

Crisis Residential Treatment Manual

(excerpt)

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Research Review

Introduction

Crisis residential treatment programs have rarely been the focus of controlled, empirical research utilizing random assignment to the treatment interventions, a control group, and other protocols of an experimental scientific study. Professional journal publications regarding crisis residential services are generally descriptive, with self-reported data and anecdotal accounts to address the issues of program effectiveness and other outcomes. Even though there have been only a few controlled studies documenting the effectiveness of this level of care, community mental health systems have been turning to crisis residential services in increasing numbers. In 1987, Stroul noted the presence of at least 29 crisis residential programs in 17 different states in the publication Crisis Residential Services in a Community Support Program. Although there has been no formal survey of the growth of this service model over the past 16 years, it is certain that there is a growing interest in the development of crisis residential programs as an alternative to hospitalization in more communities

One significant reason for the growth in the crisis residential treatment modality is that this type of treatment intervention is often established in communities that are desperately searching for less expensive forms of acute, 24-hour care. As the costs for inpatient treatment continue to rise, along with all health care costs nationally, the practical necessity to develop alternatives to hospital-based psychiatric treatment becomes paramount.

This increased utilization of crisis residential alternatives to hospitalization, however, does not mean that the various types of crisis residential treatment programs follow a common clinical design or treatment philosophy. The crisis residential program profiles reported by Stroul (1987) represented a wide range of program types, from family home settings to highly institutional environments. Similarly, Warner's Alternatives to the Hospital for Acute Psychiatric Treatment, published in 1995, profiles 19 crisis and acute treatment "alternatives" that range from apartment settings to locked facilities that mimic all aspects of a traditional hospital.

Of course, the lack of any consensus regarding a specific type of crisis residential treatment model is not necessarily bad. The wide range of program models within the crisis residential category does reflect the fact that most crisis residential programs are developed as a reaction to local conditions. The type of program is idiosyncratic to a particular community or service system. As a result, the crisis residential treatment program becomes, by definition, a level of care as opposed to a type of treatment intervention. The crisis program becomes defined, primarily, by its role within a system of care. Very little attention is paid to the unique philosophy and practice of the crisis residential treatment model. Everything from a 120-bed institution to a 6-bed residential setting becomes identified as a "crisis residential program" with little or no agreement on the defining characteristics of a residential treatment program that serves as an alternative to institutional settings, not just in locus but in treatment approach, as well.

In order to have a more definitive impact on patterns of hospitalization, and the overall costs of acute mental health treatment, it is important that crisis residential treatment advocates begin to define “best practice” elements common to crisis residential settings.

As a contrast, it is helpful to examine the process that brought the programmatic orientation and practice of the Assertive Community Treatment (ACT) approach to the consciousness of community mental health practitioners and policy makers. The original program design and description, along with empirical, scientific controlled research data, was first published in 1973, based on the model developed in Madison, Wisconsin (Marx, Test & Stein, 1973; Stein & Test, 1980). Interestingly, the concept, let alone the practice, of assertive community treatment did not have much impact on community mental health programs for more than a decade after the publication of the original, highly provocative findings that the treatment intervention significantly reduced the need for hospitalization over a period of six months. In spite of these empirical studies, assertive community treatment did not permeate the program planning and design of community mental health systems outside of Madison, Wisconsin.

However, as subsequent studies replicated the findings of Stein & Test, the popularity and visibility of the assertive community treatment model began to grow (Bush, Miller, Krumied & Ward, 1988) (Dincin, Wasmer, Witheridge, Sobeck, Cook & Razanno, 1993). Ultimately, the dissemination and replication of the assertive community treatment model, or ACT as it has come to be called, was based more on the popularization of the treatment philosophy and specific practice than on the initial positive research findings. The program elements of 24-hour availability, meeting the clients in their environment, working with individuals in realistic, community settings, emphasizing the acquisition of daily living skills, among others, became the “selling point” of the ACT model. It certainly helped that there was empirical evidence of program effectiveness, but it could be argued that the primary element in the replication of the ACT approach was its concrete and specific set of program principles and practices and their applicability to developing pressures and conditions existing in community mental health systems throughout the country.

Crisis residential treatment services face a dual challenge. There needs to be more empirical research in controlled situations to establish an argument for the efficacy of this model as an alternative to hospitalization. At the same time, there needs to be a more specific delineation of the endemic programmatic principles and clinical practice that is unique to the crisis residential program. One of the purposes of this manual to address the second challenge. This document is intended to lay out a specific set of programmatic and systemic principles that form the basis of a strong crisis residential treatment service, along with recommendations for clinical protocols specific to the practice of crisis residential services.

The Foundations of Research on Alternatives to Hospitalization

Any discussion of the available empirical research regarding the effectiveness of community-based residential treatment alternatives to psychiatric hospitalization must begin with three critical sources. In 1978, Mosher and Menn published "Community Residential Treatment for Schizophrenia: Two-Year Follow-up" (Mosher & Menn, 1978), based on the research findings of the Soteria Project. Three years later, the American Journal of Psychiatry printed "Overview: Deinstitutionalization of Psychiatric Patients, a Critical Review of Outcome Studies (Braun, et al, 1981). The third seminal publication is "Mental Hospitals and Alternative Care: Noninstitutionalization as Potential Public Policy for Mental Patients" by Charles Kiesler (1982).

The Soteria Project

The Mosher and Menn study compared outcomes in two groups of young patients who had been newly diagnosed as schizophrenic and who were deemed in need of hospitalization. The experimental group was treated by nonprofessional staff, in a homelike psychosocial residential setting, with minimum use of psychiatric medications. The house, called Soteria, was located in an urban neighborhood. In many respects, the clinical philosophy and practice of the original Soteria House was the precursor to the philosophy and practice of today's crisis residential treatment. The control group was treated in a psychiatric inpatient facility where antipsychotic medications were a principal element of the treatment.

For close to twenty years, the Soteria study represented the most explicit comparison between a residential treatment program that served an acute psychiatric population and an inpatient modality. The project design was a random assignment, 2-year follow-up study. The time period for the Soteria Project study was from 1971-1983. In 1978, Mosher and Menn published the findings of the first cohort of clients involved in the study. A subsequent publication reviewed the data from both cohorts of the original Soteria Project, which eventually included, in the second cohort, data from both Soteria House and a replication of the model, Emanon, opened in 1974 (Mosher, 1999).

The analysis of the Soteria Project data, completed in 1992, revealed that approximately 85% to 90% of individuals deemed in need of acute hospitalization can be treated in, and returned to, the community without traditional hospital treatment. After establishing that the experimental and control subjects in the study were similar along several critical variables, the study demonstrated that the experimental group in the acute residential alternative did no worse, and in some areas did much better, than the hospital-treated control group. The experimental subjects, over a 2 year follow-up period, were not readmitted to the hospital more often than the hospital-treated subjects, had significantly higher occupational levels, and were significantly more often living independently or with peers, while the hospital subjects tended to live with parents or relatives.

Although the original design of Soteria House could be viewed as applicable to a very specific target group of clients – clients with newly diagnosed schizophrenia and a drug-free treatment environment – the model evolved, over time, to include the use of neuroleptic drug treatment in about 25% of the experimental group.

A critical review of experimental alternatives to hospitalization

In 1981, Braun, et al. published an overview of experimental studies on the outcomes for psychiatric patients in three areas: alternatives to hospitalization; modifications of conventional hospitalization; and alternatives to long-term hospitalization. For the purposes of this review, the first category is the most relevant. The authors presented eight studies testing a variety of approaches to providing alternatives to inpatient treatment. The studies included home care, with or without drug therapy, a network of community services outside the hospital, group home treatment, family crisis therapy, and “total community care.” The time frame for the studies ranged from 1967 to 1978. The review includes the findings from the Soteria Project discussed above.

Braun et al held to a specific set of standards for deciding which studies to include in the review. The studies had to utilize methods of randomized assignment to experimental and control groups, include clear characterization of target clients, delineate outcome measurements including psychosocial status, clinical status, quality of life and functional status, and involve a follow-up strategy that included a high proportion of subjects over an adequate period of time. The studies included were of program designs that provided “community-based alternative treatment programs for patients who would otherwise be admitted to inpatient services.”

In the aggregate, the eight experimental designs led to findings by Braun et. al. that “The most satisfactory studies allow the qualified conclusion that selected patients managed outside the hospital in experimental programs do no worse and by some criteria have psychiatric outcomes superior to those of hospitalized control patients.” Among the eight studies, when differences were noted between experimental and control subjects, they generally favored the experimental groups, particularly in relation to hospital readmission and independent functioning following treatment.

The authors take great pains to express qualifications to their conclusions. They note that there is little information, in the cited studies, describing the nature of the conventional hospital care provided to the control groups. Therefore, the studies displayed a bias or enthusiasm toward new methodologies in the experimental programs, as contrasted with conventional, perhaps outmoded, approaches in the hospitals. In addition, the authors note that the results of the various experimental programs represent very selective designs, with specific types of patients. The general value derived from the studies, therefore, should only be applied in comparable situations, with comparable patients.

Notwithstanding the cautious and conservative qualifications of Braun et. al., the conclusions regarding a wide range of alternatives to psychiatric hospitalization are

inescapable. In the case of alternatives to admission to conventional psychiatric hospitals, the experimental designs all produce results better than, or equal to, the hospital control groups.

Noninstitutionalization as public policy

The Charles A. Kiesler article, published in 1982, reviews ten studies in which psychiatric patients in acute crisis were randomly assigned to either hospital treatment or some alternative community treatment setting. Some the studies cited by Kiesler are the same as the Braun et al overview. Significantly, for this discussion, the acute residential treatment alternative of Soteria House is one of the included studies.

Kiesler's review of the 10 studies provides the context for his argument that, in spite of a national policy of deinstitutionalization, the episodic rate of psychiatric hospitalizations has continued to increase. Arguing that studies show that mental institutions produce debilitating and stigmatizing effects on individuals (Goldstein, 1979), and that hospitalization in mental institutions is self-perpetuating (Stein & Test, 1979), Kiesler cites the consistent findings throughout the array of studies to conclude that a national policy of "noninstitutionalization" of persons with mental illness requires close examination, both in the public policy arena and in the support of further research.

Kiesler goes beyond the more narrowly defined review of Braun et.al. to suggest that experimental studies are needed that examine "the effects of institutionalization compared to alternative modes of care. One definitional problem is that *alternative care* is a term typically applied to methods of caring for *deinstitutionalized* patients. That research is not necessarily relevant regarding the possible efficacy of alternative modes of care *instead of* the original institutionalization." This distinction is important for the development of crisis residential treatment programs because the primary purpose of this modality is to prevent hospitalization and establish a treatment intervention that is distinct from the inpatient or institutional approach to a psychiatric crisis.

In order to achieve this focus on alternatives that provide an intervention *instead of* the original hospitalization, Kiesler chose studies that fit three criteria: (1) all patients in the study should be individuals for whom hospitalization would be the normal method of treatment; (2) there should be random assignment to conditions of treatment, with some subjects admitted to the hospital, and others assigned to an alternative treatment mode; and (3) there would need to be a specification of the "characteristics of the patient population and the details of professional treatment." He also wrote that the progress of those in the study should be tracked, over time, to compare the groups and to determine rates of re-hospitalization.

With these criteria, Kiesler reviews 10 studies, across a wide variety of interventions. His provocative conclusion from all of the studies is that "in no case were the outcomes of hospitalization more positive than alternative treatment. Typically, the alternative care was more effective regarding such outcome variables as psychiatric evaluation,

probability of subsequent employment, independent living arrangements, and staying in school, as well as being decidedly less expensive.”

Kiesler summarizes his analysis by writing, “It seems quite clear from these studies that for the vast majority of patients now being assigned to inpatient units in mental institutions care of at least equal impact could be otherwise provided. There is not an instance in this array of studies in which hospitalization had any positive impact on the average patient which exceeded that of the alternative care investigated in the study. In almost every case, the alternative care had more positive outcomes.” While acknowledging that the studies do not answer the question “Is it necessary to hospitalize anyone at all?”, Kiesler draws the conclusion that “...although we are left hanging about the degree to which we could reduce inpatient care, it is very clear that it could be reduced dramatically while increasing the effectiveness and quality of care.”

One significant aspect of the review of alternatives that Kiesler provides is that he addresses the barriers to implementing national policy changes regarding “noninstitutionalization.” He lists several issues that adversely affect the implementation of any model programs, including: (1) a lack of treatment facilities and appropriately trained staff; (2) inadequate funding for alternative settings, from both public mental health systems and private sector insurance programs; (3) incentives within the Medicaid/Medicare programs favoring hospitalization and discouraging the development of non-institutional alternatives; (4) public resistance to treatment of persons with mental disabilities in the community, and (5) “community and professional resistance to closing mental hospitals.”

The NIMH crisis residential services project (1987)

In the five years following the publication of the initial Soteria findings, and the Braun and Kiesler articles calling attention to the existence of research supporting alternatives to psychiatric hospitalization, Mosher (1983) and Rissmeyer (1985) published articles challenging the mental health policy establishment. Mosher’s article, titled “Alternatives to psychiatric hospitalization: why has research failed to be translated into practice?” expanded upon Kiesler’s analysis of barriers to the development of alternatives by calling specific attention to the gap between evidence-based research and clinical practice. Rissmeyer also explored the same public policy issues in his 1985 article “Crisis intervention alternatives to hospitalization: why so few?”

These policy issues are addressed directly in Crisis Residential Services In A Community Support System (Stroul, 1987). This publication documented the findings of the National Institute of Mental Health (NIMH) crisis residential services project. This project, building upon the groundbreaking work of the Community Support Program of the NIMH, gathered information about crisis residential services through a review of the literature and surveys of operating crisis residential programs. It also reported the findings of providers and policy makers convened by the NIMH “to consider the implications of such information for national policy, program implementation, financing, research, and training and to develop guidelines and recommendations for crisis

residential services.” (Stroul, 1987). It is significant, both in terms of the relevance of the report of the crisis residential project and the lack of significant examination of this level of service over the past 17 years, that Stroul’s publication and its companion publication Crisis Response Systems: A Descriptive Study (1993) have continued to be cited as major sources in the few publications regarding crisis residential services.

In the section titled “Definition and Uses of Crisis Residential Services” Stroul (1987) offers general descriptions of the types of crisis residential settings, the purposes of this level of service, and the role of crisis programs in an overall crisis response system. Stroul refers to several articles, including the Braun, Mosher and Kiesler publications described above. Stroul cites articles that describe the role of crisis alternatives in a system of care, and examines some of the characteristics of alternatives to hospital that distinguish them from institutional environments (Mosher, 1983; Rissmeyer, 1985). She reaches a conclusion based on a review of the literature regarding crisis residential and other alternatives to hospitalization: “Thus, there are a number of factors which suggest that the use of certain types of nonhospital alternatives in acute psychiatric crises should be expanded. The results in many nonhospital settings appear to be at least equal to or better than hospital treatment. Such alternatives reduce the likelihood of future hospitalization, encourage less dependency, are less stigmatizing, and seek to avoid the disruptive impact of hospitalization by keeping the client active and connected with the community during and following a crisis.”

The final section of Stroul’s 1987 report contains a series of recommendations regarding guidelines for the design and operation of crisis residential programs in a variety of individual and group settings. Included are recommendations regarding the necessity to address many of the barriers to the implementation of crisis residential programs in communities and within mental health systems. There are also recommendations regarding the administration and financing of this level of service, including a call for more flexibility in the federal guidelines and regulations to allow Medicaid reimbursement, and a challenge to NIMH to sponsor research and evaluation efforts to continue to examine the effectiveness of various types of crisis residential services.

One particular aspect of the 1987 Stroul review of the literature has a direct bearing on the type of crisis residential model that is the focus of this manual. Stroul cites two studies that could be interpreted as contradicting the findings regarding the effectiveness of alternatives to hospitalization described in both Braun and Kiesler. She describes a 1986 study of a psychiatric health facility (PHF) in San Jose, California that found that the cost of treatment for patients in the PHF, even though it was designed as an alternative to the hospital, was comparable to the cost of hospitalization, despite the lower per diem of the PHF. The reason for the comparable costs is that the clients stayed longer in the PHF, and, therefore, their cost of episode was equal to that of the hospital. Clients leaving the PHF also appeared to have poorer treatment outcomes. The second study investigated nursing home care as an alternative to hospitalization for a Veterans’ Administration client population. In this study, the patients transferred to a nursing home had poorer outcomes than those treated in a psychiatric inpatient unit.

Stroul makes the observation that the “alternatives” in both these studies were, in fact, “larger, hospital-like facilities serving relatively large groups of clients. The settings appear to be organized and operated much like hospitals, with many ‘institutional’ characteristics.” The findings of both studies, although they would seem to contradict the notion that non-hospital alternatives are cost-effective, actually support the proposition that effective alternatives to psychiatric hospitalization must utilize smaller, human-scale environments that are distinct from institutional environments.

Other studies supporting crisis residential alternatives to hospitalization

While there have been articles describing studies of various types of residential alternatives to hospitalization since the Stroul publication, there have been very few empirical, random-assignment controlled studies that examine the specific model of crisis residential treatment described in this manual. Nonetheless, the experiential evidence continues to mount that residential settings, both intensive and transitional, are effective treatment and rehabilitation interventions. We will review several studies and articles that examine the clinical and cost-effectiveness of residential treatment program and the implications of these findings for the development of crisis residential programs.

In 1987, Wherley and Bisgaard published an evaluation of 19 residential treatment programs in Hennepin County, Minnesota (Minneapolis area) that provide intensive, transitional and supportive levels of care. The study covered two periods between 1980 and 1985. Of particular interest with this study is the “intensive residential treatment program” that functioned as an alternative to acute psychiatric care. The program description, including the staffing ratio and client mix, supports its characterization as an intensive, or crisis, residential setting. The study, which included this level of service, utilized an aggregate reporting system so that the study data do not represent a single cohort of clients, or any randomized assignment.

Wherley and Bisgaard compared the number of hospitalizations before admission to one of the residential settings with hospitalizations while clients were in a residential program, and at a six month follow-up after discharge from the programs. The study reported a 91% decrease in hospitalizations while the clients were in the programs (in the aggregate) and an overall 25% decrease at the six month follow-up. While the data showed that the actual cost of providing the residential treatment, for all levels of care, produced a net loss when compared to hospitalization costs alone, this result is due mainly to the use of concomitant community outpatient services for clients who were not in the most intensive residential setting. The intensive treatment programs produced the greatest gross and net savings, \$2.1 million and \$223,000 respectively primarily because they were full-service, 24 hour treatment settings.

Bond, Witheridge, Wasmer, Dincin and others (1989) compared outcomes for demographically matched clients admitted to two short-term crisis programs. One program purchased shelter in hotels and boarding houses, and the other provided an

eight-bed crisis residential treatment setting. Although the eight bed residential treatment program is not described in great detail, the staffing (9.5 full-time equivalent positions) indicate that it was not at the intensive level of crisis residential treatment. For instance, there was only single-coverage on the overnight shift. Subjects of the study were consecutive admissions to each of the programs over a period of months. The staff members of several local emergency rooms screened and referred all individuals to the two programs after making a judgment regarding the appropriateness of community referrals as an alternative to hospitalization. Information was collected on services provided, client outcomes, including re-hospitalizations and community functioning, and treatment costs over a four-month period.

The study showed that, in both programs, two-thirds of the clients avoided hospitalization during the four-month follow-up and both programs were effective in providing stabilizing support services for clients. The costs of each of the program models were comparable, although, significantly, that comparability did not include the additional costs of brief inpatient stays for clients of the purchase-of-housing approach before admission to that program. Another significant difference between the two models is that the boarding house and hotel client population had more extensive alcohol and substance use, while in the shelter settings, than did the crisis residential client population. In systems that are struggling to respond to the significant co-occurring problems of severe mental illness and addiction, this is an important distinction between the two interventions.

Bond et. al. note that, following the results of the study, the host agency, Thresholds, decided to close the eight-bed crisis house and expand the emergency housing in hotels and boarding houses model. It is not clear from the study why this decision was made. There is some question whether the screening and referral criteria of the study favored a demographic of clients that was most appropriate for a supported housing approach, while it excluded the very client population that a 24-hour crisis residential treatment setting should be designed to serve. The article states that study “exclusion criteria included the likelihood of homicidal, assaultive, suicidal, or self-destructive behavior and impairments severe enough to preclude self-care in a community setting.” (Bond, 1989). This is a conservative set of criteria when considering the unique capability of an adequately designed and staffed crisis residential program to serve exactly that client population. It is not clear how much this set of exclusion criteria, implemented at the emergency room level by staff potentially unfamiliar with the alternative settings, prevented a true comparison of the unique strengths of each of these crisis alternatives.

Although the cost and client outcome measurements were comparable for each of the crisis interventions, it appears as though the agency decided to close the crisis house because a “perception grew among both administrative and line staff that the risk of burnout among staff in a 24-hour crisis house was greater than among workers who negotiated lodging for clients in community hotels and boarding house. The evidence came not only from the staff turnover rates of the two programs but also from extensive anecdotal information.” There can be many reasons for burnout in a community mental

health setting, but the authors offer no more data, beyond the anecdotal evidence alluded to and staff turnover rates, that one modality more prone to burnout than another.

The prevention of burnout is the responsibility of the agency and program leadership and includes many elements, such as training, recognition within the agency, and appropriate staffing levels for the program. The staffing discussion in Bond et. al. (1989) suggests that the number of staff in the crisis house was not adequate for a crisis residential setting. In addition, the demographics of the staff in the crisis house differed in some significant ways from the purchase-of-housing staff. For instance, the typical line staff worker in the crisis house had a bachelor's degree and five years' experience, while the typical line staff worker in the other program had a master's degree and approximately three years experience. The challenges of providing training, support and screening for appropriate staff in a setting that uses, primarily, non-credentialed staff are unique and require specific responses that reflect that characteristics of the workforce. The article gives little insight into the agency analysis of the apparent burnout or staff turnover (they are not necessarily the same) rates in the two programs.

Nonetheless, the findings of this comparative study between two emergency alternatives to psychiatric hospitalization echo the findings of previous studies. The client outcomes, particularly in regard to community stabilization and reduction of subsequent hospitalizations, reflect the strength of alternative settings, even less intensive case management and residential programs such as the Thresholds programs that were the subject of this study.

Goodwin and Lyons (2001) published a study that evaluated the feasibility and effectiveness of an 25-bed emergency "transitional supportive housing program" from three systemic perspectives: (1) as a step-down after inpatient treatment; (2) as a step-up program from community-based living; and (3) as an alternative to inpatient care for clients with a serious mental illness who were evaluated at an urban medical center. The study involved the retrospective assessment of 161 individuals who had been admitted consecutively to one of the emergency housing conditions. The emergency housing intervention is not described in much detail. However, the on-site services apparently include "temporary housing, case management, 24-hour supervision and linkage to community-based psychiatric services to persons experiencing acute episodes of psychiatric symptoms."

The methodology included a retrospective chart review that examined data from three measures: the program's evaluation questionnaire, the Severity of Psychiatric Illness (SPI) scale, and the Acuity of Psychiatric Illness (API) scale. The study showed that residents of all three categories – step-down, step-up and diversion – showed a "significant decline in acuteness of psychiatric symptoms." Of the three categories of admission, the highest measured decline in symptoms was shown in those clients who were referred as a step-down from an inpatient unit. The study advances the hypothesis that this decline is to be expected because the interventions in the hospital

contribute to the clinical improvement that is demonstrated in the emergency housing setting.

The authors, however, also conclude that the step-up group, as well as the group that was referred as an alternative to the hospital also showed a positive direction of change in acute psychiatric symptoms. They state that, "It did not appear to matter whether a person admitted directly from the community met the clinical criteria for psychiatric hospitalization. These results suggest that about 75 percent of persons in this study who avoided hospital admission by entering the emergency housing program were able to use the program as an effective alternative to hospitalization."

Another conclusion from the study supports the model of crisis intervention that combines stabilization efforts with the social model interventions of a community-based residential setting. The authors note that "...residents who met criteria for hospital admission exhibited a significant improvement in nursing scores, which may indicate a need for care that is not strictly clinical. Supportive care provided as a nontreatment aspect of inpatient treatment, such as housing, food, and security, may be an integral part of the recovery process during stages of acute illness." Crisis residential treatment programs that operate as highly intensive alternatives to hospitalization have known for some time that the absolute integration of these elements is a key to effective crisis stabilization and ongoing recovery. In fact, crisis residential programs do not make a distinction between traditional "clinical" care and the supportive elements of a normalizing environment that helps to mitigate acute psychiatric crises.

The Goodwin and Lyons study views the utilization of crisis residential services from a very conservative perspective. Most of the environments discussed in these studies represent a relatively low level of intensity in the crisis settings. In fact, even the 24-hour programs are more like transitional residential settings than the acute diversion model discussed in this manual. The point of these studies is that, even the most basic emergency housing model, if it has some elements of case management, available staff on-site or on-call 24 hours a day, 7 days a week, and a willingness to divert individuals from hospitalization, can be an effective alternative to the psychiatric hospital. In other words, if these lower intensity emergency housing models show demonstrable positive outcomes, and provide effective alternatives for a group of individuals who were deemed appropriate for hospitalization, it stands to reason that a more intensive, highly staffed model of crisis residential treatment can target an increasingly acute population that is determined to require inpatient treatment at the time of assessment.

In another article that sheds light on the role of crisis residential treatment programs in a system of care, Richard Budson (1994) explores the role of a range of community residences that serve as effective alternatives to long-term inpatient hospitalization. Budson asserts that the development of a range of facilities is effective in containing costs of treating the most seriously ill patients, while the services "provide more adequate treatment for such patients and sustain a core value system of clinical rehabilitation." Budson (1994) addresses Health Maintenance Organizations (HMO's) as

well as other insurers and health care providers who under increasing pressure to contain costs without sacrificing quality of care.

Budson posits an array of treatment alternatives that include inpatient, acute residential, longer term residential, partial hospitalization, ambulatory and home care. He writes that the goal of this “system of care” is to “avoid ‘admitting’ patients to the hospital, but rather to ‘triage’ patients into the least intense and least costly service area necessary to restore the patient’s health.” He describes the Community Residential and Treatment Program at McLean Hospital in Massachusetts that comprises 175 beds, spread over eleven facilities. He proposes that this expanded system of care would meet several critical needs of mental health agencies or payers that are struggling with the high cost of inpatient treatment: (1) it allows the hospital to be competitive with others by providing lower costs of care; (2) it creates a system of low-cost alternatives; (3) it allows for direct admission or diversion into lower cost alternatives; and (4) it combines low cost acute care with longer term psychiatric rehabilitation for individuals with serious mental illness.

While Budson (1994) describes a full range of elements of this system of care, it is helpful, for the purposes of this discussion, to concentrate on the “high intensity community residence.” This level of care is characterized as an “acute” residential setting, even though it is a step-down from the hospital following average inpatient stays of 15 days. Nonetheless, within the context of a long-standing psychiatric institution such as McLean Hospital, the development of this form of high intensity residential treatment program represents a shift toward the recognition of the effectiveness of community settings. The focus of this “acute facility” is not on diversion from initial hospitalization but on serving as an alternative to longer term hospitalization. However, the principle of utilizing a highly staffed, service-rich residential environment to serve individuals who would previously have been viewed as requiring ongoing inpatient treatment is consistent with the purpose of the crisis residential treatment program.

Budson rightly places the “high intensity” residential program in the continuum of services that includes a “long-term group residence,” a “high expectation transitional halfway house,” and a “cooperative apartment.” Discussions in Chapter 2 of this manual explore the importance of a range of residential treatment options in a system of care that includes a crisis residential program. Budson, working from the perspective of a traditional psychiatric hospital, has described a version of this continuum that coincides with the experience of community-based social rehabilitation agencies. It is interesting to note the congruity between Budson’s conclusions regarding the clinical and cost effectiveness of residential treatment settings, operating as an integrated and coordinated range of rehabilitation services, and the experience of agencies that have advocated for, and provided, residential treatment alternatives for the past thirty years.

Three crisis residential treatment services research projects

Three recent research studies focus specifically on the clinical and cost-effectiveness of alternatives to hospitalization for clients with a severe mental illness. Two involve random assignment of individuals to an alternative community intervention or an acute psychiatric hospital. One utilizes a demographic and diagnostic matching of clients treated in five acute residential treatment settings and two hospital-based psychiatric units, focus specifically on the clinical and cost-effectiveness of alternatives to hospitalization for clients with a severe mental illness.

Sledge et. al. (1996) compared a conventional inpatient program serving urban, poor severely ill voluntary patients who required psychiatric hospitalization to an alternative community program consisting of a day hospital linked to a crisis residential setting.

Fenton et. al. (1998) studied the outcomes of two sets of randomly assigned clients experiencing an acute exacerbation. One cohort was referred to an 8-bed crisis residential treatment program and the other voluntarily hospitalized on the acute psychiatric ward of a general hospital.

Hawthorne and others (1999) presented the results of an observational study examining the outcomes of 368 clients in 5 crisis residential treatment programs and 186 clients in psychiatric hospital settings.

Sledge et. al. present their findings in two parts. The first part examines the clinical outcomes and the second part the service utilization and costs analysis. Notably, the study corroborates earlier studies regarding various types of alternatives to hospitalization, by concluding that “the clinical, functional, social adjustment, quality of life, and satisfaction outcome measures were not statistically different for the patients in the two treatment conditions; however, there was a slightly more positive effect of the experimental program (the day hospital/crisis residence) on measures of symptoms, overall functioning and social functioning. The experimental condition, a combined day hospital/crisis respite community residence, seems to have had the same treatment effectiveness as acute hospital care for urban, poor acutely ill voluntary patients with severe mental illness.”

These clinical findings are significant because they represent one of the first controlled, empirical studies since the Soteria Project studies to examine the effectiveness of an alternative to hospitalization that utilizes a residential component. Adding to the relevance of the study are the conclusions regarding cost. Sledge et. al. report that “On average, the day hospital/crisis respite program cost less than inpatient hospitalization. The average saving per patient was \$7,100, or roughly, 20% of the total direct costs. There were no significant differences between program service utilization or cost during the follow-up phase.”

There are some idiosyncratic elements in this study that affect its applicability to the crisis residential treatment model discussed in this manual. First, the primary treatment

locus in the experimental condition is in the day hospital, not the crisis residence. Although the crisis residence is staffed with double-coverage 24 hours-a-day, the program is variously described as a “respite” program and “crisis residence.” It is not designed to be a full, 24-hour residential treatment setting. The primary clinical responsibilities, including everything from medical/psychiatric evaluations, development and implementation of a treatment plan, and medication services, were assigned to the day hospital staff of the participating Community Mental Health Center (CMHC). The day hospital staffing was rich, heavily credentialed and professional, and met accreditation standards of the Joint Commission on Accreditation of Healthcare Organizations and the Health Care Financing Administration.

Therefore, it is difficult to determine which of the outcomes of the study can be attributed to the atmosphere and service philosophy of the crisis residence and which are the result of the traditional clinical intervention of the day hospital. Skeptics might conclude that the clinical outcomes were driven by the day hospital intervention, which, in most respects, was indistinguishable from the inpatient unit. Clearly, the benefit of being in the community, and traveling between a supportive residence and an intensive day program cannot be denied. However, the question remains whether the experimental design required the “heavy artillery” of the day hospital in order to achieve the impressive clinical outcomes of this study. Braun et. al., Kiesler, Bond et. al. and Goodwin and Lyons all suggest that even lower staff models serving voluntary clients in a psychiatric crisis achieve outcomes that match or exceed those of psychiatric hospitals. It is possible that the crisis residence, operating independently with a 24-hour service and treatment capability, augmented with specialty staff for medications and other medical services, could have achieved similar or even better results.

This analysis also pertains to the cost findings of the study. The approach toward economic analysis of the relative costs of the two experimental conditions is relatively conservative in its use of hospital daily charges as the basis for the conclusions. Nonetheless, the study concludes that the day hospital/crisis residence condition showed significantly lower operating costs than the inpatient service. The study concludes that capital costs for each of the experimental conditions were about equal, and that the total capital expenditures were minimal in relation to total cost. Direct service staff costs allocated to produce services for the study subjects was roughly equal between the groups, largely due to the high cost of the staffing for the day hospital portion of the experimental design. The savings in the day hospital/crisis residence is largely attributable to the significantly lower operations cost. The authors point out that inpatient units in a general hospital must carry many overhead costs of the entire institution and those allocated costs drive up the cost of inpatient psychiatry. The study supports the premise that it is possible to lower acute psychiatric treatment costs by providing services in specialized, decentralized environments with lower overhead costs than a general hospital.

Interestingly, the Sledge et. al. (1996) study places the greatest emphasis for the clinical success of the experimental program on the fact that the day hospital/crisis residence model matches the staff patterns of the inpatient unit, while achieving cost efficiencies in

the operating costs arena. The study does not attempt to examine a clinical approach that is distinct from the interventions utilized in the hospital. It seems to place the emphasis on a change of locus for treatment, rather than a change of treatment philosophy. If the crisis residence had been more of an active treatment program, utilizing some of the principles of social rehabilitation discussed later in this document, then there might have been more meaningful information regarding the effectiveness of different treatment approaches.

It would have been useful to understand the specific role of the crisis residence in the overall outcome measurements of the Sledge et. al. study. Certainly, the results bring to mind the central questions regarding crisis residential treatment services: What would happen if the crisis residential element of this approach became the primary 24-hour treatment setting as an alternative to the hospital? Would the difference in outcomes be more dramatic than those achieved through, essentially, two institutional approaches to acute psychiatric treatment? Would the cost differentials between the experimental approach and the hospital be even more dramatic if the high institutional costs of the day hospital were replaced by a social model 24-hour treatment capability integrated within the crisis residential setting?

In spite of these reservations, Sledge and his associates do advance the discussion of alternatives to psychiatric hospitalization through the results of this study. Once again, in this case through a controlled, random-assignment study, the clinical and fiscal efficacy of community-based alternatives to hospitalization are demonstrated reaffirming the conclusions Braun and Kiesler first published over a decade earlier.

Two additional studies, published one year apart, shed more specific light on the role of the crisis residential treatment program as an alternative to hospitalization in an acute psychiatric episode.

In their article, "Comparison of Outcomes of Acute Care in Short-Term Residential Treatment and Psychiatric Hospital Settings," Hawthorne, Green et. al. (1999) report on a study that utilized an observational and repeated-measures design to compare characteristics and outcomes of clients from five separate crisis residential programs and two traditional psychiatric hospitals. The five residential treatment programs ranged in size from 11 to 14 beds and provided brief, intensive treatment in a homelike setting. The programs describe their treatment approach as a "psychosocial rehabilitation orientation." The programs admit clients who would otherwise be at high risk for acute psychiatric hospitalization. The staffing pattern, including a minimum of two staff on duty 24 hours-a-day, with a peak staff presence of one staff member for every three to four clients, indicates that the programs were designed as intensive residential treatment programs. The comparison hospital programs were typical acute psychiatric care settings, located within a hospital accredited by the Joint Commission on Accreditation of Healthcare Organizations.

Multiple standardized measures were administered to participants in the study at admission, discharge and a four-month follow-up. Self-report measures were

augmented by additional chart information and other sources such as previous admissions and computerized information systems. Comparisons between the crisis residential group and the hospital group were differentiated by diagnostic categories. A total of 554 clients voluntarily participated in the study at program admission and discharge, 368 from the crisis program and 186 from the hospital-based program. The study did not have an experimental design, and the study participants in each of the acute residential treatment facilities and the hospital served as their own control subjects.

The study concludes that nine clinical outcome measures, examined across four diagnostic categories, demonstrated no significant differences between the groups in areas of acute symptoms at admission, improvement at discharge, and stability of treatment gains at the four-month follow-up. In addition, client satisfaction with the two types of acute intervention was also comparable. During the follow-up period, 27 percent of the residential clients and 24 percent of the hospital clients reported an acute care readmission (including readmission to either a hospital or an acute residential treatment program). The most striking difference between the two groups, however, was the significantly lower cost of treatment in the acute residential setting. The episode cost of treatment in the alternative settings was approximately half that of the hospital treatment. This cost savings is conservative because the reported hospital costs did not include psychiatric, pharmacy and laboratory costs, while the acute residential treatment cost per day was all-inclusive.

Hawthorne et al (1999) provide the most recent replication of the findings of various residential-based alternatives to hospitalization over the past two decades. The importance of this study is that the crisis residential programs which are being compared with inpatient psychiatric services are truly intensive, acute residential treatment facilities. In addition, each of the crisis programs operated as a social model, milieu-based treatment environment with a staffing pattern and program design much like the model described in this manual. In a direct comparison between crisis residential treatment programs and traditional psychiatric hospital services, the results show that the outcomes for clients who voluntarily participated in the study were comparable, with the significant difference that the crisis residential program was, at least, half the cost of the hospital.

In 1998, Fenton, Mosher, Herrell and Blyer published the results of a prospective, randomized trial that compared cohorts of clients referred to an acute residential treatment program and an acute psychiatric ward of a general hospital. All subjects were experiencing an acute exacerbation and were willing to accept voluntary treatment. There were no psychopathology-based exclusion criteria. The clients also had to have either Medicaid or Medicare funding, a design element that reflects the complications of performing controlled studies within an existing, highly stressed, public mental health system. Each treatment episode was assessed for symptom improvement, satisfaction with services, discharge status, and 6 month pre-and post-episode acute care utilization, psychosocial functioning, and client satisfaction. The

study contained 139 clients, 79 in the crisis residential program and 60 in the hospital cohort.

The crisis residential treatment setting, McAuliffe House, is described as an eight bed intensive residential treatment program, with double coverage 24 hours per day, and utilizing what the authors describe as a “supportive environment, supervised medication self-administration, and the availability of one-to-one staff monitoring.” The program differs from the San Diego acute residential treatment setting described above (Hawthorne et. al., 1999), and the model described in this manual, in one significant respect. The McAuliffe House clients leave the program during the day to participate in community-based treatment, rehabilitation, school or even work during all or some part of their stay at the program. While this aspect of the program might indicate a client population that is less acute than many crisis alternative programs, it is also clear that the study randomly assigns clients who were determined eligible for hospitalization at the time of assessment. The control treatment site was a 31-bed psychiatric unit in a general hospital. The psychiatric unit is supported by a day hospital and an outpatient clinic and provides a full range of inpatient services.

The study concluded that 87 percent of the clients treated in the crisis residential alternative program successfully completed the program and returned to the community. Both the initial episode and 6 month clinical outcome measurements, including symptom improvement, psychosocial functioning, acute care utilization, and client satisfaction were comparable between the experimental and control cohorts. The authors conclude that “Hospitalization is a frequent and high-cost consequence of severe mental illness. For patients who do not require intensive general medical intervention and are willing to accept voluntary treatment, the alternative program model studied provides outcomes comparable to those of hospital care.”

In a discussion regarding the current climate of reduced funding for public health services, Fenton et. al. (1998) suggest that “...cost cutting replaces the risk of excessive hospitalization with the risk of undertreatment or of shifting the burden of acute care to families or the criminal justice system. While clearly not a substitute for all psychiatric hospital care, wide use of acute nonhospital residential alternatives may be crucial in maintaining a humane treatment infrastructure for psychiatry’s most vulnerable patients in a future that will be characterized by shrinking resources. Our data suggest that a crisis residential alternative can be as effective as general hospital care for a wide range of patients with severe mental illness who do not require either acute detoxification or emergent medical evaluation and are willing to accept voluntary treatment.”

Conclusions Regarding Crisis Residential Treatment

A common theme throughout the literature examining the effectiveness and role of a wide range of alternatives to psychiatric hospitalization is the question posed by Mosher in 1983: “Why has research failed to be translated into practice?” Since Mosher first challenged policy makers to respond to this question, over 20 years have passed. In

that time, numerous studies and efforts, as described above, have added to the evidence that alternatives to hospitalization are just as effective as, if not more effective, than hospital-based treatment for individuals with severe mental illness. Recently, evidence shows that crisis residential treatment, specifically, is clinically comparable to hospital treatment for many clients at one-third to one-half the cost of hospitalization.

Over a decade ago, Stroul (1989) documented the growing number of crisis residential programs and delineated the many barriers and disincentives to the development of more crisis residential alternatives to psychiatric hospitalization. Some of those disincentives have been addressed in recent years, such as the growing utilization of the Rehabilitation Option within the state Medicaid plans to implement crisis residential services as a 24-hour treatment setting. Other barriers remain as strong as ever. Perhaps the most complicated and embedded barrier to the idea of acute psychiatric treatment in a community-based, normalized setting is the resistance on the part of the medical/psychiatric profession and the managers of public mental health systems and private Health Maintenance Organizations. Further exacerbating this problem is the lack of community-based mental health agencies that are willing and able to promote, develop and successfully operate a crisis residential treatment program. Without effective advocacy and commitment to the development of alternative treatment programs, the hegemony of the institutional psychiatric establishment remains unchallenged.

Critics may point to the lack of empirical studies regarding crisis residential treatment programs as a reason for the slow rate of replication. However, as noted in this review, the assertive community treatment model as developed by Stein and Test had significant evidence-based support years before that form of alternative to psychiatric hospitalization was replicated. It is not clear that articles in trade publications and journals, no matter how compelling the evidence, have a great effect on the public policy deliberations of mental health systems and government funding agencies, at the local level. In fact, it may be just as crucial to the development of an alternative to hospitalization that an organization, or an individual within an organization, takes the lead in developing, promoting and advocating for a particular program that responds to specific local challenges and conditions.

There is also evidence, both in the San Diego and San Francisco county mental health systems, that initial acute residential treatment programs are subsequently replicated by public mental health funding agencies because the programs have produced tangible results within a system of care. The Progress Foundation crisis residential treatment programs described in this manual started with a single program. Although there was much skepticism and resistance to the idea originally, when the program demonstrated its willingness and ability to divert acute clients from high-cost hospitalization, the county mental health authorities funded an expansion of crisis residential treatment to include three more facilities. Today, the acute residential treatment programs in San Francisco are considered an indispensable level of care within a system that is always facing escalating mental health costs. The acute residential treatment programs in San Diego operated by the Community Research Foundation have followed a similar pattern,

including the continued funding from the county mental health department after the original state funding that established the programs was cut.

In a real way, this affirmation of success is just as important as evidence-based studies conducted in other communities because it represents decisions made by mental health organizations and funding agencies in the context of realistic economic and clinical pressures to respond to shrinking resources while maintaining the obligation to serve those with the most severe mental illness. This process of “practice based evidence” as an argument for the development of crisis residential services has been successful because it is based on the actual experience of responding to system challenges in real life.

It is important that there is a continued effort by the NIMH to promote and fund research regarding the effectiveness of crisis residential treatment programs. Building from the studies of Sledge et al and Fenton et al, the federal government could assist the development of alternatives to psychiatric hospitalization by providing more opportunities to study this level of care, and to determine, more accurately, which clients have the best outcomes in residential treatment, and which do better in a hospital setting. Further research could examine the effectiveness of a crisis residential program within a larger system of care that includes transitional and longer-term social rehabilitation services. This approach would focus on long-term outcomes, including improvement in social functioning, vocational functioning and reduction of acute treatment episodes.

But it is not enough to simply wait for more empirical research. There are existing crisis residential programs all over the country that are providing critically needed alternatives to hospitalization. It is time to describe the programmatic philosophy and practice of this unique level of care so that communities and organizations that are inclined to develop less expensive and more humane alternatives to psychiatric hospitalization have a blueprint to follow. A fundamental strategy to encourage the replication of crisis residential treatment programs is the description and dissemination of a program and treatment philosophy that distinguishes this type of intervention from the many other types of alternatives to hospitalization that have been discussed in the research over the last twenty-five years.

Existing crisis residential treatment programs are already operating in highly stressed systems of care. For this reason, it is almost impossible to develop a pure, random-assignment, empirical study of these programs. Even McAuliffe House had to make certain concessions within the controlled study in order to continue to meet its obligations to the treatment system within which it was functioning. The purpose of this manual is to describe, in as much detail as possible, the specific practice of an acute residential treatment program that is currently serving as an effective alternative to hospitalization within an urban public mental health system. After more than twenty-five years of operation, providing services to over 12,000 clients, the Progress Foundation acute residential treatment programs have demonstrated their effectiveness.

It is time to look closely at the elements of a successful crisis residential program. It is time to delineate the unique aspects of this level of care that distinguish it from institutional settings and to define its scope of practice. This detailed description of a specific treatment program, including its relationship to other elements of a community mental health system, is offered to encourage the development of crisis residential treatment programs in communities that are searching for a more humane, and more cost-effective, way to assist individuals who are experiencing an acute psychiatric crisis.

Bibliography

- Anthony, WA. (1980). *The Principles of Psychiatric Rehabilitation*. Baltimore University Park Press.
- Arntzen, B., Greenfield, T., Harris, A., and Sundby, E. (1995). Early Experiences at Sacramento's Consumer Run Crisis Residential Program. *The Journal of the California Alliance for the Mentally Ill*. 6 (3), 35-36.
- Bond, G., Witheridge, T., Wasmer, D., Dincin, J., McRae, S., Mayes, J., and Ward, R. (1989). A Comparison of Two Crisis Housing Alternatives to Psychiatric Hospitalization. *Hospital and Community Psychiatry*, 40 (2), 177-183.
- Braun, P., Kochansky, G., Shapiro, R., Greenberg, S., Gudeman, J., Johnson, S. and Shore, M. (1981). Overview: Deinstitutionalization of Psychiatric Patients, a Critical Review Study. *American Journal Psychiatry*, 138:6, June, 736-749.
- Coursey, R., Ward-Alexander, L., and Katz, B. (1990). Cost-Effectiveness of Providing Insurance Benefits for Posthospital Psychiatric Halfway House Stays. *American Psychologist*, 45(10), 1118-1126.
- Fairweather, G., Sanders, D. and Maynard, H. (1969). *Community Life for the Mentally Ill: An Alternative to Institutional Care*. Chicago: Aldine.
- Fenton, W., Mosher, L., Herrell, J., and Blyler, C. (1998). Randomized Trial of General Hospital and Residential Alternative Care for Patients with Severe and Persistent Mental Illness. *American Journal of Psychiatry*, 155, 516-522.
- Fields, S. (1990). The Relationship between Residential Treatment and Supported Housing in a Community System of Services. *Psychosocial Rehabilitation Journal*. 13(4).
- Fields, S. (1995). The Progress Foundation, San Francisco. In R. Warner, (ed.), *Alternatives to the Hospital for Acute Psychiatric Treatment, Clinical Practice #32* (pp. 57-76). Washington, D.C.: American Psychiatric Press, Inc.
- Fields, S and Weisman, G.. (1995). Crisis Residential Treatment: An Alternative to Hospitalization. In M. Allen, (ed.). *The Growth and Specialization of Emergency Psychiatry* (pp. 23-32). San Francisco: Jossey Bass Inc
- Goodwin, R., and Lyons, J. (2001). An Emergency Housing Program as an Alternative to Inpatient Treatment for Person with Severe Mental Illness. *Psychiatric Services*, January, 52, 92-95.

- Harding, C.M., Zubin, J. and Strauss, J.S. (1987). Chronicity in Schizophrenia: Fact, Partial Fact, or Artifact? *Hospital and Community Psychiatry*. 38, 477-486.
- Hawthorne, W., Cronan-Hillix, T. and Woodburn, L. (1985). The Acute Non-Hospital: A Retrospective Study. *Quarterly Journal of Professional School of Psychological Studies* 1(2).
- Hawthorne, W., Fals-Steward, W. and Lohr, J. (1994). A Treatment Outcome Study of Community-Based Residential Care. *Hospital and Community Psychiatry*, 45 (2), 152-155.
- Hawthorne, W., Green, E., Lohr, J., Hough, R. and Smith, P. (1999). Comparison of Outcomes of Acute Care in Short-Term Residential Treatment of Psychiatric Hospital Setting. *Psychiatric Services*, March, 50, 401-406.
- Keisler, C. (1982). Public and Professional Myths about Mental Hospitalization: An Empirical Reassessment of Policy-Related Beliefs. *American Psychiatry* 37, 349-360.
- Mosher, L. (1983). Alternatives to Psychiatric Hospitalization: Why has Research Failed to be Translated into Practice? *New England Journal of Medicine*, 309 (25), 1579-1580.
- Mosher, L. (1999). Soteria and Other Alternatives to Acute Psychiatric Hospitalization. *The Journal of Nervous and Mental Disease*. 187 (3), 142-149.
- Mosher, L. and Burti, L. (1989). *Community Mental Health: Principles and Practice*. New York. Norton and Company.
- Mosher, L. and Menn, A. (1978). Community Residential Treatment for Schizophrenia: Two Year Follow Up. *Hospital and Community Psychiatry*. 29 (1), 715-723.
- Mosher, L., Reifman, A. and Menn, A. (1973). Characteristics of non-professionals serving as primary therapists for acute schizophrenics. *Hospital and Community Psychiatry*. 24 , 391-396.
- Newman, Sandra, PHD. (2001). Housing Attributes and Serious Mental Illness: Implications for Research and Practice. *Psychiatric Services*, 52 (10), 1309-1317.
- Rissmeyer, D. (1985). Crisis Intervention Alternatives to Hospitalization: Why so few?. *Psychosocial Rehabilitation Journal*. 9(2), 54-63.
- Stroul, B. (1986). Crisis Residential Services: Review of Information. Prepared for *National Institute of Mental Health, Community Support Program*.

Sledge, W., Tebes, J., Rakfeldt, J., Davidson, L., Lyons, L., and Druss, B. (1996). Day Hospital/Crisis Respite Care versus Inpatient Care, Part I: Clinical Outcomes. *The American Journal of Psychiatry*, 153 (8), 1065-1073.

Sledge, W., Tebes, J., Wolff, N., and Helminiak, T. (1996). Day Hospital/Crisis Respite Care Versus Inpatient Care, Part II: Service Utilization and Costs. *The American Journal of Psychiatry*. 153 (8), 1074-1083.

Stein, LI., Test, MA. (1980). An Alternative to Mental Hospital Treatment, I: Conceptual Model, Treatment Program, and Clinical Evaluation. *Archives of General Psychiatry*. 37, 392-397.

_____ (2001). Gold Award: A Community-Based Program Providing a Successful Alternative to Acute Psychiatric Hospitalization. *Psychiatric Services*. October, 52, 1383-1385.