

Allocating Funds for Medications and Psychosocial Interventions: How Consumers Would Divide the Pie

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During the past decade the expenditure on second-generation antipsychotic medications has grown almost exponentially. It is estimated that about \$8.8 billion will be spent on these medications in the United States in 2005 (personal communication, Kolling B, Express Scripts, Inc., 2005). Spending on resources for other empirically validated interventions, such as supported employment, assertive community treatment, or family psychoeducation, has not correspondingly increased. The opposing trends in spending for medications and spending for other interventions have occurred despite evidence that during this period individuals with serious mental illnesses had limited access to treatment modalities other than medications (1). Also, despite this expenditure there is no indication that the overall plight of

people with serious mental illnesses has improved: 85 percent are unemployed, and compared with the general population they have a ten- to 20-fold rate of homelessness (2), a sixfold rate of incarceration (3), and a two- to threefold rate of substance abuse (4). The failure to achieve real-world impact may reflect the recent observation that the benefits reported in the original efficacy studies of second-generation antipsychotics may not be replicable in effectiveness studies (5).

Most of the funding for second-generation antipsychotics comes from government entitlements and not from private payments. This shift in expenditures represents policy decisions. But were these the correct decisions, and should they be continued? Do they represent the best possible value or the most efficient use of mental health resources?

These are difficult questions to answer. Despite the existence of meta-analyses of first-generation versus second-generation antipsychotic medications (6) and extensive reviews of psychosocial interventions (7), no meta-analyses have attempted to compare the impact of new medications with the impact of new psychosocial interventions. One of the difficulties in performing such comparative studies is finding outcomes that cut across the various interventions. Outcome studies of

medications measure clinical change (symptoms and side effects), whereas outcome studies of psychosocial interventions, such as assertive community treatment, emphasize community tenure and function. Studies of supported employment assess employment outcomes. Because it is hard to compare the value of these disparate outcomes, it is correspondingly difficult to value these different interventions.

In theory there are economic methods to deal with this issue (8). Cost-efficiency analysis tells us that when two treatments have identical outcomes, the less expensive is the better value. However, identical outcomes are rare, and in their absence cost-benefit analysis can be used if a monetary value can be attached to a health outcome. But most health outcomes do not have clear monetary values. An alternative, cost-effectiveness analysis can compare the effectiveness of interventions in achieving some particular health outcome (for example, the cost of reducing Hamilton Depression Scores by 20 percent). Although most interventions have multiple, often conflicting, health outcomes, these can be aggregated through cost-utility analyses that use a common metric such as quality-adjusted life years (QALYs).

Finally, because the value of health outcomes needs to be compared with

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alternative nonhealth expenditures, economists have devised willingness to pay, also known as contingent-valuation techniques (9), to determine how much consumers would pay for specific outcomes. An advantage of these willingness-to-pay or contingent-valuation approaches is that they are consistent with market theory in allowing consumers to determine how much they would pay for a specific health product or outcome. They are also consistent with the growing consumer movement in mental health and the President's New Freedom Commission report that highlights the need for consumer choice. Such an approach was used in a previous Economic Grand Rounds column to assess how much consumers would pay for a hypothetical pill that cured schizophrenia (10). What we would like to address is the more practical question of how consumers choose when given the option of real, but expensive, medications or a package of comparably priced psychosocial interventions.

Study design

To address this question of how consumers choose between medications and interventions, we modified the contingent valuation technique. Using an interview protocol approved by the University of Chicago institutional review board and after explaining that this would not influence the interviewee's actual treatment, we studied eight adult patients (all African American, six female) at the university clinic who had been given a diagnosis of schizophrenia or schizoaffective disorder and who were receiving Illinois Medicaid benefits. These patients were being treated with first-generation depot antipsychotics (haloperidol or fluphenazine decanoate) but were being considered for a trial of the new depot form of risperidone.

We first discussed their current symptoms and side effects. Most of the patients described ongoing symptoms of anxiety, suspiciousness, and difficulty with side effects such as stiffness and spasm. They were then informed about the possible risks and benefits of depot risperidone and told that it would cost approximately \$450

per month more than their current medication but that Medicaid would pay for this expense. They all expressed interest in trying this medication and were supportive of using the money for this purpose.

After a discussion of the medication the patients were systematically questioned about four other aspects of their lives: housing, employment, case management, and income. These questions were based on items in the Lehman Quality of Life Scale (11). After each of these four areas had been discussed, patients were given \$450 in play money to "spend" either on the medication or on these other areas of their lives. At the end of the interview they were again asked to divide the \$450 among the various options.

Findings

At the end of the interview, none of the patients wished to use the money for the new medication. Instead they divided the money among four areas: housing, income, case management, and employment.

On a scale of 1 to 7 (1 being terrible and 7 being delighted) the patients' overall satisfaction with housing was 3.4, and their sense of safety with where they lived was 3.1. They decided to commit an average of \$213 (47 percent) of the \$450 to a housing voucher.

All the patients received government support checks. Their total income averaged \$696 per month. They all believed that their income was adequate to purchase their food. Five patients felt that it was inadequate for housing, and none felt that it was adequate for travel to visit friends or family or for socializing. Their overall satisfaction with their income was 1.1. They decided to commit a mean of \$125 per month (28 percent) to extra income.

Seven patients denied that they needed assistance with meeting their basic needs and on average rated the chance to talk with a case manager as 1.8 on the 1 to 7 scale. They committed a mean of \$94 per month (21 percent) for case management.

None of the patients were employed at the time of the study, but seven of the eight patients had been

employed. Half of them had some experience with workshops or job training programs. After hearing a description of supported employment, patients decided to spend a mean of \$19 per month (4 percent) on such services.

Discussion

Obviously, the results of such a pilot study need to be viewed cautiously. The sample was small and not chosen to be representative. Undoubtedly, eight different persons might make very different choices. Therefore, these findings are not offered to support a policy that prevents patients who are stabilized on long-acting, first-generation depot antipsychotics from having access to second-generation depot antipsychotics, but rather to argue for policies in which patients have greater choice over how the resources committed to their care are allocated.

Another drawback of this type of study is that it deals with the hypothetical. Regardless of how many patients are interviewed, it can only assess what consumers say they might choose, not what they actually do choose. This problem can only be overcome by a real-world trial in which consumers are given the choice of new medications or a comparably expensive package of other services. It would be interesting to see the choices they made and the outcomes. However, such a study is unlikely to be funded by the pharmaceutical industry. It is also unlikely to occur as a "natural" experiment because each of these interventions is supported by a different funding stream: medications funded by Medicaid Medical Option, case management by Medicaid Rehabilitation Option, supported employment by Vocational Rehabilitation, housing by the Department of Housing and Urban Development, and cash benefits by Social Security. These funding streams are more than bookkeeping devices. They were established by different legislative mandates and represent our society's, or at least our government's, commitment to different priorities.

Like other social initiatives that promote choice, such as school

vouchers, the implementation of this degree of consumer choice has a political dimension. In this vein, it is perhaps not surprising that the major growth area in mental health budgets is medication. The pharmacy benefit is a compulsory component of Medicaid, and society generally believes that people with illnesses should have access to medication. The pharmaceutical lobby, Washington's largest, is there to argue the case. Case management, housing, and employment are not guaranteed by any entitlement programs. Society does not generally believe that people with illnesses should be guaranteed access to these benefits, and there is no industry lobbying to make the benefits available. Therefore, regardless of how compelling a clinical or even economic case can be made for greater consumer choice, it may be difficult to divert resources from medications. If re-

sources are diverted from medications, it will be even harder to ensure that the savings will go to consumers to meet their other, perhaps more pressing, needs. Why this is and how it might be changed could require *Psychiatric Services* to initiate a Political Grand Rounds column. ♦

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