

# Family Treatment for Schizophrenia

## *The Design and Research Application of Therapist Training Models*

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*The NIMH Treatment Strategies in Schizophrenia (TSS) collaborative study group investigated the efficacy of antipsychotic drug maintenance strategies involving reduced medication exposure in interaction with applied and supportive family management for the long-term treatment of schizophrenia. Therapy was provided at five centers by 25 clinicians who did not participate in the development of the therapies. They were trained by two of the authors, I.R.H.F. and C.W.M., in applied family management, a home-based treatment derived from the behavioral family therapy developed by them. Clinicians' characteristics, selection, and training methods, as well as patient rehospitalization rates, are reported for the two family management conditions. The TSS study represents a bridge between the development of a novel therapy and its dissemination in general clinical practice.*

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The past decade has seen unprecedented growth in schizophrenia research, with an increased focus on the development and evaluation of a wide range of treatments for schizophrenia. These treatments are designed to ameliorate the personal and economic burden on patients, their families, and significant others during acute exacerbations of the illness, and they aim at providing long-term relief from decompensation and relapse. Medication strategies have been refined to relieve the prominent positive symptoms often associated with relapse in schizophrenia; psychosocial strategies are developing that may provide additional protection from relapse through stress reduction and address the often enduring negative symptoms, including impairments in social functioning, work, and functioning in the general community.

In the psychosocial domain, several studies<sup>1-13</sup> have examined the efficacy of family participation in the treatment of schizophrenia. Although the specifics of the family treatment interventions vary, the following principles are common among them:

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Received November 23, 1993; revised February 7, 1995; accepted February 14, 1995. Study sites are listed in the acknowledgments at the end of the article. Address correspondence to Susan Matthews, 5600 Fishers Lane, Room 18C26, Rockville, MD 20857.

1. Engagement of the family in a positive therapeutic alliance.
2. Provision of psychoeducational material about schizophrenia.
3. Introduction of social learning principles of problem-solving and interpersonal communication skills to the family to enhance management of everyday stresses and major life events.
4. Enhancement of family social networks, often through mutual support groups.

These investigations have provided strong evidence that the addition of family treatment to maintenance antipsychotic medication improves patient outcome.<sup>14,15</sup> Therefore, the National Institute of Mental Health (NIMH), in collaboration with investigators at five sites, initiated a study of family treatment in combination with maintenance medication strategies that were designed to reduce the amount of medication patients received. The study is called the Treatment Strategies in Schizophrenia (TSS) Cooperative Agreement Program;<sup>16</sup> study sites are listed below in the acknowledgments section.

The two family treatments used in TSS followed a psychoeducational approach. One of the treatments, applied family management (AFM), was based on earlier work by Falloon and his colleagues, who developed behavioral family therapy (BFT).<sup>1</sup> They had reported findings of a randomized study comparing at-home BFT and clinic-based individual supportive care. At the end of 9 months, the family-treatment approach was superior in preventing major symptomatic exacerbations (6% vs. 44%) and subsequent patient rehospitalization (11% vs. 50%). At 24 months, clinicians reported 6 major episodes of psychopathology in the family-treated condition, whereas 31 major episodes were reported in the individual-treatment condition.<sup>3</sup> Only 3 individual cases (17%) had not had a major exacerbation of schizophrenia, whereas 15 family-treated patients (83%) had not experienced a substantial clinical episode of schizophrenia. The rehospitalization rate at 24

months was 22% for family-treated patients versus 56% for control subjects. These findings suggest that BFT enhanced the recovery rate for patients with schizophrenia, especially when combined with optimal neuroleptic drug maintenance.

The TSS study design and preliminary findings regarding early stabilization have been reported elsewhere.<sup>17-20</sup> Initially, patients were randomly assigned to one of the two family treatment strategies described below. Patients who stabilized symptomatically within 6 months were then further randomized to a 2-year double-blind medication protocol.

One goal of the TSS study was to provide carefully defined family treatments in a range of clinical settings by clinicians who did not participate in the development of the treatment and who were not under the immediate daily supervision of the treatment innovators. Such studies can provide a link between the development of the treatment model and the transfer of such treatments to general clinical care. In TSS, this linkage was achieved by the close collaboration of the treatment innovators (I.R.H.F., C.W.M.) with the study staff responsible for the delivery of treatment in five new clinical settings.

Because this study built upon earlier studies of family treatment that compared family therapy to routine treatment and found demonstrably reduced rehospitalization and relapse rates for the family-treated groups, we did not include such a routine-treatment comparison group. Rather, this study examined two viable family treatments with differing intensities and locales of treatment delivery (home versus clinic). Research that is outcome-oriented often fails to provide sufficient detail regarding the methods of psychosocial treatment delivery to allow readers to judge the quality of the treatment provided. This article, in conjunction with reports that address the detailed outcome of the study, is designed to fill that gap and will enable readers of study results to evaluate the integrity of the methods employed in the family treatments.

The two psychosocial treatments studied in TSS, applied family management (AFM) and supportive family management (SFM), are based on

1. A psychoeducation model of the treatment of schizophrenia.
2. A recognition of the important role of the family in supporting patient gains in the community.
3. The explicit expectation that many inherent problems in the illness are responsive to aspects of the environment.

Principles common to the two psychosocial treatments include

1. Education regarding schizophrenia as a major mental illness with biologic and psychosocial components.
2. The importance of stress and its management.
3. The fact that interpersonal relationships may be uniquely stressful in schizophrenia.
4. The provision of case management.
5. The importance of early identification of general and patient-specific indicators of relapse.

AFM differs from SFM in intensity and in the site of the delivery of treatment (the home for AFM, the clinic for SFM). Further, AFM has a behavioral focus, with the intent of providing specific training in communication and problem solving.

SFM was designed to provide families with a framework for a shared and supportive experience through an initial psychoeducational workshop (designed after the survival skills workshop model developed by Anderson et al.<sup>21</sup>) and monthly multifamily supportive group meetings conducted by a family management clinician (FMC). These monthly meetings included joint participation by patients, family members, and significant others and were structured to include a brief educational presentation on a topic of interest (such

as medications for schizophrenia, community resources, or stress management) and subsequent open discussion among the meeting participants. Although the SFM and AFM multifamily group sessions were conducted separately for research purposes, the two are parallel in design and implementation.

AFM, designed by Falloon and McGill, was modeled after the BFT approach of Falloon, Boyd, and McGill.<sup>2</sup> Patients assigned to this treatment received all components of SFM described above; in addition, they received individual family sessions conducted in the home. These home sessions focused on improvement in communication, personal goal attainment, and problem solving for everyday stresses. All family members were evaluated initially with functional assessments to identify the specific strengths and weaknesses of each individual. Subsequent family sessions included the patient, parents, and others. In these sessions, presentation of educational materials and training in communication skills (expressing positive and negative feelings, active listening) led to the teaching and practice of problem-solving strategies. Sessions were conducted weekly for the first 3 months (13 sessions), biweekly for the next 6 months (13 sessions), and monthly until the patient reached the end of the first year of double-blind medication treatment.

Clearly, the therapeutic skills of trained therapists responsible for the delivery of treatment are essential to the potential success of any treatment approach. Further, because of the varied clinical settings employed in this study, the assurance of comparability in the delivery of the family treatment components across five study sites was a critical element in the conduct of the study. Because both family treatments follow the same treatment principles and differ primarily in intensity and location of treatment delivery, the same therapists were responsible for delivering both of these treatments.

In this article we describe the training models, subsequent monitoring of therapist competency, and adherence to the TSS treat-

ment protocol, emphasizing the components of AFM. We detail the NIMH responsibilities and coordination, the roles of the family management consultants, the selection and descriptive characteristics of the FMCs, the training and monitoring process, and basic outcome in terms of rehospitalization rates over the 2 years of maintenance treatment.

#### N I M H R E S P O N S I B I L I T I E S   A N D C O O R D I N A T I O N

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The NIMH staff (S.J.K., N.R.S., S.M.M.), in collaboration with the principal investigators at the five study sites and using the expertise of the family management consultants (I.R.H.F., C.W.M.), developed the operational protocol for the two family management treatments. The distinctiveness of AFM and SFM was maintained only during the initial stabilization period and the first year of double-blind medication treatment; no AFM-protocol home sessions were regularly scheduled during the second year of double-blind treatment. The initial psychoeducation workshop for families was completed before randomization to the two family treatment conditions, but thereafter monthly family group meetings were conducted separately for the two conditions. All FMCs were assigned cases in both conditions.

The NIMH staff prepared the initial psychoeducational workshop manual, modeled on the work of Anderson et al.,<sup>21</sup> and a series of educational handouts, "What Is Schizophrenia?", "Medication for Schizophrenia," and "The Role of the Family." They also monitored comparability of the workshops across the sites, identifying elements that had to be included, such as the introductory video prepared by NIMH staff and the essential review of schizophrenia symptoms, etiology, treatment, and the role of the family. Structural elements, such as evening versus day workshops or the order and content of monthly group presentations, were not standardized

across sites. In addition, NIMH staff monitored protocol adherence, determining that the prescribed number and frequency of protocol home sessions were conducted in AFM and monitoring tapes of the parallel monthly group meetings to ensure that the same general psychoeducational principles were adhered to in both. The general conduct of the support group sessions was defined by the study protocol so as to ensure the comparability of the monthly meetings conducted within the two family treatments. The monthly meetings were structured to include an initial brief didactic component (15–20 minutes) on the principles of good clinical management, including crisis intervention, problem-solving, and psychoeducational material (such as information about schizophrenia, treatment, and the role of the family in managing the illness). A restriction for monthly meetings in both conditions was that the two principal components of AFM that were used in the home sessions and that required active family participation—that is, role-playing and active problem solving—were not used.

#### F A M I L Y   M A N A G E M E N T C L I N I C I A N S

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##### Clinician Selection

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The following selection criteria were developed by the NIMH central coordination group in conjunction with the family management consultants:

1. A minimum of 6 months of professional clinical experience working with a population characterized by severe disability (such as schizophrenia or mental retardation).
2. Some knowledge of schizophrenia.
3. A clear desire to work with families of patients with schizophrenia and to consider the family as a potential positive therapeutic resource.
4. Willingness to work with the family in the family's home.

5. An appreciation of the potential constraints of treatments offered in a research context.
6. Commitment to the project for the duration of the study.

The principal investigator at each site retained final decision on the staff selection, with the advice of the family management consultants if requested.

At the study start, each site selected three clinicians to participate in the initial training process. One clinician was designated as an alternate FMC who was trained and "certified" (see description below), carried a minimum of one case assigned to each treatment condition, and was ready to assume additional cases if required. Each site also identified an onsite supervisor. Trainees were encouraged to build on their existing skills in psychosocial treatment; in parallel fashion, they were expected to assist patients and their families in building on their existing understanding, communication, and problem-solving skills.

#### FMC Training Models

Training was designed by the family management consultants in collaboration with NIMH central coordination staff. An intensive workshop model was developed for initial training (14 clinicians were originally trained; one clinician did not complete training). A "training at a distance" model was required because neither of the consultants was part of the TSS study team at the sites. However, the FMCs who joined the study in progress ( $n = 10$ ) were trained by use of a more familiar apprenticeship model in conjunction with the methods developed earlier.

*Intensive Workshop Model:* Therapists were trained in the application of BFT, the principal component of AFM, by use of a competency-based model of skill training that included intensive training workshops followed by ongoing case supervision and supportive coaching. Although the basis for the general

approach used in the study was well established, modifications were made to accommodate the specific study needs. Changes included standardizing the educational materials and adding an educational module on the role of the family and a medication module specific to the TSS dosing strategies. Less emphasis was placed on specific cognitive-behavioral techniques that require experience with behavioral psychotherapy and extensive clinician training; rather, training emphasized the characteristic features of negative symptoms and their management.

Each clinician received a workbook (now available in published form<sup>22</sup>), which supplemented the more theoretical handbook, *Family Care of Schizophrenia*,<sup>2</sup> the basic text for clinician training. A series of intensive training workshops was led by the family management consultants (I.R.H.F., C.W.M.). Three workshops were held within the first 9 months of study funding. Each lasted 3 to 5 days and was attended by FMCs from all of the study sites. A skill training approach was used: didactic presentation of the rationale of each component was followed by video and role-play demonstration by the trainers and extensive behavioral rehearsal by the clinicians, with constructive feedback and coaching, until clinicians showed mastery in the performance of each skill.

Initial training required treatment of three training families. Sessions were either audio or video taped and reviewed by the family management consultants, who provided specific written and oral feedback. A certification protocol was established. Each clinician submitted taped sessions conducted with three families over a 3- to 4-month period to the consultants, who evaluated the sessions for therapist mastery of specific skills. Therapists were required to demonstrate mastery on at least 30 taped sessions to be "certified" by I.R.H.F. or C.W.M. From the standpoint of providing the treatment according to the BFT model, sessions needed to show competent delivery of the elements of the model. Because all sessions had specific goals, sessions that did

not meet these goals were not counted in meeting the 30-session target, and the clinicians received feedback from I.R.H.F. or C.W.M. on strategies and techniques to achieve the session goals.

Skills mastery was not achieved without substantial effort. For many of the FMCs, the shift from therapist to teacher, coach, and partner was difficult. They had a wide range of prior clinical experience, but they shared a desire to approach schizophrenia in a family context with novel treatment methods. They came to the first workshop with a mixture of enthusiasm, willingness to learn new things, and some apprehension. The method of supervision that included review of video or audio tapes and detailed feedback on the content of these tapes was also novel for many of the clinicians in that the trainers/supervisors had direct access to their performance. Clinicians often reported initial discomfort in learning and implementing a novel treatment and in being assessed. This phase was generally followed by a period of mastery of specific techniques (giving positive feedback, expressing negative feelings, identifying pros and cons for particular problem solutions). The final stage of training involved the understanding of the contribution of individual elements (techniques) to the approach and the integration of the model into each clinician's personal therapeutic style. All but one of the original 15 clinicians successfully completed the training process and were certified by the trainers as qualified to begin working with families in the TSS study. The one trainee who withdrew did so after attending the first workshop; she found the model both incompatible with her clinical style and stressful.

*Apprenticeship Training Model:* Because of the extended length of patient recruitment into the study (6 years), additional FMCs were trained at four of five study sites. An "apprenticeship" training model was adopted, using the original FMCs as peer supervisors to train new clinicians. Each new clinician was assigned to work in tandem with an experienced

FMC on 1 or 2 cases, first as an observer and later as a therapist for specific sessions. New clinicians were required to treat at least one non-TSS-protocol family with whom they conducted all sessions without a cotherapist. The initial 30-tape training criterion continued to be required. Between 1986 and 1989, 11 additional FMCs started training; of these, 10 were certified.

#### Maintenance of FMC Proficiency

A critical aspect of therapist training was the maintenance of therapists' mastery of the specific skills of BFT and integrated case management. This was achieved through several mechanisms:

1. Regular advanced workshop courses. These workshops were typically 3 to 5 days long and were conducted by the family management consultants for all clinicians and supervisors. Annual workshops were held through the sixth year of the study, when patient intake was completed and clinician workload began to decline. (The distinctive components of AFM were delivered only during the first year of double-blind treatment.) These workshops were partially structured to divide clinicians into more and less experienced groups. The workshops incorporated advanced training that addressed particular clinical problems identified by clinicians, supervisors, and trainers (such as family compliance with homework, setting realistic goals, and substance abuse) and reviews of specific behavioral skills (such as active listening, contracting, and stress management). In addition, the workshops provided the format for further training on educational topics (for example, one workshop included a seminar on substance abuse among the chronically mentally ill.)
2. Onsite supervision. FMCs met weekly with the onsite supervisor to review

cases, discuss clinical issues, and receive feedback, consistent with the methods used in the study. Over the study course, with the adoption of the apprenticeship model, the designated onsite supervisors were generally replaced with a peer-review model of supervision involving more senior experienced FMCs who provided feedback to one another and to newer FMCs during the weekly meetings. An advantage of the BFT approach is that the same skill training techniques employed in facilitating the development of competence in families can be applied in the supervision of professional therapists, making the transition between therapist and supervisor a natural progression.

3. Monthly individual case discussion between FMCs and a family management consultant (C.W.M.) provided specific guidance on all aspects of case management as well as specific resolution of problems associated with the BFT.
4. Ongoing quality assurance review of audiotaped treatment sessions required clinicians to send tapes of cases selected by NIMH staff to I.R.H.F. monthly for quality control and feedback. Each clinician always had one case under review during the entire study duration.
5. Monthly conference calls with family management clinicians, NIMH staff, and a family management consultant (C.W.M.) were designed to discuss treatment concerns, review study cases, and monitor overall adherence to the study's clinical management protocol.
6. Regular conference calls and meetings of the family management consultants and NIMH staff were held to monitor progress and resolve problems.
7. All treatment session tapes for 2 cases for each FMC (1 representing an early case in the clinician's experience in TSS, 1 representing a later case) were rated by an independent rater using the

### Behavioral Family Therapy Skills (BFTS) assessment described below.

#### Assessment of FMC Competence

The BFTS assessment was used to assess therapists' ongoing competence in the AFM condition. It includes scales to assess therapist competence in eight key components of BFT.<sup>23</sup> They are assessment and review, rationale and teaching, rehearsal and coaching, feedback and reinforcement, handing over, structuring of session, relationship, and dealing with therapeutic difficulty. This instrument was applied by one of its originators (M. Laporta) to sessions conducted by the FMCs who had been certified by I.R.H.F. and C.W.M. following completion of training.

#### RESULTS

Table 1 presents the characteristics of two groups of FMCs who participated in the study. The initial cohort ( $n = 15$ ) was selected at the study outset and trained according to the intensive workshop training model described above (includes 1 clinician who had been previously fully trained in BFT at the outset). The clinicians ( $n = 10$ ) who later joined the study staff were trained by use of the modified apprenticeship supervision model. The FMCs tended to be female (92%) and from a social work discipline (72%), they were a mean of 37 years old, and only 28% had any prior experience using behavior therapy methods.

FMC competency ratings are also shown in Table 1. The overall mean level of clinician competence was similar during treatment of early cases ( $3.3 \pm 0.95$  [SD]) and late cases ( $3.6 \pm 0.85$ ). A nonsignificant trend was noted for competence levels to rise in later cases. Whereas 27% ( $n = 17$ ) of all sessions with early cases were considered less competent than the criterion set for certification by I.R.H.F. and C.W.M., this proportion was reduced to 10% ( $n = 6$ ) when later cases were rated by the independent assessor. Similarly, the propor-

tion of therapists who averaged less than the criterion of 3.00 in three sessions with early cases was 38% ( $n=8$ ), compared with 10% ( $n=2$ ) for later cases. There was no difference between the overall mean levels of competence of FMCs trained with the apprenticeship learning model and those trained with the intensive workshop model.

A total of 528 patients were randomized to AFM and SFM. Of this cohort, 313 were further randomized to the medication conditions after successful stabilization. As shown in Table 2, there were no differences between the two family treatments in the likelihood of stabilization: 157 (58%) of the 272 patients randomized to AFM and 156 (61%) of the 256 patients randomized to SFM entered the dou-

ble-blind medication protocol. As described by Keith et al.<sup>18</sup> for a partial sample, there were no differences between the two family treatments in attendance at the initial psychoeducation workshop within the total group that entered the stabilization phase of the study—an anticipated finding given that the workshop was offered prior to treatment assignment. Further, as shown in Table 2, there were no differences between the two family treatments in workshop attendance among the successfully stabilized cohort. Table 2 also presents cumulative rehospitalization rates for AFM- and SFM-treated subjects. Rates at one year were 25% for AFM and 26% for SFM. They rose to 29% and 35% by the end of the second year.

**TABLE 1. Background characteristics and competency assessments of TSS family management clinicians**

	Clinicians Trained by	
	"Training at Distance" Model ( $n=15$ )	Apprenticeship Training Model ( $n=10$ )
Background information		
Male, $n$ (%)	2 (13%)	0
Female, $n$ (%)	13 (87%)	10 (100%)
Age, years		
Mean	36.2	37.7
Range	28–45	25–53
Education, $n$ (%)		
M.S.W., M.S.S.	10 (67%)	8 (80%)
M.S.N.	2 (13%)	0
Psy.D., Ph.D.	3 (20%)	0
Other	0	2 (20%)
Postgraduate clinical experience, years		
Mean	7.6	7.2
Range	0–17	0–22
Experience treating families, $n$ (%)		
Yes	13 (87%)	9 (90%)
No	2 (13%)	1 (10%)
Experience using behavior therapy methods, $n$ (%)		
Yes	6 (40%)	1 (10%)
No	9 (60%)	9 (90%)
Competency Ratings, <sup>a</sup> mean $\pm$ SD		
Early cases	3.2 $\pm$ 1.1	3.4 $\pm$ 0.9
Late cases	3.6 $\pm$ 1.0	3.6 $\pm$ 0.8

<sup>a</sup>Includes only those clinicians who remained in the study for a sufficient time to conduct sessions with early and late study cases (11 in the "training at a distance" model, 10 in the apprenticeship training model).



## DISCUSSION

Experience with the training methods described above has shown that clinicians in a variety of clinical settings, with limited prior knowledge and experience in behavioral methods, can be trained to maintain acceptable levels of competency in delivering a family management protocol to patients and their families who are struggling with the daily management of schizophrenia. This finding is confirmed in both of the described training models. Data show that therapist competency does not decline over time and suggest that the ongoing training contacts contributed to the maintenance of therapist competency in this study.

We had two methods for assessment of therapist performance. The first was the determination by the developers of BFT that the clinicians had mastered the skills sufficiently well to implement them in the context of the TSS study. This method is quite close to traditional clinical methods of therapist training and supervision. The innovations to this strategy were "training at a distance" and the use of video and audio tapes of sessions.

The second innovation involved the ongoing review of sessions in the study by independent assessors with the goal of documenting the level of competence over time. Use of the BFTS for the latter purpose has both strengths and weaknesses. The strengths include the fact that it rates skills that are specific to the AFM approach and, as reported by Laporta and his colleagues, its

psychometric properties appear adequate to the task. Its major weakness is that its specificity precludes its application to other treatments, and therefore it is difficult to compare levels of competence achieved in our study with the competency achieved in other psychosocial treatment studies. Although the difference in the proportion of sessions judged competent in our study did not change significantly over time, the direction of the scores toward improvement suggests the value of ongoing supervision. Because therapists were primarily from a social work background with limited experience and expertise in cognitive-behavioral methods, their training process may have required more intensive followup to promote competency in the basic techniques of BFT than might be required with therapists from a behavioral background. Similarly, the constraints of delivery of treatment within a research context and the required reconciliation of clinical need and research design may complicate the delivery of treatment and require more intensive training than would otherwise be needed.

The results of this study suggest that two clinician training models are equally effective in training clinicians to deliver a behavioral intervention for patients and their family members who are dealing with the significant burdens imposed by schizophrenia. Further, the study represents a bridge between the delivery of a treatment in a research environment and its application to more general clinical practice. FMCs at four of the five study

**TABLE 2. Comparison of applied family management (AFM) and supportive family management (SFM)**

	AFM		SFM	
	<i>n</i>	%	<i>n</i>	%
Entered stabilization	272	52	256	48
Entered double-blind	157	58	156	61
Attended psychoeducation workshop <sup>a</sup>	117	75	124	79
Rehospitalization rate (cumulative) <sup>a</sup>				
At 1 year		25		26
At 2 years		29		35

◆ <sup>a</sup>*n* = 313 subjects who entered double-blind.

sites have initiated training models similar to those described in this report for clinical staff at their sites. Preliminary reports are both encouraging and positive on two fronts: first, training and experience gained by staff in this study are being disseminated to others involved in clinical care; second, clinical staff appear to be ready to accept these new strategies for interacting with patients, their families, and significant others.

Although the FMCs were novices to the specific treatment model employed in the TSS study, the study itself was conducted in academic clinical settings with distinct research interests, arguably far from the "average" clinician's circumstances. Thus, successful implementation of the method in our study does not mean that any clinician who reads the manual can master the skills and immediately incorporate these methods into his or her treatment for schizophrenia. Our study represented a necessary step in the process, but it is certainly not a sufficient condition.

Results of the study also suggest that the willingness of patients and family members to

participate in treatment may significantly predict patient outcome.<sup>18</sup> As shown in Table 2, there were no differences between the two family treatments in attendance at the initial psychoeducational workshop, an anticipated finding given that the workshop was offered to families prior to their family treatment assignment. However, patients whose families attended the initial workshop were more likely to enter double-blind than those whose families did not. Further, as shown in Table 2, we have found comparable outcomes for patients receiving AFM and SFM for a measure of relapse (defined by rehospitalization).

Table 3 presents comparable results from other studies that reported rehospitalization. For studies comparing a family treatment with a nonfamily treatment, the rehospitalization rate is consistently lower for the family treatments (11%–38%) at 1 year than for the nonfamily treatment (50%–53%). The two studies that compared two forms of family treatments reported 1-year rehospitalization rates ranging from 12% to 54%. For the two studies providing rehospitalization rates at 2 years, the rehos-

**TABLE 3. Rehospitalization rates in studies of family treatment**

	N	Rehospitalization Rate (%)	
		1 Year	2 Year
Comparison with nonfamily treatment approaches			
Falloon <sup>3</sup>			
Family treatment	18	11	22
Individual case management	18	50	56
Kottgen <sup>13</sup>			
Family treatment	15	33	NA
Usual care	34	53	NA
Randolph <sup>11</sup>			
Family treatment	21	38	NA
Customary care	20	50	NA
Comparison between two family treatments			
McFarlane <sup>10</sup>			
Psychoeducational family groups	16	12	23
Psychoeducational single family	18	22	44
Zastowny <sup>12</sup>			
Family treatment	13	47	NA
Supportive family treatment	17	54	NA

◆ Note: Falloon and Kottgen reported 9-month rates; Zastowny reported 16-month rates. NA = not available.

pitalization rate ranges from 22% to 44% for family treatment and 56% for the only reported nonfamily treatment. The AFM and SFM rehospitalization rates are consistently lower than those reported for nonfamily treatments in prior studies. The 29% rehospitalization rate at 2 years for AFM is very similar to the rate reported by Falloon for BFT (22% at 2 years), the study that provided the model for AFM. The rehospitalization rate for AFM is also relatively low compared with prior studies. These findings suggest that the engagement of families in both family treatment conditions may contribute to improved outcome, at least in terms of relapse (rehospitalization).

Future reports from the TSS will examine a wide range of variables that potentially influence outcome. These variables include the impact of therapist competency on both the delivery of treatment and the patient's and family's response to treatment; the impact of the family constellation; and individual patient predictors of outcome. That therapist competency ratings may be influenced by the characteristics of the families with whom they work would come as no surprise to clinicians. To researchers, this possibility offers the challenge to identify the characteristics of families for whom applied and supportive family management are appropriate.

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