Prospective Cost Allocations for the Chronic Schizophrenic Patient

by Steven S. Sharfstein

Abstract

Schizophrenia affects from 0.5 percent to 1.0 percent of the population and is often a chronic relapsing illness with high morbidity. Because it strikes young adults, the lifetime direct and indirect costs are considerable. One method of budgeting the costs of treatment is through a prospective method with the development of "risk-adjusted" capitation rates that take into account a patient's past use of services, perceived health status, and level of disability. Such a system may provide opportunities to improve the quality of mental health services by increasing service flexibility, particularly in the development and differentiation of outpatient services. The essence of the approach is to encourage early intervention by reducing financial barriers for patients, especially barriers to alternatives to expensive inpatient services. One method currently employed in Rochester, New York, which creates a capitation payment system for the chronically mentally ill, will be described. The implications of this system for public policy will be discussed as we struggle to treat and care for chronic schizophrenic patients in humane and compassionate ways.

The success of modern medicine is reflected in the epidemic of chronic illness throughout the world. Although we've mastered most forms of acute illness through improved medical technology and have devoted expensive resources for the acute phase of illness, we have failed to manage scarce resources over the life history of individuals with chronic conditions. The treatment and financing of schizophrenia continue to emphasize the suppression of acute symptoms that are extremely disruptive to daily life. The bias is toward acute inpatient care with high costs associated with every episode of inpatient treatment, especially during the first decade after initial diagnosis. The typical course of schizophrenia, however, is a steady 10-year deterioration in functioning after diagnosis in young adulthood, with subsequent stabilization or even improvement later in life. Long-term outcome studies of schizophrenia have shown a more hopeful prognosis. In a recent issue of the Schizophrenia Bulletin, McGlashan and Carpenter (1988) reviewed and assessed outcome studies of the last 60 years and found rates of long-term recovery ranging from 40 to 60 percent. Most studies have shown that long-term outcome of a positive nature was not associated with the severity of initial presentation or the rapidity of response to medications. Further, these studies have not demonstrated the efficacy of one treatment over another in relation to eventual outcome. McGlashan (1988) summarized what we know about the course of schizophrenia as follows:

- Schizophrenia is a chronic, disabling illness.
- There is an increased risk of suicide, physical illness, and mortality in schizophrenia. Suicide rates vary from 5 to 10 percent in the schizophrenic patient population and longevity is decreased by up to 10 years compared to the general population.
- While schizophrenia is chronic and disabling, especially the early "raging brainstorms" in the first 10

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years, most patients plateau to a more stable residual stage.

- The course of schizophrenia is heterogeneous and more study is needed to investigate the differences in positive versus less positive outcome.
- Nothing indicates that our current treatment technology alters the eventual course of the illness.
- Social and cultural forces are very important in helping schizophrenic patients function.
- Young men have worse prognoses than young women with schizophrenia.
- Patients with a comorbid condition such as coexisting substance abuse have a worse prognosis than those who do not.
- Outcome should be viewed as a multidimensional process, not a categorical description of one point in time.

These findings from the world literature compel the development of a new case-managed psychosocial and rehabilitative model of chronic illness for a rational lifetime financing policy for patients with schizophrenia.

The Life-Course Longitudinal Model

Given chronicity, a life-course longitudinal perspective is essential for the development of policy to finance care and to move to a time when there is a positive prognosis. Paying for acute treatment is just one component in the care of patients with schizophrenia. In paying for this phase, however, the need for resources over the life-course must be kept in mind. The following scenario takes place too often. A young adult develops symptoms of schizophrenia and is hospitalized in a private psychiatric setting for symptom stabilization and diagnosis. Several additional short-term hospitalizations take place within the first couple of years of unfolding illness until the insurance resources are exhausted (typically, a lifetime limit of $30,000 to $50,000). The patient is then at risk for homelessness or custodial hospitalization in a State facility. Premature death by suicide or other concurrent illness is a definite danger.

We therefore must plan for and provide the resources necessary for longer term rehabilitation, habilitation, resocialization, and other psychosocial support services that have a direct impact on the patient and eventual recovery. These resources must be individually managed for each patient and family.

The epidemiology of schizophrenia must also be taken into consideration. It is estimated that between 0.5 percent and 1.0 percent of the U.S. population in any 6-month period suffers from schizophrenia (Regier et al. 1988). It must be emphasized that this large group of patients has a wide variety of needs during this time. The range of services required to meet needs of individuals varies over time and among different subgroups of patients with this heterogeneous condition. What is essential in any financing policy is flexibility in allocating resources and a capacity to integrate funding streams to coordinate the necessary services outside the hospital. At the individual patient level, these resources must be case managed.

As stated before, in the United States as well as in other Western countries, too little attention has been devoted to a policy that treats and supports individuals with chronic illness, especially chronic schizophrenia. Therapeutic nihilism, stigma, and the front-loading of resources have been the major impediments to the design of a rational policy that emphasizes the long-term outcome and provides resources to support many of the nonpsychiatric areas that, if left unattended, lead to excess mortality and morbidity in schizophrenia such as homelessness, substance abuse, and medical illness.

This article proposes a method of financing care based on the longitudinal life-care model through a prospective cost allocation methodology. Specifically, a system of capitation payment for individuals with schizophrenia will be proposed. I will describe this methodology, with a specific example in New York State, and then discuss the advantages and disadvantages of capitation methods for patients with schizophrenia and the benefits and costs of pursuing innovative financing to provide for both flexibility and integration of resources.

The Prospective Cost Allocation Method

The proposed financing methodology has certain implicit assumptions (Lehman 1987). The first is the need for economic incentives for interdisciplinary teams to assume total responsibility for a defined group of patients. This total responsibility includes comprehensive, individualized case management of such services as income support, structured and supervised housing, psychoeducation for families, self help, and access to the array of available medical, psychiatric, and rehabilitative services. The economic incentive system must be responsive to the basic need to plan services over the long term, but also be flexible enough to respond to the intermittent and changing needs of individuals with schizophrenia.
The fiscal incentive, therefore, must lead to an integration of care in the fragmented patchwork quilt of community services.

A prospective cost allocation method using capitation payments for high-risk patients is the method that I propose. This method, of course, has some inherent problems. Most systems of capitation financing function by removing as many high-risk patients as possible from the pool of covered lives, that is, enrolling as many healthy people as possible in the system to offset the high costs of the high-risk patients. A high-risk population consists of patients who will need at some points in time more intensive services than others. In order to manage such a population, a system of prospective capitation must set rates based on health status or risk. This has been called “risk-adjusted capitation” and it is based on the patient’s past use of services, current health status, and level of disability (Babigian and Reed 1987). One such method, illustrated in table 1, is currently in use in Rochester, New York.

This program, the Monroe-Livingston demonstration project, was developed to provide financial incentives to deliver community psychiatric care for the chronically mentally ill, most of whom have a diagnosis of schizophrenia. Eligible patients are enrolled in one of five community mental health agencies (“lead agencies”) that assume total case management responsibility for these patients. Eligibility is determined on the basis of a treatment history in the State hospital or clinic system. The specific risk-adjusted capitation is based on the following three categories (table 1):

1. The continuous treatment group, that is, patients who spent at least 270 days in State hospitals during the previous 3 years. For this extremely high-risk group, the community mental health agency is responsible for all care, including

Table 1. Proposed capitation payment system for chronic mental patients in the Monroe-Livingston demonstration project

<table>
<thead>
<tr>
<th>Risk category</th>
<th>Criteria for enrollment</th>
<th>Estimated capitation rate</th>
<th>Services covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuous treatment</td>
<td>≥270 State hospital inpatient days during last 3 years</td>
<td>$36,000</td>
<td>All outpatient mental health and rehabilitation services All inpatient mental health services General medical and dental care Housing Personal expenses</td>
</tr>
<tr>
<td>Intermittent treatment</td>
<td>45 to 269 State hospital inpatient days during last 3 years or 30 State hospital inpatient days during last year or 30 continuous State hospital inpatient days during last 3 years</td>
<td>12,000</td>
<td>All outpatient mental health and rehabilitation</td>
</tr>
<tr>
<td>Outpatient treatment</td>
<td>Currently enrolled as an outpatient at the State hospital and ≥25 outpatient visits during last 3 years or at least 2 years of functional disability due to mental disorder</td>
<td>4,000</td>
<td>All outpatient mental health services</td>
</tr>
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housing, food, personal expenses, and clothing, as well as access to mental health and health care.

2. The intermittent treatment group, those who have been inpatients in a State hospital for 30 continuous or 45 to 269 days total in the previous 3 years or 30 days in the previous 1-year period. The lead agency responsibility includes all outpatient, health and mental health, and rehabilitative services.

3. The outpatient treatment group, defined as patients who have used at least 25 outpatient visits in the last 3 years or experienced at least 2 years of functional disability due to a mental disorder. Outpatient mental health services are the only responsibility for the lead agency.

The rates set (based on 1986 dollars) used two methods: (1) the costs of care per day at the State hospital, annualized and multiplied by 70 percent of the per diem; and (2) average service plan costs constructed by a group of experienced clinicians, using the past utilization profiles of the patients and then averaging their past expenses. It should be noted that a nonprofit corporation has authority over all five agencies and is a conduit for all funding streams allowing for the capitation system. It monitors the care and costs and the evaluation of the impact of the program.

The primary goal of the demonstration is, through the prospective allocation method, to provide the community agencies with the fiscal incentives to flexibly expand outpatient treatment and residential services for the chronically ill and to effectively integrate social welfare supports for this population. If the local agency is able to achieve “a profit,” it is used to develop new or additional outpatient services.

Advantages and Disadvantages

The method described above for the project in Rochester represents a major rethinking in mental health care financing. As indicated, it is hoped that such financing will increase service flexibility (particularly in the use of outpatient services), offer over a lifetime a new configuration of services that are broader and better coordinated, and encourage early care. There are, however, many questions about whether this will work because, if too low a rate is established, the risks to patients will be just as great as those created by the current underfinanced, uncoordinated system of care. Therefore, good evaluation and research are needed to develop an actuarially based financial method to accurately estimate future costs and determine a fair prospective allocation for those with chronic illness.

In the United States, an effective integration of both private and public resources is necessary in this process. Many individuals in the United States have some private insurance. There is also the so-called “safety net” of the public system. If private resources could be husbanded and budgeted and State resources placed upfront as described in the Rochester demonstration, it is possible that a sufficient prospective allocation could be made available to manage the majority of patients with schizophrenia. Case management should attempt to combine the appropriate mix of private resources and public entitlements over the lifetime of the patient.

Currently, there is no agency or authority capable of integrating funding streams to provide prospective allocations and overseeing the clinical care for patients with schizophrenia in the community. In addition, no governmental authority has undertaken responsibility for the coordination, funding, and treatment of the schizophrenic population. The current fragmentation of funding streams complicates the process and deters preventive intervention and systems change. Families, who are most often the primary caretakers for patients with schizophrenia, have virtually no support. We must develop the financial incentives to move care from the nursing home to the home, from the single-occupancy hotel room to the supervised group residence, from the costly acute inpatient unit to the long-term community-based treatment system, and from cure-promising to care-providing services. The prospective allocation method described above is one step toward providing opportunities for more humane care for patients with schizophrenia. What is needed is a new social policy based on clinical understanding and economic planning.

Implications for Social Policy

Patients suffering from chronic schizophrenia face uncertain futures. They require expensive medical care and related support services over an extended period of time. Unfortunately, most patients with chronic schizophrenia can expect a fragmented treatment experience, which is a sad commentary for an illness that is characterized by fragmented perceptions and cognitive disorders. Opportunities for treatment and support are often unplanned and uncoordinated and vary enormously in cost. It has been estimated that approximately 43 percent of the direct annual costs of all mental illness are related to treatment and care of the
chronic mentally ill (Andrews et al. 1985). A significant portion of these costs is paid to long-term institutional treatment settings. But the cost of treatment and care for the chronic schizophrenic patient is complicated by the fact that many of the services critical to remaining in the community are not considered medical and do not come under mainstream health financing through either public national health systems or private health insurance. The costs of basic care, such as housing, clothing, and food, and many of the costs involved in social and vocational rehabilitation as well as social welfare costs, such as social services, legal services, and income maintenance, create an immense challenge to social policy.

Since monies to support and treat the chronic schizophrenic patient are provided through a multiplicity of sources, it is almost inevitable that the treatment and care system will remain splintered and difficult to coordinate for the individual patient and family. In the United States, funds come directly from the Federal Government through Federal entitlement programs, Medicare, Medicaid, supplemental security income, and Social Security disability insurance. States contribute, especially through the State mental health agencies, and local services relate to vocational and housing needs. Funds also come from other social agencies, private insurance, and private resources. In the United States, too often the costs are paid retrospectively, that is, in a "fee-for-service" methodology that does not allow for easy cross-subsidization of necessary services or for a coordinated approach to meet the needs of chronically ill persons in a continuum of care.

With deinstitutionalization and the development of Federal entitlement programs, services for the chronic schizophrenic patient took on the following characteristics: They became mostly separate entitlement and categorical monies supporting separate services. They were unit costs and often fee-for-service based on complicated rules of reimbursement. There was a continuing search to get the Federal Government to pay for services that had traditionally been the State's responsibility. And the expansion of private third-party insurance led to the growth of private, not-for-profit psychiatric units in general hospitals, for-profit hospitals with psychiatric units, and for-profit psychiatric hospitals, as well as a dramatic increase in the number of mentally ill persons residing in private nursing homes. There is no social policy in the United States that remotely addresses the complexity of needs for individuals with chronic schizophrenia.

A new social policy and funding system must be developed. The goals of the system should be as follows:

• Care should be comprehensive, cover all the services that were once provided in the large institutions, and provide for a continuum of care and support that includes treatment, shelter, and case management.
• There should be administrative and programmatic responsibility for the implementation of a treatment system for the chronic schizophrenic patient.
• Funding should be adequate and not merely a replication of past economies of scale and should integrate the needs for both acute and chronic care.
• Funding should provide incentives for change in desirable directions, such as excellent community care in the least restrictive settings rather than in unsupervised group residences or in overly restrictive nursing homes or hospitals. The funding system should encourage the use of cost-effective treatments, such as day programs, outpatient clinics, and less restrictive residential facilities. Families who care for mentally ill relatives should receive direct support and should not have to face economic disaster by continuing to care for an ill relative at home.

• The funding approach ideally should give patients some choice in the type of care provided and who will provide it.

In the United States, Dr. John Talbott and I made a proposal (Talbott and Sharfstein 1986) to coordinate and integrate all sources of Federal, State, and local funds which would focus on a treatment system for the chronic mentally ill. This new Federal program would take existing monies from various Federal sources and lump them into one new Federal Social Security title. These Federal dollars would be channeled via indexed capitation grants through State administrative authorities and eventually arrive at local community programs. The total State grant would be indexed with the amount determined by the per capita premium and number of potentially eligible individuals in each State. These individuals would include patients who are currently residing in State and county mental hospitals, those with a primary diagnosis of severe mental disorder who are residing in nursing homes, those who are receiving disability income as their primary source of support and are on the rolls of a community mental health program, and those who were previously hospitalized and are now living at home with their families. The
States would develop a managed care system of medical and mental health care, social services, residential alternatives, and personal care. Federal guidelines would specify the essential elements of such a program and the program would be evaluated over time. The States, however, would be expected to develop a single administrative agency to coordinate all the programs needed for the chronic schizophrenic patient, including both institutional and noninstitutional care. The dollars provided would be planned, but individuals and families would be allowed some choice perhaps through a voucher approach, so that community programs would need to compete for patients and dollars.

This type of approach for the entire country is similar to the approach in Rochester, New York, described earlier. It recognizes that the long-term responsibility is best carried out by State government and local service delivery agencies. It also recognizes that Federal dollars will make the difference for an enriched program of treatment opportunities for this chronic population. We must begin to test a variety of new solutions if we are going to manage the challenge presented by the chronic schizophrenic patient.

References


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