

Cost of Treating Mental Illness From a Managed Care Perspective

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The issue of cost-effectiveness in the pharmacoeconomics of mental illness is a new concept. As methodologies for exploring this subject unfold, the most fundamental objective for health care professionals and managed care officials is to find ways in which currently available resources can be used most effectively. The managed care perspective is highly cost-based within the market it serves. In addition to cost, other factors that influence the managed care perspective are a short-term focus, segmentation of budgets, and measurable indicators of outcome, cost, and quality of care. The cost of new psychopharmacology—especially antidepressants and antipsychotics—may be many times that of traditional drugs, and concern about increased drug costs is present in many managed care organizations. Several issues must be addressed to prevent restriction of pharmacotherapeutics in managed care settings. For example, a focus on both outcomes and practice guidelines is needed to help allocate limited resources fairly. This article suggests ways in which available resources can be used more effectively to treat mental illness within the present health care system.

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The social process called *health care reform* primarily addresses 3 issues: (1) cost of care, (2) quality of care, and (3) access to care. In the mental health field, the cost of care was seemingly out of control, the quality of care widely deficient, and access to care a national disgrace because of limited access and low utilization of care by the mentally ill. When health care reform was ushered into society, the cost issue was paramount, and that issue continues as a primary focus. However, a new focus is developing on serious quality issues, and it is becoming apparent that, rather than a simple cost differential, the various outcomes associated with different treatment options should be the focus of funding decisions.

The issue of cost-effectiveness in the pharmacoeconomics of mental illness is a new concept. As methodologies for exploring this tool unfold, the most fundamental objective of its use for health care professionals and management officials is to find ways in which currently available resources can be used most effectively. This objective involves more than a simple comparison of drug A with drug B, but rather ways in which all available resources can be used more effectively to treat mental illness within the present health care system.

MENTAL HEALTH BENEFITS IN MANAGED CARE ORGANIZATIONS

Managed care is the application of management principles in a comprehensive prepaid health care delivery system that controls input and output to optimize efficiency and effectiveness with the prior consent of providers and patients.¹ Types of managed care organizations (MCOs) include independent practice associations (IPAs), health maintenance organizations (HMOs), preferred provider organizations (PPOs), point-of-service plans (POS), prepaid group practices (PGPs), and managed fee-for-service (FFS). Managed care plans are guided by a set of common principles, but the implementation within each managed care plan can be quite different.²

Mental health benefits, unlike those of other medical specialties, are often provided under a *carve-out* plan.³ The payer (employer) provides an MCO with a sum of money to cover the cost of medical care for each insured enrollee. A per capita fee may then be carved out of the MCO funds for a second company called a managed behavioral health organization (MBHO) that specializes in mental health and/or chemical dependency services (Figure 1).

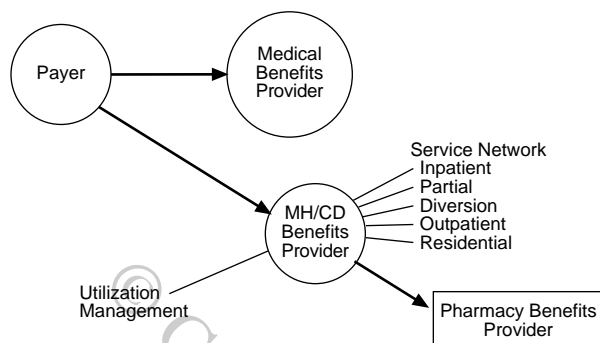
There are 3 major markets for carve-out MBHOs: (1) the employer markets (usually large corporations or trade union), (2) the insurer/HMO market (such as the merger of Aetna Insurance company with U.S. Healthcare, a large HMO), and (3) the public sector (Medicaid and Medicare) market. Each of these markets functions differently and has unique requirements and problems. The employer/union system is probably the most commodious for both

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Figure 1. The "Carve-Out" Approach to Medical Care*



*From reference 3. Abbreviations: CD = chemical dependency, MH = mental health.

employers and enrollees because of capitation rates approximately 4 times those of the insurer/HMO market. The public sector market offers exciting opportunities for innovative care for the seriously ill, and some programs, such as that of the state of Iowa, have been very successful, but this sector has a history of underfunding, which has hampered programs in it.

The calculation of capitation rates in managed care—and the subsequent influence on the allocation of resources—is problematic because the rates are generally calculated on the basis of historical utilization. Other rational models can be designed to estimate costs of optimally expected care in certain populations to establish the capitation rate. A model could be developed based on the known epidemiologic characteristics of the population and the cost of efficient treatment of all affected individuals. This type of model could provide a reasonable estimate of the funds necessary to treat a specific population effectively. Additionally, cost-effectiveness studies could compare the overall costs of broad protocols instead of the cost of specific drugs. The protocol should incorporate such factors as the sequence of optimal care for patients with specific diagnoses. For example, ample information is available on panic disorder to design a model for providing care in that population. The sequence of care might start with a 4-session cognitive-behavioral therapy program, followed by 12 sessions and then medications for nonresponders; another sequence might start with medications. Data obtained from comparing different models of therapy sequences and treatment strategies could then be used by health care professionals to optimize outcomes versus expenditures.

FACTORS INFLUENCING DECISION MAKING IN MANAGED CARE

Payer-Oriented Focus

Managed care differs according to the market it serves. Consequently, services provided in an insurer/HMO mar-

ket will be different from those provided in the public sector or employer/union markets. Even though MCOs are independent, they are basically subservient entities to the payers, and the focus of their perspectives is on serving the payers. The controlling element of the managed care system is the payers, and since the 2 largest payers are corporations and government, there is where the focus of advocacy for change in level of adequate funding should be directed. While payers are now requiring measures of outcome and quality, and the National Committee for Quality Assurance,⁴ an independent nonprofit organization that performs accreditation reviews to assess and report on the quality of managed health care plans, has made progress toward shifting the managed care perspective from price to performance and quality standards, the price bid is still the main marketing advantage among competing MCOs.

Also, additional complexity and confusion have been created because of the desire by individual payers for separate services. Efforts by MBHOs to provide specific services to various clients has created the problem of customization, and some MCOs have attempted to provide managed care under 500 to 1000 different plans.

Short-Term Focus

The focus of managed care on short-term results is influenced by several factors: The MCO must necessarily focus on the short term when the average annual turnover rate of enrollees is approximately 30%. Additionally, the long-term effects of a specific treatment may not interest an MCO that has a 1-year or 2-year contract with the payer. A third factor that contributes to a short-term focus in behavioral managed care is the large population of enrollees who suffer from adjustment disorders accessing services. As a result, this disorder has become the normative model for all mental illness in the managed care environment. The inapplicability of this model to truly ill psychiatric patients who require more intensive care and long-term maintenance treatment has led to one of the most troubling areas of tension between advocacy groups such as the National Alliance for the Mentally Ill, organized psychiatry, and the MBHOs.

Budget Segmentation

Budget segmentation often makes it difficult to implement the most cost-effective treatment, in terms of overall cost, especially when a pharmacy budget is siloed. In the case of a siloed pharmacy budget, total health care costs are unlikely to be considered when formulary decisions are made. Likewise, the MCO may not be attuned to the costs of medication when a separate company controls pharmacy benefits.

Individual MCOs view formularies and pharmacy differently; some are committed to keeping an open formulary while others take more restrictive approaches. When

a pharmacy budget is segmented from the mental health care budget, decisions about what to include in the formulary are more likely to be based on the drug costs alone rather than the total cost of treatment. Some drugs may cost less initially but the overall cost of patient care may increase because of greater use of other services such as inpatient care. Atypical antipsychotics, for example, cost more than conventional neuroleptics, but overall treatment costs are lower because of a reduced need for hospitalization. Moreover, the pharmacy purchasing agent is unlikely to recognize the differences, such as bioavailability, among manufacturers of generic products and will search for the lowest-priced medication. An MCO may reduce expenses more by optimizing outcomes rather than limiting the choice of medications.

Control of Risk

Managed care companies try to control the amount of risk they assume. Sometimes this leads to reduction of benefits for groups that are difficult to manage or have an unpredictable outcome, sometimes to passing on risk to the provider. This situation has particular danger with regard to pharmacy matters, especially if the physician is put at risk. For example, in Germany, where physicians are capitated on their pharmacy budgets and quality of care is unsupervised, it has been observed that selective serotonin reuptake inhibitors (SSRIs) have very low comparative rates of utilization. In this situation, an intense conflict of interest has been created by having physicians—who should be primarily concerned with treatment effectiveness—directly affected by the cost of treatment.

INDICATORS THAT MAY ALTER MANAGED CARE DECISIONS

Managed care organizations are demanding data that show specific treatments are cost-effective. However, these data may be difficult and expensive to gather. Among the indicators that can be measured are outcome, disease treatment costs, and quality of care.

Outcome Indicators

Three indicators that may shift the managed care perspective are (1) clinical and functional outcome, (2) hospitalization, and (3) recurrence. Protocols designed to measure clinical and functional outcomes are lacking in most health care delivery organizations. Although valid and reliable instruments to measure clinical and functional outcomes exist, using them is an extra expenditure in a highly cost-competitive industry. Hospitalization outcomes can usually be measured and are of special interest to MBHOs, because hospitalization is the biggest single cost item. For example, in a retrospective study, Addington et al.⁵ found a 20% reduction in the number of hospital days after initiation of risperidone treatment in patients with chronic

schizophrenia. Studies that demonstrate a decrease in hospital days are likely to influence the managed care perspective. Recurrence without hospitalization is more difficult to measure except for outpatient episodes that occur within a contained system.

Cost Indicators

Information about cost—i.e., mental health costs, drug costs, and medical/surgical costs—can be gathered with more or less specificity in most MCO systems. Mental health costs that are claims-based can be calculated and added to drug costs and medical/surgical costs for a total cost estimate. One of the problems in collecting drug or pharmacy data is that some systems are unable to track prescribed medications. Illegible physician signatures and absence of a DEA (Drug Enforcement Agency) number can hinder the collection of data of prescribed drugs.

Quality-of-Care Indicators

If measurement of pharmacy data is taken as an example, quality-of-care indicators would include adherence—here defined as days the drug is taken continuously within the prescription—duration, and dosage. The importance of such indicators for guiding managed care policies and improving health outcomes cannot be overestimated. The potential for cost savings and quality improvement made possible by tracking these indicators is substantial. Most of the prescriptions are written by a small number of physicians, and tracking and intervention are becoming increasingly possible.

THE COST OF NEW PSYCHOPHARMACOLOGY

The cost of new psychopharmacology—especially antidepressants and antipsychotics—may be several times that of traditional drugs, and concern about increased drug costs is present in many MCOs. In a survey of national and local HMOs, it was found that antidepressant costs increased over 300% from 1993 to 1995, with 90% of that increase due to SSRIs.⁶ For example, risperidone costs about 200 times more and olanzapine about 400 times more than a generic conventional antipsychotic.⁷ To forego the high costs of newer antidepressants, some MCOs have requested that physicians use tricyclic antidepressants as initial antidepressant therapy.

Several issues must be addressed to prevent restriction of pharmacotherapeutics in managed care settings. For example, much waste occurs because of the uncontrolled use of psychotherapeutic agents within the managed care setting. Simply making a drug available does not insure that it will be administered by an informed physician or taken correctly by the patient. Protocols on the proper administration of psychotherapeutic medications—including titration and switching—should be readily available for physicians.^{8,9}

A PATH TO A SOLUTION

In the context of managed care, practice guidelines may be used to allocate resources and improve the quality of care.¹⁰ Development, dissemination, and implementation of guidelines is a costly complicated process. However, there is an abundance of literature on knowledge, technology, and knowledge transfer that is quite applicable in this field.¹¹⁻¹³ Guidelines such as the expert consensus guidelines on the treatment of bipolar disorder and schizophrenia^{14,15} employ the latest technology on consensus surveys to encapsulate the opinions and practice of experienced clinicians and can be used to develop guidelines within the behavioral managed care setting.

Dissemination of information is aided by using both high impact and low impact techniques such as printed materials, audiovisual demonstrations, experiential learning workshops, supervised practice, academic publications, and traditional CME conferences. Fang et al.¹⁶ noted disproportionately little attention paid to guideline implementation and evaluation of the effects of guidelines relative to guideline development and dissemination. However, it has been found that barriers to the implementation of guidelines may arise from the guideline itself (e.g., complexity, cost) or from the adopting organization (e.g., administrative fiat, organizational resistance to change). Strategies such as involvement of potential users and local adaptation of the guideline can be used to improve the success of implementation, and feedback can be assessed by printed reports, peer group interactive sessions, and supervisor review. Computer-based implementation tools such as medical record systems with guideline prompts and patient-specific reminders at the time of treatment are methods of stimulating the use of guidelines.

CONCLUSION

The most important objective for managed care is to find ways in which available resources can be used most effectively. Rational models can be designed to estimate costs of expected care in certain populations, and data obtained from models can be used to optimize outcomes versus expenditures. Indicators that may show specific treatments to be cost-effective are outcome, direct treatment

costs, and quality of care. Increased cost without concomitant cost-effectiveness data for newer psychopharmacologic agents may lead to restriction of formularies in managed care settings. Along with focus on outcomes, the development, dissemination, and implementation of practice guidelines may also serve to facilitate the fair allocation of limited resources. Guidelines addressing areas in which the quality of care is demonstrably poor and where appropriate care would lead to reduced costs are ideal targets for the use of practice guidelines in managed care settings.

REFERENCES

1. Lundberg GD. Managed care in JAMA and the Archives Journals [editorial]. *Arch Gen Psychiatry* 1995;52:967
2. Rapaport MH, Cantor JJ. Panic disorder in a managed care environment. *J Clin Psychiatry* 1997;58:51-55
3. Glazer WM, Cohen LJ, Viale GL, et al. Drug formularies and managed care [discussion]. *J Clin Psychiatry Monograph* 1997;15(4):23-30
4. Marwick C. NCQA: quality through evaluation. National Committee for Quality Assurance [news]. *JAMA* 1997;278:1555-1556
5. Addington DE, Jones B, Bloom D, et al. Reduction of hospital days in chronic schizophrenic patients treated with risperidone: a retrospective study. *Clin Ther* 1993;15:917-926
6. Steator J, Moss J. Identification of off-label antidepressant use and GAD in a national model HMO. *Drug Benefit Trends* 1997;9:42-56
7. The National Drug Data File [database online]. San Bruno, Calif: First DataBank; 1977
8. Soumerai SB, Avorn J. Principles of educational outreach ('academic detailing') to improve clinical decision making. *JAMA* 1990;263:549-556
9. Yager J, Docherty JP, Tischler GL. Preparing psychiatric residents for managed care: values, proficiencies, curriculum, and implications for psychotherapy training. *J Psychother Pract Res* 1997;6:268-271
10. Wells KB, Astrachan BM, Tischler GL, et al. Issues and approaches in evaluating managed mental health care. *Milbank Q* 1995;73:57-73
11. Kahn DA, Docherty JP, Carpenter D, et al. Consensus methods in practice guideline development: a review and description of a new method. *Psychopharmacol Bull* 1997;33:631-639
12. Grimshaw JM, Russell IT. Effect of clinical guidelines on medical practice: a systematic review of rigorous evaluations. *Lancet* 1993;342:1317-1322
13. Brugha TS, Lindsay F. Quality of mental health service care: the forgotten pathway from process to outcome. *Soc Psychiatry Psychiatr Epidemiol* 1996;31:89-98
14. Frances A, Docherty JP, Kahn DA. The Expert Consensus Guideline Series: treatment of schizophrenia. *J Clin Psychiatry* 1996;57(suppl 12B):1-58
15. Frances A, Docherty JP, Kahn DA. The Expert Consensus Guidelines Series: treatment of bipolar disorder. *J Clin Psychiatry* 1996;57(suppl 12A):1-88
16. Fang E, Mittman BS, Weingarten S. Use of clinical practice guidelines in managed care physician groups. *Arch Fam Med* 1996;5:528-531