

Clinical Case Conference

Intensive Community-Focused Treatment of Veterans With Dual Diagnoses

Robert Rosenheck, M.D., Laurie Harkness, Ph.D.,
Barbara Johnson, M.S.N., Carolyn Sweeney, R.N., M.A., Nancy Buck, Ph.D.,
Debbie Deegan, M.S.W., and Thomas Kosten, M.D.

This case presentation follows two veterans through a 5-year course of intensive outpatient care as they made the transition from lives centered on repeated cycles of crisis and hospitalization to lives that are stably centered in the community. The veterans have both major psychiatric disorders and severe substance abuse, and their outpatient treatment demanded intensive, highly individualized care. The treatment programs in which these patients participated were costly, and their development required a substantial shift of inpatient staffing and resources to the outpatient sector (1–4). These clinical histories illustrate the need for both flexibility and close coordination of the efforts of multiple providers, programs, and agencies. Since these patients were participants in national Veterans Affairs (VA) demonstration programs that include built-in pro-

gram evaluation and outcome-monitoring efforts, the care they received was an example of the new evidence-based medicine in which the tools of empirical science are used to inform clinical decision making and in which high levels of accountability become a standard part of the everyday practice of medicine (5–7).

CASE PRESENTATION

Ivan and Henry are now in their early 40s, and both had extensive hospitalizations before their entry, in 1992, into two separate, specialized case management programs, one for high users of psychiatric inpatient care and the other for homeless veterans with serious mental illness. Ivan is a ruddy-faced, short, rotund, 41-year-old, single white man with chronic paranoid schizophrenia and alcohol abuse, which have now been in sustained remission for over a year. In 1991 alone, Ivan was hospitalized for 97 days over four separate admissions. He had experienced progressively reduced social functioning after his discharge from the military, and in 1992 he found himself threatened with eviction from his community board-and-care home because of an assault on another resident. He was already on court probation for assaulting his father, and his parents had obtained a restraining order to keep him away from the family home. His symptoms included persistent auditory hallucinations with poor medication compliance, and he was drinking daily.

Henry, in contrast, is a tall, fast-talking, wiry, 43-year-old, single white man whose eyes dart back and forth from dark sockets. He has both major depressive disorder and cocaine and alcohol dependence, which have now

been in remission for over 6 months. Henry had three long hospitalizations between 1987 and 1992. Like Ivan, Henry experienced a gradual deterioration in his social functioning after his honorable discharge from the Navy in 1978. At first he was employed as a skilled mechanic, but as his drinking and depressive symptoms worsened, he could only perform unskilled day labor and experienced multiple periods of unemployment and sustained homelessness. He, too, was increasingly estranged from his family, especially from his father and older brother, both of whom also had problems with alcohol dependence.

Upon discharge from inpatient care in early 1992, both veterans found themselves without funds, alienated from once supportive families, and dependent on emergency shelters for the homeless for housing.

Ivan: Entry Into Intensive Psychiatric Community Care

Ivan quickly left the emergency shelter in which he was residing and was allowed to return to his board-and-care home, in large part as a result of being referred to a VA Intensive Psychiatric Community Care (IPCC) program (1), which is a clinical case management program with low caseloads (about 12 patients per case worker) that allows intensive individualized treatment. The team is composed of two full-time nurses, three full-time social workers, and a quarter-time psychiatrist (8, 9). The team meets daily for treatment planning, and clinicians provide 24-hour coverage by telephone. Patients are seen as often as five times per week in this program, and strong emphasis is placed on home visits to provide support and in situ skills

Received Feb. 10, 1998; revision received April 28, 1998; accepted May 15, 1998. From the VA Connecticut Healthcare System; the VA Connecticut-Massachusetts Mental Illness Research, Education and Clinical Center, West Haven, Conn.; and the Department of Psychiatry and the School of Epidemiology and Public Health, Yale Medical School, New Haven, Conn. Address reprint requests to Dr. Rosenheck (182), VA Connecticut Healthcare System, 950 Campbell Ave., West Haven, CT 06516; Robert.Rosenheck@Yale.edu (e-mail).

Supported in part by the VA Connecticut-Massachusetts Mental Illness Research, Education and Clinical Center and the National Institute on Drug Abuse.

The authors thank Paul Errera, M.D., Gay Koerber, M.A., Thomas Horvath, M.D., Al Washko, Michael Neale, Ph.D., Wesley Kaspro, Ph.D., and Linda Frisman, Ph.D., for their contributions to the design and development of the programs described in this article.

training. The willingness of the IPCC team to make home visits and to facilitate rehospitization for Ivan, if necessary, allowed the board-and-care home to agree to take him back. Within the first month of treatment, however, he was rehospitized after yet another altercation with a fellow resident.

For Ivan this rehospitization began a tumultuous 18-month period with the IPCC team. As a result of this crisis, he once again lost his residence and violated the terms of his court probation because of his continued alcohol abuse and aggression. During the hospitalization, the IPCC staff visited him daily to develop specific treatment plans and to establish a working alliance. Ivan was finally discharged to a new board-and-care home and was seen twice weekly at his residence and in other community settings. The IPCC staff also took an active role in coordinating money management between him and his family. The family made sure that the rent was paid directly to the board-and-care home at the beginning of each month and that Ivan was provided with no more than a limited allowance, distributed daily, to discourage his spending money on alcohol. To address his noncompliance with the oral medication regimen, he was also started on intramuscular fluphenazine.

Ivan continued to drink almost every day, however, and was hospitalized six times for medical detoxification. He was also sent to the emergency room almost weekly by the evening staff of the board-and-care home for intoxication and disruptive behavior. At each twist and turn of his treatment, the IPCC team provided practical assistance and personal support, nurtured the slowly developing treatment alliance, and was prepared to set limits, by using involuntary commitment if necessary (10).

Henry: Entry Into Intensive Supported Housing

Henry was initially evaluated by a VA outreach worker at an emergency shelter for the homeless and was referred to an intensive supported housing program designed specifically for indigent, homeless veterans, the U.S. Department of Housing and Urban Development (HUD)-VA Supported Housing Program. In this program he was offered a renewable HUD Section 8 voucher to subsidize his rent and was assigned an intensive case manager not unlike those working in the IPCC pro-

gram. The HUD-VA Supported Housing Program is a smaller program with two master's-level clinicians and a joint target caseload of 25 veterans (4). The goal of case management in the HUD-VA Supported Housing Program is to facilitate community adjustment through constructive use of the housing voucher, to encourage participation in both psychiatric and addictions treatment, to facilitate the transition to independent housing, and to provide continuous support and linkage with the diverse service agencies.

Like Ivan, Henry had an early course in treatment that was fraught with difficulty. During the years from 1992 to 1994 he had multiple relapses into alcohol and cocaine abuse, but these were followed by outpatient detoxification rather than hospitalization. The supported housing case manager visited Henry at least weekly in his apartment and attempted to facilitate sobriety by strengthening his social supports. Multiple attempts were made to connect him to Alcoholics Anonymous and to link him with a support system rooted in the other veterans participating in the HUD-VA Supported Housing Program. Even as these efforts were implemented, Henry frequently arrived at his apartment intoxicated and telephoned his case manager complaining of suicidal feelings. He was linked to a day program located in a community setting, away from the hospital, that emphasized adaptive coping skills.

In concert with the day program staff, short-term (day-to-day) contracts were developed to ensure Henry's safety (10), and he was encouraged to make active use of the day center as a behavioral "splint," even when he was intoxicated, instead of going to the hospital. While staff members of the clinical team wondered (and worried) many nights whether Henry would be safe, their joint decision to expect Henry to behave responsibly appears to have bolstered his self-confidence and his ability to take care of himself. This approach ultimately strengthened his coping capability, rather than returning him to the hospital and the world of sick role dependency.

During the subsequent months, Henry finally successfully remained in his apartment and substantially reduced his dependence on the hospital for crisis support. A critical aspect of this housing arrangement was that assertive outreach was provided at home during relapses, to repair disruptions and strengthen his relationship with

his landlord and to support recovery strategies. Meeting with both Henry and his landlord, the HUD-VA Supported Housing Program clinician defined each crisis as an opportunity for improved coping rather than a personal failure.

Pharmacological Intervention

In both of these cases, a complex series of pharmacological interventions were also undertaken to control a range of behavioral problems that were intensified by the substance abuse. Both the IPCC and the HUD-VA Supported Housing Program teams work with close psychiatric collaboration, although the psychiatrist is formally defined as a member of the IPCC team but is identified as a collaborating pharmacotherapist in the HUD-VA Supported Housing Program.

For Ivan the initial use of depot fluphenazine had no effect on either his substance abuse or his recurrent aggression. His alcohol use was initially controlled with an intensive day program and twice weekly dual-diagnosis treatment groups that occupied him for about 6 hours on 5 days per week. However, after maintaining sobriety for 6 months, he had a serious relapse shortly after his primary clinician went on a planned vacation.

After this crisis was resolved, he was started on naltrexone for his alcoholism (11). While taking naltrexone, he continued to use alcohol, but his level of consumption was lower than it had been previously, and there were no sustained relapses for several months. He complained, however, of increased auditory hallucinations and was offered a trial of clozapine (12). Ivan agreed to the treatment and experienced a marked improvement of symptoms; he also complied with the required blood tests. After several weeks, he reported decreased auditory hallucinations, decreased psychomotor agitation, and complete abstinence from alcohol and became more engaged with his case manager (13).

Treating Henry's depression, suicidality, and recurrent sleep disorder required a sustained dialogue between the psychiatrist, the HUD-VA Supported Housing Program clinician, and the patient concerning appropriate medication management in the context of ongoing substance abuse. Henry repeatedly requested benzodiazepines for sleep problems and would abruptly leave sessions with his psychiatrist when this request was refused. As an

alternative, a variety of augmentation strategies were used, initially with tricyclic antidepressants and later with selective serotonin reuptake inhibitors, eventually in combination with lithium. Unsuccessful attempts at using thyroid augmentation or nonbenzodiazepine sleeping medications were followed by frustrating relapses but not by the suicidality that had frequently precipitated the previous hospitalizations.

From Reluctance to Engagement

The intensity of case management was often experienced as intrusive and demanding by these patients, especially during the early phases of treatment. Ivan initially resisted the responsibilities that go with independent living and viewed his legal problems, his violent behavior, and his housing problems as divorced from his psychiatric illnesses and their treatment. In response, a unified approach to Ivan's treatment was developed that involved all of his community providers. It was as if the only way to link different aspects of his life psychologically was to develop interactive links between the agents representing them. Ivan's IPCC case manager began to accompany him to his monthly probation meetings and met with the residential house manager to reinforce his abstinence from alcohol. Ivan considered these meetings intrusive at first but gradually became an active participant.

He was also encouraged to learn basic living skills, such as cooking, right at the day center, using a kitchen located on the premises. He was initially reluctant to assume responsibility for this and all other activities of daily living, such as cleaning, shopping, laundry, self-medication, and money management. He was accompanied out into the community to learn shopping skills and went with staff to his apartment to learn to keep it clean, to do his laundry, and even to socialize with his housemates. Ivan initially doubted his ability to master these tasks, but in time, he made progress in each of these areas.

Henry had a different way of expressing his reluctance to take responsibility for himself. At first, he wanted the individual meetings with his case manager to focus on his history of physical and emotional abuse and seemed determined to portray himself as a helpless victim. His case manager diligently refocused him on his strengths, on his ability to behave re-

sponsibly, and on the importance of using his adaptive skills to prevent relapse and maintain sober living. A substance abuse counselor also worked with Henry to focus his attention on recovery and on becoming a productive participant in his community. Personal triggers for abusing drugs were identified, and coping strategies were practiced. "Then and there" received minimal emphasis, while "here and now" was given priority.

During relapses, which occurred three times between 1992 and 1997, crisis coping was actively encouraged, not regression. Relapses were treated as learning opportunities, not personal failures, and hospitalization was avoided. The success of this approach is reflected in the fact that Henry had just 5 inpatient days during two separate hospitalizations between 1994 and 1998. In both cases he had begun to give up on himself, protesting that "nothing is working for me." More concretely, he complained that he had no transportation and could not, therefore, continue his treatment. For a short time his case manager picked him up at home and brought him daily to the day program. The team would not be provoked into giving up on him.

Work and Responsibility

Vocational rehabilitation for patients with dual diagnoses who have severe illnesses is invariably a multistage process, moving through a series of graded work restoration programs that allow progressive development of meaningful and productive work habits. Work itself can provide motivation for sobriety and an incentive to cope with demands for responsible behavior. For Ivan this aspect of rehabilitation began relatively late in his treatment. He began by first moving into a more independent living situation, a VA group home, in which he took responsibility for such tasks of daily living as cooking, cleaning, and doing the laundry. He also began a work study program and worked successfully as a volunteer for 15–20 hours per week for 6 continuous months in 1996. During this period of time he developed a strong supportive network with other members in the group home and renewed his relationship with his family. He was eventually accepted by a VA-sponsored work-for-pay program and entered a computer training program at a local psychosocial club.

Henry turned out to be capable of more intensive vocational activity than

Ivan. After his 1992 hospital discharge, he appeared ready and motivated for work and moved quickly into a well-paid competitive position. This initial foray into the world of work was apparently too rapid and resulted in a relapse, loss of his job, and return to the supervised workshop. He followed this circular trial-and-error course three times in the 4-year recovery process. Each time he took a demanding job, relapsed, and experienced a decrease in income from losing his job. He has gradually increased his vocational capability and now works each morning in a trial work program reading meters for a local utility company. In the afternoon he continues to work in a highly structured noncompetitive work program. He has been abstinent for the past 6 months and reports no craving for alcohol or drugs. This is the longest that he has been sober in over 10 years. He has maintained his housing in good standing and recently signed a new lease with his landlord.

DISCUSSION

These two cases illustrate some of the most complex and difficult clinical challenges encountered anywhere in behavioral health care. Ivan and Henry have dual diagnoses, and their treatment had to address severe psychiatric illness, compounding addictive disorders, and a host of adaptive problems. These disorders cannot, however, be treated independent of one another. While a patient with a cold and a broken leg might be adequately treated by different doctors in distant clinics, treatment of the psychiatric condition in patients with dual diagnoses cannot be separated from treatment of the addiction or from the need for help with adaptation to the community (14). In these two cases mental disorders were seriously complicated by problems such as violence, homelessness, social isolation, and poverty, each of which had to be addressed in close coordination with the others. Substance abuse treatment, for example, was thoughtfully linked to addressing criminal justice system problems and residential support.

In addition, since these patients' diverse problems brought them into contact with numerous VA and non-VA, health, social welfare, and criminal justice programs, they had to be helped to make their way through a complex and fragmented system of health care and social services. To make things even

more difficult, these patients sought treatment at a time of major change in the nation's health care and social safety net programs. Nationally, during the years of treatment reported here (1992–1997), the VA eliminated 38% of its general psychiatry beds and 76% of its substance abuse beds and experienced a 24% decline in inflation-adjusted expenditures per psychiatric patient (15). In addition, local general assistance (welfare) programs reduced their benefits, low income housing subsidies became more difficult to obtain, and job opportunities for unskilled workers diminished.

These two cases are thus of particular interest because they illustrate some of the most difficult challenges confronting mental health treatment teams, administrators, and program planners in the late 1990s. These patients had far more severe and complex problems than most others, the resources to care for them were increasingly limited, and they had a particular need for intensive community-based programs because of extensive reduction in inpatient treatment capacity. Although these challenges are formidable, important new tools are now available to meet them. New, more effective pharmacological agents, improved and experimentally tested models of psychosocial rehabilitation, and a variety of approaches for reducing the adverse impact of service system fragmentation all played a role in the treatment we have described. Thus, while facing a difficult set of problems in a difficult and challenging environment, these two patients have benefited from advances in both the efficacy of mental health treatments and the effectiveness of mental health service delivery. Several of these advances deserve further elaboration.

First, and perhaps simplest, these patients have benefited from the development of new pharmacotherapies. Recent studies have demonstrated the cost-effectiveness of atypical antipsychotic medications such as clozapine (12) and the benefit of naltrexone in forestalling relapse in alcoholism (11). Clozapine may also be particularly effective in patients with both schizophrenia and addictive disorders (16). Studies showing that new medications are efficacious in controlled trials does not guarantee, however, that these agents will be effectively used in practice or that resources will be allocated to pay for them. Only the availability of sophisticated professionals (supported, in some cases, by up-to-date

practice guidelines) and committed policy makers can ensure that these efficacious treatments are used effectively.

Second, these patients received services from multidisciplinary integrated case management teams that had both sufficient expertise to understand the wide range of health and social service problems they faced and sufficient staff resources to address these problems in depth. Numerous studies have shown that intensive community-based treatment teams can consistently reduce hospital utilization, and many show improved clinical outcomes as well (17, 18). The IPCC program that treated Ivan was part of a national VA demonstration project which showed that the Assertive Community Treatment approach developed by Stein and Test in Madison, Wis., could be effectively implemented on a large scale in the VA (1, 7, 9). IPCC teams operate under four core principles: 1) intensity: patients are seen as frequently as clinically indicated, and caseloads are kept low (7–15 patients per clinician); 2) flexibility and community orientation: clinicians are urged to provide the majority of contacts in community settings, where maximal clinical leverage can be obtained for developing coping skills; 3) rehabilitation focus: a broad range of practical rehabilitation services and supports, such as transportation assistance, work therapy, and money management, are provided; and 4) continuity of care: the teams assertively maintain contact with even the most reluctant patients, refusing to let them “fall through the cracks.” Studies have shown that adherence to these basic principles is closely related to program effectiveness and that continuous monitoring of team activities is important in guiding their effective implementation (1, 16, 17).

A recent study (19) has shown that service system integration is associated with superior housing outcomes among people with serious mental illness, and both the IPCC team that treated Ivan and the HUD-VA Supported Housing Program that treated Henry were distinctive in accepting responsibility for actively making fragmented health and social service systems accessible to these two patients. The two programs, however, illustrate somewhat different approaches to the challenge of service system integration (20). The IPCC program represents a “bottom-up” approach in which a single provider or case management team makes a fragmented service system

work by “carrying patients across the cracks in the system.” The HUD-VA Supported Housing Program similarly uses “bottom-up” integration principles of intensive case management, but it also developed out of a “top-down” approach to systems integration. In this approach agency leaders come together to develop programmatic coordination of service delivery at the provider level, effectively “sealing up the cracks in the system,” not just bridging them for individual patients. In 1992 the Federal Interagency Council on the Homeless brought together federal agencies to develop joint approaches to assisting homeless persons with severe mental illness. The HUD-VA Supported Housing Program was an outgrowth of that effort as VA and HUD leaders decided to test a program that joined case managers from the VA's Health Care for Homeless Veterans Program (4) with HUD Section 8 subsidized housing vouchers. Preliminary data from an experimental evaluation of the HUD-VA Supported Housing Program show that the integrated program is associated with 50% better housing outcomes than case management alone (4).

Finally, it must be recognized that because of resource limitations, the costly but effective treatment received by Ivan and by Henry is not available either in the VA or in most other health care systems to many patients who would benefit from it. Although it has been shown that many new treatment methods, including some of those provided to these two patients, result in inpatient cost savings great enough to offset their direct program costs (5, 12), expensive programs often require an initial investment of resources, and savings sometimes do not appear for months or even years. Funds for such up-front investments are often difficult to obtain. In addition, the decreasing reliance on inpatient care in all parts of the health care system means that there are fewer hospital days to be reduced and, thus, fewer dollars to be saved by new treatments.

With the growing emphasis on primary care and other types of nonspecialized service delivery, it is also increasingly difficult to obtain funds for specialized mental health programs that focus on the least well-off patients—those with the greatest needs. In assessing the value of such programs, traditional cost-effectiveness analysis unfortunately fails to take into consideration the widely accepted ethical obligation to give special weight to

programs that address the needs of those with the most severe problems (21, 22). Less expensive programs that help less disabled patients may look more attractive to health system managers trying to help the largest number of people possible with limited funds. The dissemination of successful programs like those presented here requires sophisticated weighing of health care benefits, economic costs, and ethical considerations. Only such a broad-based decision-making process will produce allocation decisions that are both efficient and just.

The care of complex, disadvantaged patients like those presented here requires highly skilled intervention at multiple levels of the health care system. First, clinicians must directly provide a complicated array of services with skill and patience over an extended period of time. Second, program managers must coordinate the care provided by numerous clinicians, often working with multiple agencies to ensure adequate breadth and intensity of care. Third, clinical and services researchers must provide decision makers at all levels with credible data on program effectiveness and costs. Fourth, and finally, health systems managers and policy makers must make resource allocation decisions that balance considerations of effectiveness, efficiency, and justice.

Caring for persons with the most severe problems is not an easy task at any level. Whether we can provide such care is one of the most important tests of our commitment to health care equity in the broadest sense of the term and to realizing basic principles of fairness in our society.

REFERENCES

1. Rosenheck RA, Neale MS: Cost-effectiveness of intensive psychiatric community care for high users of inpatient services. *Arch Gen Psychiatry* 1998; 55:459-466
2. Rosenheck RA, Gallup PA, Frisman LK: Service linkage and related costs of an outreach program for homeless mentally ill veterans. *Hosp Community Psychiatry* 1993; 44:1166-1171
3. Rosenheck RA, Frisman LK, Gallup PG: Effectiveness and cost of specific treatment elements in a program for homeless mentally ill veterans. *Psychiatr Serv* 1995; 46:1131-1139
4. Rosenheck RA: Testimony for House Veterans Affairs Subcommittee on Oversight and Investigations Hearing on VA Treatment of Homeless Veterans, July 10, 1997. Washington, DC, US Government Printing Office, 1997
5. Millenson ML: Demanding Medical Excellence: Doctors and Accountability in the Information Age. Chicago, University of Chicago Press, 1997
6. Rosenheck RA, Leda C, Gallup PG: Program design and clinical operation of two national VA programs for homeless mentally ill veterans. *New England Journal of Public Policy* 1992; 8:315-337
7. Rosenheck RA, Neale M, Baldino R, Cavallo L: Intensive Psychiatric Community Care (IPCC): A New Approach to Care for Veterans With Serious Mental Illness. West Haven, Conn, Northeast Program Evaluation Center, 1997
8. Rosenheck RA, Neale MA, Gallup PG: Community-oriented mental health care: assessing diversity in clinical practice. *J Psychosocial Rehabilitation* 1993; 16:39-50
9. Rosenheck RA, Neale M, Leaf P, Milstein R, Frisman L: Multisite experimental cost study of intensive psychiatric community care. *Schizophr Bull* 1995; 21:129-140
10. Rosenheck RA: Substance abuse and the chronically mentally ill: therapeutic alliance and therapeutic limit setting. *Community Ment Health J* 1995; 31:283-285
11. O'Malley SS, Jaffe A, Chang G, Schottenfeld RS, Meyer RE, Rounsaville BJ: Naltrexone and coping skills therapy for alcohol dependence: a controlled study. *Arch Gen Psychiatry* 1992; 49:881-887
12. Rosenheck RA, Cramer J, Xu W, Thomas J, Henderson W, Frisman LK, Fye C, Charney D, Department of Veterans Affairs Cooperative Study Group on Clozapine in Refractory Schizophrenia: A comparison of clozapine and haloperidol in the treatment of hospitalized patients with refractory schizophrenia. *N Engl J Med* 1997; 337: 809-815
13. Rosenheck R, Tekell J, Peters J, Cramer J, Fontana A, Xu W, Thomas J, Henderson W, Charney D: Does participation in psychosocial treatment augment the benefit of clozapine? Department of Veterans Affairs Cooperative Study Group on Clozapine in Refractory Schizophrenia. *Arch Gen Psychiatry* 1998; 55:618-625
14. Drake RE, Yovetich NA, Bebout RR, Harris M, McHugo GJ: Integrated treatment for dually diagnosed homeless adults. *J Nerv Ment Dis* 1997; 185:298-305
15. Rosenheck RA, Dillela D: National Mental Health Program Performance Monitoring System: Fiscal Year 1997 Report. West Haven, Conn, Northeast Program Evaluation Center, 1998
16. Buckley P, Thompson P, Way L, Meltzer HY: Substance abuse among patients with treatment-resistant schizophrenia: characteristics and implications for clozapine therapy. *Am J Psychiatry* 1994; 151:385-389
17. Burns BJ, Santos AB: Assertive community treatment: an update of randomized trials. *Psychiatr Serv* 1995; 46:669-675
18. McGrew JH, Bond GR, Dietzen L, Salyers M: Measuring fidelity of implementation of a mental health program model. *J Clin Consult Psychol* 1994; 62:670-678
19. Rosenheck RA, Morrissey J, Lam J, Calloway M, Johnsen M, Goldman HH, Calsyn R, Teague G, Randolph F, Blasinsky M, Fontana A: Service system integration, access to services and housing outcomes in a program for homeless persons with severe mental illness. *Am J Public Health* (in press)
20. Mechanic D: Strategies for integrating public mental health services. *Hosp Community Psychiatry* 1992; 42:797-801
21. Callahan D: Setting mental health priorities: problems and possibilities, in *What Price Mental Health?* Edited by Boyle PJ, Callahan D. Washington, DC, Georgetown University Press, 1995, pp 175-192
22. Rosenheck R, Armstrong M, Callahan D, Dea R, Del Vecchio P, Flynn L, Fox R, Goldman HH, Horvath T, Munoz R: The obligation to the least well off in setting mental health service priorities. *Psychiatr Serv* (In press)