Topics in Primary Care Medicine

Primary Care for Those With Severe and Persistent Mental Illness

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Historically, the medical care of persons with severe and persistent mental illness (SPMI) has been suboptimal. In many communities, large gaps exist in the continuum of services necessary to meet the medical needs of those patients, and existing services are not well coordinated. The effect of the managed mental health care on patients with SPMI remains to be seen, but it does not bode well for patients who are already at risk for being undertreated. We initiated primary care clinics exclusively for patients with SPMI because of our belief that integrating primary care and mental health services offers the best hope of improving health care for those patients. Our experience to date is instructive for other health care systems.

(Crews C, Batal H, Elasy T, Casper E, Mehler PS: Primary care for those with severe and persistent mental illness. West J Med 1998; 169:245–250)

The deinstitutionalization of people with severe and persistent mental illness (SPMI) has resulted in a shift of the burden of care from state hospitals to communities. Before 1955, patients with severe mental illnesses were cared for in a semipermanent manner by public mental hospitals that provided food, shelter, and ongoing medical care. The move toward community care has resulted in deficiencies in housing and basic medical care for SPMI patients.[1] Because of the large gaps that exist in the continuum of services necessary to meet the needs of the severely mentally ill, there is a tendency for these patients to "slip through the cracks" and end up in jails, in shelters, or on the streets.[2] These circumstances, in concert with the perception that patients with concomitant mental illnesses increase health care costs,[3] provide a compelling incentive to devise more effective strategies to care for them.

Despite evidence of high rates of medical comorbidity,[4–8] many patients with severe mental illness do not receive ongoing medical care; rather, they receive care sporadically and at late stages of disease. When patients do seek care in the mental health setting, medical comorbidity is frequently unrecognized,[9,10] leading to higher rates of morbidity and mortality.[11] In addition, substance abuse is prevalent in this population[12] and has been correlated with serious medical sequelae and an increased need for acute inpatient treatment.[13,14]

Many complex factors lead to the breakdown in delivery of care to patients with SPMI. They involve characteristics inherent to this population, including paranoia and psychosis, as well as characteristics of medical care professionals and health care systems themselves. The absence of a regular source of health care results in worse overall health outcomes,[15] so the numerous impediments to providing proper care for these patients must be removed.

Just as primary care patients are reluctant to accept referrals to mental health specialty settings,[16] the chronically mentally ill seldom receive quality primary care.[17] A mortality rate four times that of the baseline population was recently reported in the homeless population,[18] a group with a high incidence of chronic mental illness. Without an ongoing formalized structure or a strong relationship with primary medical care givers, those patients are at risk for noncompliance and rapid decompensations in clinical status.

Historically, there has been a separation of psychiatry from general medical care. The prevailing understanding of disease processes is one that promotes a mind-body dualism, which in turn fosters the separation of the general medical and mental health domains of care.[19] Similarly, there has been a paucity of effort directed toward initiating and securing a strong relationship between primary care and psychiatry for treating the medical problems of patients with chronic mental illness.[20] Although some recent discussions and proposals within the field of psychiatry have focused on bridging the gap between psychiatry and primary care,[21] they have mostly addressed the detection and treatment of psychiatric disorders in a primary care setting[22] or the training of psy-

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ABBREVIATIONS USED IN TEXT
MHCD = Mental Health Corporation of Denver
SPMI = severe and persistent mental illness

chiatrists to also function as primary care physicians for simple internal medicine problems. Providing quality primary care for patients with SPMI is a separate and unknown clinical area. Therefore, it was our goal to improve medical care for SPMI patients by developing clinics, staffed by internists, that provide primary care exclusively for such patients. We opted for this type of health care delivery model because we believe that the high medical comorbidity found in this patient population is best served by internists. The SPMI patient needs a physician trained in the complex spectrum of primary care internal medicine.

Discussion between psychiatry and general internal medicine at Denver Health Medical Center identified the SPMI patient group as one that lacked continuity of medical care. Psychiatrists frequently noted untreated medical conditions upon presentation for psychiatric emergency services or admission to the psychiatric inpatient service. Internists observed that individuals with psychiatric disorders often inappropriately visited the urgent care clinic and emergency department. Both physician groups believed that a lack of continuity led directly to reliance on the more expensive and sporadic treatment provided through urgent and emergent services. We believed that designating clinics and physicians for this patient group would provide better patient adherence and access to primary medical care. The underlying theme of this experiment was predicated on the compelling belief that consistent and well organized treatment of chronic conditions will reduce the need for acute costly episodic services, will prevent disease progression, and will improve the overall health of those with severe and persistent mental illness.

Methods

In collaboration with the Mental Health Corporation of Denver (MHCD), the designated provider of all publicly funded outpatient mental health services for the city and county of Denver, we at Denver Health Medical Center initiated a program that serves SPMI patients in the setting of a primary care clinic.[23] Denver Health Medical Center is an integrated health care system that includes an acute care hospital and 10 community health centers located in medically underserved areas throughout Denver County. This system of hospital and clinics is integrated under one administration and a single system of medical records. Denver Health Medical Center provides approximately 40% of the unreimbursed care for the state of Colorado.

The MHCD provides comprehensive outpatient mental health care including psychiatric evaluation, medication prescription and monitoring, case management, housing programs, crisis intervention, and community outreach programs. Services are provided to clients at more than 30 locations throughout Denver, and clients are billed for services based on their ability to pay. Approximately 80% of MHCD patients are covered by Medicaid or Medicare. The MHCD serves 3600 adult clients, the majority of whom carry an axis I diagnosis of schizophrenia or severe affective disorder. These patients are of mixed ethnicity (51% white, 24% Hispanic, 21% African-American) and are almost exclusively indigent, 90% having incomes less than $10,000 per year.

To provide primary care to this population, two clinics were set up in the Community Health Department: one in the ambulatory care clinic of Denver Health proper and the other at Eastside Family Health Center, one of the Denver Health community-based neighborhood clinics. Each clinic operates one half-day a week and is staffed by a board-certified general internist. Physicians were selected for their willingness to work with this group of patients. Given that they had not received additional formal psychiatric training, their involvement and interest in this population self-directed their efforts to expand their knowledge.

Substantial time was spent designing and refining the proper referral system to support and improve collaboration between the separate medical and mental health care systems. After much deliberation, we decided that referrals to the clinics would be made by professional staff at MHCD by completing a standard form *before* the patient's first appointment. This form provided basic psychiatric and medical information, a current medication list, demographic details such as present housing situation, and telephone contact numbers for case managers and physicians at the MHCD. We decided the case managers would be the best to initially elicit this important information because of their established rapport with these patients. The referral also specified any symptoms or medical complaints requiring evaluation and treatment. Likewise, a completed treatment plan was communicated to the MHCD staff after each appointment in primary care.

Results

Before the clinics' inception, we tested our assumptions regarding patterns of health usage and access in this population by conducting a random survey of 100 MHCD patients (although we did not use a formal, validated survey tool). The results showed that a significant number of these patients are not linked to ongoing primary care: 61% reported that they would go to the emergency department or urgent care clinic if they felt sick; only 20% said they would see their "regular physician." Fifty percent reported having a regular doctor, and only 50% of those patients said their regular physician was an internist/family doctor. The others reported their regular physician to be a psychiatrist or were unsure.

During the first 6 months of the trial, 220 patients (unduplicated visits) were seen at the clinics. Patients were 59% male; 53% age 26–44 years and 38% 45–65;

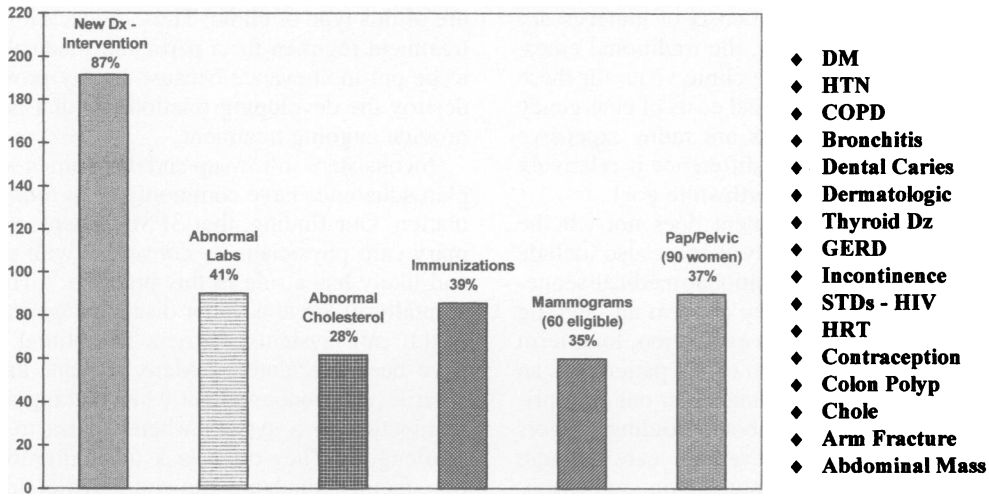

Figure 1.—Clinical results of 220 chronically mentally ill patients in primary care clinics.

66% white, 18% African-American, and 14% Hispanic. Sixty-one percent were schizophrenic, 20% were bipolar, and 14% carried a diagnosis of major depression. As expected, few patients referred were under age 26 or over age 65. (It is likely that younger persons with severe mental illness are not yet dependent on the public health and mental health care systems and are perceived to have less need for ongoing medical care, while persons over age 65 actually have more resources for health care due to entitlement programs for the elderly.) Seventy-eight percent of the patients smoked, 24% more than two packs per day. Forty-four percent reported a history of alcohol abuse, and 31% reported a history of other substance abuse.

In 191 patients (87%), we were able to make a new diagnosis or intervention (Figure 1). Diagnoses ranged from basic infections, abnormal Pap smears, hypertension, and new-onset diabetes mellitus to a previously unrecognized upper extremity fracture that required immediate hospitalization.

We stressed preventive health measures: we updated immunizations in 39% of the 220 patients and performed mammograms in 35% and Pap smears in 37% of eligible women. With the exception of thyroid-stimulating hormone and cholesterol, screening labs done in asymptomatic patients during this pilot project (complete blood count, chemistry panels, and serological tests for syphilis, HIV, and hepatitis) generally were normal and did not influence management.

Discussion

Our clinical results are consistent with literature describing high rates of medical comorbidity and substance abuse in the severely mentally ill.[5,13,24–26] Chronically mentally ill adults have traditionally accounted for a large portion of health care expenditures.[27] Without adequately established primary care programs, they tend to access care through emergency departments and urgent care clinics where the cost of care is more expensive.[28] Several factors contribute: a lack of regular medical care results in a deterioration of the individual's health to a point where urgent care becomes necessary; alternatively, if patients lack access to primary care, they are likely to seek care from a site where access is less impeded such as an emergency department or urgent care clinic. This pattern of utilization was observed by the Medicaid access group who found that Medicaid recipients in urban areas have extremely limited access to outpatient care apart from that offered in hospital emergency rooms.[29] Surveys of Medicaid recipients who are not necessarily mentally ill reveal that more than 60% had no regular source of care.[30] In addition, patients who are unaffiliated with a primary care physician are known to visit the emergency room repeatedly.[31] Merely putting forth efforts to limit these emergency room visits, when established alternative sources of care are lacking, will be fraught with problems.[32] These conclusions seem especially applicable to SPMI patients because their concurrent mental illness typically causes them to have increased difficulties in dealing with the health-care system.

Although it is too early to allow for an analysis of the economic impact of the clinic, from an initial overview of clinic attendance, the high rate of kept appointments, and the nature of medical conditions treated, we believe the economic impact will be positive over time. While this is open to discussion,[33] from an intuitive standpoint, enhancing the role of primary care for an underserved population should help moderate health care costs. Many of these same patients are indigent and thus served in the public sector. If we as a society and medical community do not invest the necessary time and effort to address the health needs of SPMI patients, we will inevitably be faced with having to pay for the additional health care costs for problems once they progress. Managing the care of chronically mentally ill patients may be one important strategy for health care agencies

hoping to eliminate the excessive costs of unnecessary emergency room visits. Similarly, the traditional emergency department and urgent care clinic visits for these patients are inefficient. The marginal costs of emergency care for non-emergent conditions are more expensive than an office visit;[34] even if this difference is relatively small, limiting these costs is a worthwhile goal.

However, the economic argument does not tell the entire story. An accurate cost analysis must also include the costs of failure to prevent additional medical sequelae, as well as the lost opportunity to form an ongoing relationship that promotes further evaluation, long-term management, and health education of the patient. As an example, a patient with emphysema in an ongoing primary care setting can be taught about avoiding triggers for respiratory deterioration, preventive care through influenza and pneumococcal immunization, and symptom monitoring during flares of the disease. There is seldom adequate time for patient education during an urgent care visit.

In the long run, the effectiveness of primary care in this population will be assessed based on the patients' health outcomes. The continuity we are striving to achieve for these traditionally problematic patients has in other populations been linked to improved outcomes.[35] Having a regular place of care has been shown to be the most important factor associated with receiving preventive care services.[36] The SPMI patient often places a low priority on these types of services because of more pressing psychological or social stresses or because of a lack of understanding of the benefits. We believe that the ability to perform routine health maintenance will continue to increase as patients become more comfortable and trusting of the clinics and those who provide their care. Currently, no literature addresses the utilization patterns of preventive services by this patient population. Often we have found that in contrast with other patients in a general internal medicine clinic, SPMI patients require more extensive explanations about the need for screening examinations and laboratory work. An incremental approach has been successful in many patients—early visits involve screening procedures that are the least intrusive and more sensitive tests are done at later visits when the patient feels more comfortable.

Because of their inherent paranoia, SPMI patients are more likely to return for follow-up and adhere to treatment plans if they trust the health care staff. Early on, when ancillary clinic staff expressed some hesitancy about caring for this population, we developed a number of educational sessions to discuss salient aspects of chronic mental illness in order to encourage a better understanding and empathy. In addition, the selection of primary care physicians is crucial to the success of such a clinic. The physicians must be adept at creating an atmosphere of respect and trust for the patients. This ability of the primary care physicians and support staff to build a strong relationship with the patient may prove to be the most significant variable in the success or failure of this type of clinic. Thus, on occasion, the obvious treatment regimen for a particular medical problem has to be put in abeyance because it may provoke fear and destroy the developing relationship that is necessary to provide ongoing treatment.

Inconsistent follow-up and difficulties with treatment plan adherence have commonly been found in this population. Our finding, that SPMI patients often lack primary care physicians, is consistent with earlier studies and likely has a role in this problem.[37] The chronically mentally ill are at a major disadvantage in dealing with health care systems; barriers to optimal primary care have been elucidated.[38] Many patients are aggressive, volatile, and noncompliant while lacking adaptive skills to function in a system where access to care may be challenging. They often lack transportation and education, factors which are known to predict delaying or forgoing care for a medical problem.[39] To improve adherence, we have enlisted the collaboration of the patients' case managers, who frequently accompany their clients to clinic appointments. The case managers facilitate access to the clinic by making appointments and transporting the patients. They elaborate on symptomatology, provide information about patients' day-to-day life, reinforce the treatment plan, enhance communication between the medical and psychiatric professionals, and serve as a liaison between patients and their medical care team. Rosenheck et al.[40] recently demonstrated that health services utilization was primarily associated with identification of such a need by the case manager, not the client.

The feedback about the clinics has been uniformly positive. The psychiatry staff at the MHCD appreciate the direct lines of communication that have been established with the primary care physicians and frequently consult the internists by phone. Several psychiatrists have expressed relief that the medical issues of their patients are being addressed in a structured fashion. By establishing clinics that expressly serve this population, we have sought to streamline the medical care for the patients and staff at MHCD. In the past, case managers may have had a different physician for each of their clients; now they are able to find one for a whole cohort of their clients. It is also easier for the mental health team to obtain clients' medical records, laboratory results, medication refills, and same-day appointments for acute illnesses because of the involvement of the case managers. The same-day appointments serve as an alternative to more expensive methods of care such as the urgent care clinic or the emergency room.

Given their precarious nature, SPMI patients require a system that promotes flexibility and creativity to improve the historically high rates of attrition when they are simply provided care in a general office or hospital-based clinic setting.[41] Efforts to integrate primary medical care with mental health care may result in an organizational structure that can add the necessary coherence to the system of services for the chronically mentally ill.[42] It has also been demonstrated that interventions to

improve the quality of health care through case management may be most successful when they focus on selected high-risk populations such as SPMI patients.[43]

The main lesson we have learned is that communication with the psychiatric staff is imperative. The MHCD has the structure to reinforce the treatment plan and, most importantly, the MHCD staff members are the ones who have long-standing relationships with the patients. They have the knowledge of psychiatric medications, which the patients often do not remember, and of the patients' living situations and functional status. A coordinated effort between the internal medicine staff and the psychiatry staff is required.

The main ongoing problems posed by dealing with this population are in the areas of coordination of care, approaches to follow-up, and medication compliance. In addition, patients are skeptical about some treatments, especially preventive services that do not have immediately obvious results, and they are often on so many medications that they refuse additional ones. Both these problems are most successfully dealt with by scheduling frequent follow-up visits to reinforce the treatment plan and forge trust. Education of the case managers and psychiatrists about the need for a specific treatment allows for reinforcement in a more natural and less threatening environment outside of the primary care clinic. The structure is often in place to fill "medi-planners" during psychiatric visits, and the psychiatric staff now incorporate medications for medical problems into the planners.

Transportation to the clinic is difficult. Unless the patient is being intensively case managed and is provided transportation, he or she may miss the appointment. Just communicating with the clinic can be difficult—patients often do not have phones and become frustrated and confused with the process. Another problem involves differentiating between somatic manifestations of psychiatric illness and medical illness, which requires multiple visits and carefully focused evaluation and testing to rule out serious illness. Finally, psychiatric medications cause a large number of side effects. It may be difficult to decide when to recommend a switch of medications, especially when the medication is successful psychiatrically but complicates the medical health picture, or in patients who have unsuccessfully tried numerous psychotropic medications in the past.

Important questions to consider: 1) Can this clinic be replicated with any physician? 2) How might primary care physicians be better trained to provide appropriate care for SPMI patients? 3) What specific skills, knowledge, and experience are necessary to take care of SPMI patients?

The clinic can be replicated if the necessary infrastructure for the clinic is available and communication pathways are arranged between the psychiatry and internal medicine divisions. Medical personnel need psychiatric back-up and resources (such as social workers) for the less independent patients. Primary care physicians need a basic understanding of the psychiatric illnesses, psychotropic medication indications, and side effects. Mostly, they need patience and empathy.

Ultimately, we intend to evaluate the cost-effectiveness of these clinics based on the medical and psychiatric outcomes through a randomized prospective trial. Patient and doctor satisfaction with the primary care clinics is another area to explore. We believe the results of these analyses will support our hypothesis that the basis for improved health care in the patient with SPMI will continue to rest on the establishment of a secure ongoing relationship between psychiatric staff, patients, and a primary care physician. Medical clinics developed exclusively for severely mentally ill patients may be the ideal way to care for them.[44]

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