

Rising Mental Health Costs: What Are We Getting For Our Money?

On the whole, we are getting good value, but without changes in the broader health care system, quality deficits will continue.

by **Benjamin G. Druss**

ABSTRACT: This synthesis of recent epidemiological and service use data concludes that, in aggregate, rising mental health spending since the early 1990s appear to be purchasing improvements in access to care and to represent a good value for society. However, there is also evidence of continuing waste and quality deficits. Although mental health faces some unique challenges, these patterns are more similar to than different from those seen in all of health care. These parallels suggest the importance of learning from and working with the broader health care system in improving the returns on U.S. mental health spending. [*Health Affairs* 25, no. 3 (2006): 614–622; 10.1377/hlthaff.25.3.614]

RISING HEALTH SPENDING IN THE UNITED STATES has fueled a growing debate about how the country is spending its resources. Why are health care costs increasing so quickly, and what returns are Americans getting on these investments? These concerns about resource allocation, which are central to all policy making, are particularly salient for health care because the costs are high and the goals—optimizing the length and quality of life—are important.

Measuring the value of care across an entire medical condition or class of conditions, never an easy task, is particularly challenging in the case of mental disorders. Estimates of prevalence and service use can vary greatly based on relatively small changes in definitions. Also, the delivery of mental health services is highly decentralized—divided among general medical, specialty, and human services settings and between the public and private payment sectors. There is still limited consensus on core mental health quality indicators.

Nonetheless, for any system of care, understanding return on investments is critical both for externally demonstrating value to society and for internally clarifying priorities and goals. For mental health, addressing this issue is particularly important given the history of stigma in the general public, skepticism among

Benjamin Druss (bdruss@sph.emory.edu) is the Rosalynn Carter Chair in Mental Health in the Department of Health Policy and Management, Rollins School of Public Health, Emory University, in Atlanta, Georgia.

purchasers, and ongoing debates within the mental health community about the most appropriate allocation of scarce resources.

Several recent studies have provided important data on trends in the epidemiology, treatment, and costs of mental health treatment over the past fifteen years. This overview seeks to synthesize these data to examine rising mental health spending and what the funds have been purchasing in terms of access and quality of care. I seek to place these issues in the context of the conceptual and empirical literature on spending and resource allocation in the broader health sphere.

How Fast Are Mental Health Costs Rising?

Advocates have long looked to general health costs as a benchmark for evaluating mental health costs. Relative slowdowns in mental health spending generate fears about a shift in resources away from the mental health system; disproportionately rapid increases in spending raise concerns that mental health will be targeted for cost cutting. The mental health community has thus sought a “Goldilocks” rate of rise in mental health costs—not too big, not too small—reflecting perceived equity with general health care and a sustainable rate of increase.

■ **Mental health versus other health spending.** For most of the past twenty years, mental health spending has increased at a rate close to that of all health spending, with rates of increase rarely deviating by more than one or two percentage points. During the 1980s, private-sector mental health spending rose more rapidly than other private-sector spending, largely because of increases in the number and length of inpatient psychiatric stays.¹ These increases stimulated the development and spread of managed behavioral health care, which contributed to a slowdown of mental health spending increases relative to other health care spending increases during the late 1980s through the early 1990s. Between 1991 and 1996, mental health spending rose by an average of only 4.8 percent per year, compared with 6.5 percent per year for the remainder of health care spending.²

■ **Private- versus public-sector spending.** The relative slowing of spending increases during the early 1990s was particularly visible because it was nearly all driven by cost containment in the private insurance sector. Between 1991 and 1996, private insurance spending for mental health increased only 3.6 percent per year, compared with 6.3 percent per year for all private-sector health spending, while public-sector mental health spending continued to increase 7 percent per year. The slowdown in private-sector spending increases led leaders to worry that mental health was losing ground relative to other areas of health care.³

By the mid-1990s, mental health and substance abuse spending again began to rise more rapidly. Between 1996 and 2001, the annual increase for mental health spending was 6.7 percent, slightly higher than the 6.4 percent annual rate of increase for general health costs. Private-sector mental health spending resumed its more rapid rise during this period, with an annual rate of increase of 8.0 percent, compared with 7.6 percent for private insurance in all health care.⁴ By the end of

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the decade, mental health costs were again closely tracking general health costs.

■ **General health spending as a benchmark.** Although general health spending provides a convenient yardstick against which to measure rising mental health spending, this benchmarking approach has at least two limitations. First, given concerns about unsustainable cost increases and inefficiency in the general health system, it is not clear whether emulating that system is the wisest strategy for promoting the sustainability and efficiency of mental health resource allocation. Second, even if overall spending increases are comparable across the two spheres, different treatments or patterns of care might be driving spending increases in mental health care and general health. Thus, to adequately evaluate the growth in mental health spending, we must ask a more difficult but important set of questions about what we are actually getting for our spending, and how that has been changing over time.

What Are We Getting For Our Money?

At least two elements contribute to direct spending for any medical condition: the number of people using those services, or “treated prevalence”; and the mix of services, which includes both unit costs of particular treatments and the number and types of services provided per person. Contingent on need, treated prevalence is a proxy for realized access; contingent on appropriateness of care, service mix is the main determinant of quality.

■ **Changes in “treated prevalence.”** Between 1990–91 and 2003, the proportion of the population receiving mental health services, or “treated prevalence,” rose nearly two-thirds, from 12.2 percent to 20.1 percent.⁵ This increase was the single largest driver of rising mental health spending during this time period, accounting for nearly 60 percent of the overall increase between 1987 and 2000. In contrast, increasing treatment rates explained only 19 percent of the cost increase for hypertension and only 1 percent of the increase for heart disease during those years.⁶

Although a number of factors, such as government anti-stigma campaigns, could have played a contributory role in the rise in mental health treatment rates over the past fifteen years, most evidence points to psychopharmacological treatments as the single most important factor. While rates of psychotherapy remained constant during the 1990s, the proportion of the U.S. population using a psychotropic drug increased from 3.4 percent in 1987 to 8.1 percent by 2001.⁷ The relative ease of use of these medications, especially the newer antidepressants, made them particularly appealing for use in primary care settings, which became an increasingly important locus for delivery of mental health services in the United States. Between 1990–92 and 2001–03, the proportion of mental health services delivered in the U.S. general health sector rose from 32 percent to 50 percent.⁸

The expansion of psychopharmacological treatments is a classic example of the relationship between health technology, treatment, and costs. As new technologies are developed and deployed, they typically increase costs not only by substituting for older ones, but also by increasing the number of people treated for disease.⁹ These increases typically represent a combination of expanding use in populations in whom efficacy is established and extension to new patients for whom the marginal benefits are less clear.

■ **Implications of rising treated prevalence for access.** The data presented so far indicate that rising mental health spending since the early 1990s has been purchasing increasing rates of mental health services use. But do these rising treatment rates reflect improved access to care? Moving from treated prevalence to realized access requires that these services be used by people with a need for care. If need is absent, then rising treatment rates might represent excess service use.

Recent epidemiological studies, which provide both service use data and symptom-based proxies for need, provide some insight into these associations. First, the rate of treatment among those with evidence of need for care rose during the study period. In the National Comorbidity Survey Replication (NCS-R), Ronald Kessler and colleagues found that among those with a serious mental disorder, rates of treatment rose from 24.3 percent in 1990–92 to 40.5 percent in 2001–03.¹⁰ Using data from the National Health Interview Survey (NHIS), Ramin Mojtabai found that among those with serious psychological distress, rates of contact with a specialty mental health provider rose from 29.1 percent in 1997 to 35.5 percent in 2002.¹¹ Finally, among Healthcare for Communities survey participants reporting a serious mental disorder, David Mechanic and Scott Bilder found a similar absolute increase in the rate of mental health treatment between 1997–98 and 2001–02.¹²

These findings suggest that much of the increase in treated prevalence during the 1990s represented improved access to care. However, in interpreting this rise in treated prevalence, a second finding from the NCS-R must also be considered—the treatment increase was no greater among those with serious mental conditions than among those with milder ones, or even among those with no diagnoses at all. Because people without a mental condition are more prevalent in society than those with a condition, the former group actually made up approximately half of those receiving mental health treatment in the United States during both waves of the NCS.¹³

Determining access for this population requires consideration of two different subpopulations: one with a history of having a mental disorder, and one without. Because the epidemiological surveys used here typically focus on symptoms and service use during the past twelve months, a subset of asymptomatic individuals might be in treatment for a past disorder that is now in remission. Given the increasing evidence of the importance of maintenance treatment for people with serious mental disorders such as recurrent depression, bipolar disorder, and schizo-

phrenia, much of the increase in treatment rates in this population is likely to represent appropriate care.¹⁴

The second group comprises people in treatment for conditions that do not meet criteria for either a current or a past mental disorder. Because nearly all effectiveness and cost-effectiveness research has been conducted in people with psychiatric diagnoses based on the *Diagnostic and Statistical Manual of Mental Disorders* (DSM), the benefits and value of treatment in populations with subsyndromal conditions are largely unknown. The limited research on the topic suggests that because milder symptoms are more likely to resolve themselves spontaneously, treatments tend to be less effective, or cost-effective, in people with subthreshold syndromes than in those with diagnosable disorders.¹⁵

The pattern of spread of treatments to people with less serious conditions is not unique to mental health. New medical technologies invariably diffuse beyond the populations for whom they were originally designed. As innovations move farther beyond the populations in which they have been rigorously tested, it becomes more and more difficult to fully weigh the risks and benefits, or assess the returns on investment, for these treatments. Diffusion of new technologies typically occurs without regard to need, resulting in a mixture of appropriate increases in access and spread to populations for whom benefits may be more questionable.

■ **Changing service mix.** *Psychotropic medication use.* The 1990s saw not only increasing numbers of people treated for mental disorders, but also major shifts in the types and mix of services provided to those people once they entered the care system. As with the rise in treated prevalence, psychopharmacological treatments were among the most important drivers of changes in service mix for mental disorders during this era. During the 1990s the most rapidly growing form of treatment was psychotropic medication without adjunctive psychotherapy.¹⁶ Spending data also reflect the growing centrality of psychotropic medications in U.S. mental health care: Retail prescription drug spending increased from 7 percent to 21 percent of total mental health spending between 1991 and 2001.¹⁷

Outpatient and inpatient care. In contrast to trends in psychotropic treatment, changes in outpatient and inpatient service mix contributed to a decrease rather than an increase in mental health costs during the 1990s. During this period, costs per inpatient day and per outpatient visit increased slightly relative to inflation, as did wages for psychiatrists and other mental health clinicians.¹⁸ However, these small increases were more than offset by rapidly declining lengths-of-stay and mean numbers of outpatient visits.

During the 1990s, inpatient psychiatric lengths-of-stay declined by 40 percent, nearly twice as rapidly as lengths-of-stay for other medical conditions.¹⁹ Intensity of outpatient mental health services also declined, from an average of 9.4 visits per user in 1987 to 6.6 visits per user in 2001.²⁰ This reduction likely reflects not only changes in practice patterns for mental health providers, but also a shift in the locus of delivery to primary care clinicians, who typically provide care that is much

less intensive than that provided by mental health specialists.²¹

■ **Implications of changing service mix for quality of care.** Moving from observations about service mix to discussions about value requires examining if or how these changes in services reflect better quality of care. Inasmuch as we purchase bundles of services that have been demonstrated to improve health outcomes at a reasonable cost, we can be said to be obtaining a “good deal” for the money we are spending.

Richard Frank and colleagues have described a method for assessing the value of mental health care known as “systems cost-effectiveness,” which compares costs with expected benefits of particular treatment bundles, including both medication and psychotherapy, as determined by expert-panel ratings. Using this method to study treatment of depression in a large, privately insured population, they found an increasing return per dollar spent between 1991 and 1995, as well as an overall good value for spending based on commonly accepted cost-utility standards.²² They subsequently extended this approach to other diagnoses (for example, schizophrenia and bipolar disorder) and other data sets (for example, state Medicaid data), with similar overall findings. Synthesizing the research in this area, Ernst Berndt has reported that because of the increasing use of new technologies and conformance to treatment guidelines, there was actually a decline in the quality-adjusted costs for a variety of mental disorders, including depression, bipolar disorder, and schizophrenia, during the 1990s.²³

Although this analytic framework suggests that on average, mental health spending appears to be purchasing good value, these results should be interpreted with at least two caveats in mind. First, even if some indices of value are improving, there is still considerable evidence of poor quality. Mental health scores in the Health Plan Employer Data and Information Set (HEDIS), whose measures focus on follow-up after mental hospitalization, duration of antidepressant treatment, and number of practitioner contacts, are much lower than scores for other HEDIS indicators and have shown less improvement over time.²⁴ RAND’s Community Quality Index (CQI) Study, which used expert-generated consensus guidelines, found that people with depression receive only 57.7 percent of recommended services, and those with alcohol dependence receive only 10.5 percent of recommended care.²⁵ From a systems perspective, poor quality also reflects wasted resources: In Frank and colleagues’ systems cost-effectiveness study of depression, one-fifth to one-fourth of spending on depression was classified as having little prospect of helping the patient.²⁶

Second, averaging across quality, like averaging in general, can mask important information about differences across specific systems, subpopulations, and treatments that might not be sharing in those overall gains.²⁷ As noted previously, U.S. mental health treatment has been shifting from specialty to primary care and from the private to the public sector; given documented mental health quality deficits in each of these types of settings, it will be critical to track quality indices sepa-

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rately in each sector. Vulnerable subpopulations, such as ethnic minorities and people with lower levels of education, might fail to share in gains experienced by the broader population.²⁸ Also, quality gains in certain treatments, such as use of medications, have not been accompanied by improvements in other areas, such as use of evidence-based psychotherapies and psychosocial treatments, which could represent missed opportunities to improve mental health conditions.²⁹

These patterns are similar to those seen in all of health care. Analyzing returns on investment across a range of medical conditions including depression, David Cutler found that spending increases over time were clearly “worth it” from a societal perspective. However, he noted that “in each case, the system falls far short of its potential.” These shortfalls, he suggests, are a function both of quality deficits at the aggregate level and of the failure of new treatments’ benefits to reach vulnerable subpopulations such as the uninsured.³⁰

Concluding Remarks

Perhaps the most striking pattern in examining trends in mental health spending during the 1990s is the similarities to the broader health system. As with all of health care, mental health spending is rising more rapidly than inflation; this spending appears to be yielding a good return in aggregate; but there is still evidence of continuing waste and quality deficits, as well as of vulnerable populations who might not be sharing in those gains.

These parallels with the broader health system are at once reassuring and sobering. It should be reassuring to the mental health community that it is not alone in its need to document returns on rising health spending and to work toward improving quality and efficiency. Certainly the mental health system faces unique challenges—the history of separation from the broader health system, high levels of fragmentation, and social stigma. However, many of the most important issues confronting mental health policy focus on basic issues of how best to allocate limited resources in the face of new technologies and rising costs.

These similarities are sobering when examining the long and largely unsuccessful history of efforts to reform the U.S. health system. It has been notoriously difficult to bring about change in this system, which is rife with special interests resisting alterations in the status quo.³¹ The decentralized nature of the mental health system, like that of the health system as a whole, means that no one governmental or private agency can effect change alone. The President’s New Freedom Commission on Mental Health acknowledged the limits of the federal government in enacting its recommendations, calling on private and other public entities to help work toward the goal of transformation.³²

THE PARALLELS BETWEEN THE MENTAL HEALTH and general health systems, along with the increasingly blurred lines between the two, suggest that the fates of the two systems are inextricably linked. A major finding of the recent Institute of Medicine (IOM) report on behavioral health care quality is that quality improvement strategies developed in general health care can and must be brought to bear on efforts to improve mental health care.³³ At the same time, models of consumer participation and other innovations developed in mental health care should inform similar efforts now emerging in the larger health field. Large-scale improvements in mental health care will never occur without changes in the broader health care sphere; similarly, efforts to improve quality in the health system must include attention to the mental health system with which it is so closely intertwined.

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NOTES

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