



EVIDENCE-BASED  
PRACTICES

**KIT**

Knowledge Informing Transformation

# The Evidence

# Illness Management and Recovery



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
Substance Abuse and Mental Health Services Administration  
Center for Mental Health Services  
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# The **Evidence**

## **Illness Management and Recovery**

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## The Evidence

*The Evidence* introduces all stakeholders to the research literature and other resources on Illness Management and Recovery (IMR). This booklet includes the following:

- A review of the IMR research literature;
- Selected bibliography for further reading;
- References for the citations presented throughout the KIT; and
- Acknowledgements of KIT developers and contributors.

# Illness Management and Recovery

This KIT is part of a series of Evidence-Based Practices KITs created by the Center for Mental Health Services, Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services.

This booklet is part of the Illness Management and Recovery KIT that includes a DVD, CD-ROM, and seven booklets:

**How to Use the Evidence-Based Practices KITs**

**Getting Started with Evidence-Based Practices**

**Building Your Program**

**Training Frontline Staff**

**Evaluating Your Program**

**The Evidence**

**Using Multimedia to Introduce Your EBP**

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**Illness  
Management  
and Recovery**





## The Evidence

### Review of the Research Literature

A number of research articles summarize the effectiveness of Illness Management and Recovery (IMR). This KIT includes a full text copy of one of them:

Mueser, K. T., Corrigan, P. W., Hilton, D. W., Tanzman, B., Schaub, A., Gingerich, S., et al. (2002). Illness management and recovery: A review of the research. *Psychiatric Services*, 53, 1272-1284.

This article describes the critical components of the evidence-based model and its effectiveness. Barriers to implementation and strategies for overcoming them are also discussed, based on experiences in several states.

This article may be viewed or printed from the CD-ROM in your KIT. For a printed copy, see page 3.



# Illness Management and Recovery: A Review of the Research

Focusing on  
Evidence-  
Based  
Practices

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Illness management is a broad set of strategies designed to help individuals with serious mental illness collaborate with professionals, reduce their susceptibility to the illness, and cope effectively with their symptoms. Recovery occurs when people with mental illness discover, or re-discover, their strengths and abilities for pursuing personal goals and develop a sense of identity that allows them to grow beyond their mental illness. The authors discuss the concept of recovery from psychiatric disorders and then review research on professional-based programs for helping people manage their mental illness. Research on illness management for persons with severe mental illness, including 40 randomized controlled studies, indicates that psychoeducation improves people's knowledge of mental illness; that behavioral tailoring helps people take medication as prescribed; that relapse prevention programs reduce symptom relapses and rehospitalizations; and that coping skills training using cognitive-behavioral techniques reduces the severity and distress of persistent symptoms. The authors discuss the implementation and dissemination of illness management programs from the perspectives of mental health administrators, program directors, people with a psychiatric illness, and family members. (*Psychiatric Services* 53:1272–1284, 2002)

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In recent years, interest in identifying and implementing evidence-based practices for mental health services has been growing (1,2). Criteria used to determine whether a practice is supported by research typically include all of the following: standardized interventions examined in studies that use experimental designs, similar research findings obtained from different investigators, and objective assessment of broadly accepted important outcomes, such as reducing symptoms and improving social and vocational functioning (3,4). On the basis of these criteria, several psychosocial treatments for persons with severe mental illness are supported by evidence, including assertive community treatment (5), supported employment (6), family psychoeducation (7), and integrated treatment for mental illness and concomitant substance abuse (8). The standardization and dissemination of evidence-based practices is expected to improve outcomes for the broader population of people who use mental health services (9).

In this article, we examine the research that supports interventions for helping people collaborate with professionals in managing their mental illness while pursuing their personal recovery goals. We begin by defining illness management. Next, we discuss

the concept of recovery and the role of illness management in aiding the recovery process. We then review research on illness management programs, and we conclude by considering issues involved in the dissemination and implementation of these programs.

### **Defining illness management**

The practice in medicine of professionals teaching persons with medical diseases and their families about the diseases in order to improve adherence to recommended treatments and to manage or relieve persistent symptoms and treatment side effects has a long history (10–12). Education-based approaches are especially common in the treatment of chronic illnesses such as diabetes, heart disease, and cancer. In the mental health field, didactic methods for educating people have been referred to as psychoeducation (13–15). Other methods, especially cognitive-behavioral strategies, have also been used to help people learn how to manage their mental illnesses more effectively.

People with psychiatric disorders can be given information and taught skills by either professionals or peers to help them take better care of themselves. Although the goals of professional-based and peer-based teaching are similar, we distinguish between them for practical reasons. Professional-based intervention is conducted in the context of a therapeutic relationship in which the teacher—or the organization to which the teacher belongs, such as a community mental health center—is responsible for the overall treatment of the individual's psychiatric disorder. In contrast, peer-based intervention is conducted in the context of a relationship in which the teacher—or the organization to which the teacher belongs, such as a peer support center—usually does not have formal responsibility for the overall treatment of the individual's disorder. Given this distinction, the relationship between a professional and the person with a mental illness may be perceived as hierarchical, because the professional assumes responsibility for the person's treatment, whereas the relationship between a peer and the person

with a mental illness is less likely to be perceived as hierarchical, because the peer does not assume such responsibility. This distinction is crucial among individuals with psychiatric disorders who have advocated for self-help and peer-based services as alternatives to, or in addition to, traditional professional-based services (16–18).

Another reason for distinguishing interventions delivered by professionals from those provided by peers is that most professionals do not have serious psychiatric disorders—in contrast, by definition, to peers. Thus when teaching others how to manage their mental illness, peers are able to convey the lessons they have learned from personal experience, whereas professionals cannot. This places peers in a unique position of being able to teach “self” management skills to other persons with a mental illness.

To recognize these differences, we propose a distinction between professional-based services and peer-based services aimed at helping people deal with their psychiatric disorders. We define illness management as professional-based interventions designed to help people collaborate with professionals in the treatment of their mental illness, reduce their susceptibility to relapses, and cope more effectively with their symptoms. We suggest that illness self-management be used to refer to peer-facilitated services aimed at helping people cope more effectively with their mental illness and facilitating people's ability to take care of themselves. In this article we focus on the substantial body of controlled research addressing the effectiveness of illness management. Although a variety of illness self-management programs have been developed (19–22), rigorous controlled research evaluating the effects of these programs has not been completed.

### **Recovery**

Illness management programs have traditionally provided information and taught strategies for adhering to treatment recommendations and minimizing symptoms and relapses. However, many programs go beyond this focus on psychopathology and strive to improve self-efficacy and self-esteem and to foster skills that

help people pursue their personal goals. Enhanced coping and the ability to formulate and achieve goals are critical aspects of rehabilitation and are in line with the recent emphasis on recovery in the mental health self-help movement. We briefly address the relevance of illness management to recovery here.

According to Anthony (23), “Recovery involves the development of new meaning and purpose in one's life as one grows beyond the catastrophic effects of mental illness.” Recovery refers not only to short-term and long-term relief from symptoms but also to social success and personal accomplishment in areas that the person defines as important (24–26). Recovery has been conceptualized as a process, as an outcome, and as both (27–30). What is critical about recovery is the personal meaning that each individual attaches to the concept. Common themes of recovery are the development of self-confidence, of a self-concept beyond the illness, of enjoyment of the world, and of a sense of well-being, hope, and optimism (31–34).

Critical to people's developing hope for the future and formulating personal recovery goals is helping them gain mastery over their symptoms and relapses. Basic education about mental illness facilitates their ability to regain control over their lives and to establish more collaborative and less hierarchical relationships with professionals (16,35–37). Although relapses and rehospitalizations are important learning opportunities (38–40), prolonged periods of severe symptoms can erode a person's sense of well-being, and avoiding the disruption associated with relapses is a common recovery goal (30,41). Improvement in coping with symptoms and the stresses of daily life is another a common theme of recovery, because such improvement allows people to spend less time on their symptoms and more time pursuing their goals (27,30,42). Thus illness management and recovery are closely related, with illness management focused primarily on minimizing people's symptoms and relapses and recovery focused primarily on helping people develop and pursue their personal goals.

## Research on illness management

Although illness management and recovery are intertwined, almost all the available treatment research pertains to illness management. Thus we confined our research review to studies of illness management programs. Because extensive research has been conducted on illness management, we confined our review to randomized clinical trials. We also limited our review to programs that addressed schizophrenia, bipolar disorder, and the general group of severe or serious mental illnesses, excluding studies that focused on major depression or borderline personality disorder. Studies included in this review were identified through a combination of strategies, including literature searches on PsycINFO and MEDLINE, inspection of previous reviews, and identification of studies presented at conferences.

With respect to outcomes, we examined the effects of different interventions on two proximal outcomes and three distal outcomes. The proximal outcomes are knowledge of mental illness and using medication as prescribed. The distal outcomes are relapses and rehospitalizations, symptoms, and social functioning or other aspects of quality of life. Distal outcomes are of inherent interest because they are defined in terms of the nature of the mental illness and associated problems. Proximal outcomes are of interest because they are related to important distal outcomes. Specifically, knowledge of mental illness is critical to the involvement of people with psychiatric disorders as informed decision makers in their own treatment (14,15). Using medication as prescribed is important because medications are effective for preventing symptom relapses and rehospitalizations for persons with severe mental illness (43,44), yet many people do not take medications (45), and nonadherence accounts for a significant proportion of relapses and inpatient treatment costs (46). Although adherence to medication regimens is important in and of itself, illness management approaches involve forming partnerships between clinicians and persons with a mental illness in order to determine the services each person

needs, including medication, and respecting patients' rights to make decisions about their own treatment (36).

The literature review was divided into five areas: broad-based psychoeducation programs, medication-focused programs, relapse prevention, coping skills training and comprehensive programs, and cognitive-behavioral treatment of psychotic symptoms.

### *Broad-based psychoeducation programs*

Most broad-based programs, summarized in Table 1, provided information to people about their mental illness, including symptoms, the stress-vulnerability model, and treatment. Among the four controlled studies, all but one (47) provided at least eight sessions of psychoeducation. Follow-up periods ranged from ten days (15) to two years (48). Three of the controlled studies found that psychoeducation improved knowledge about mental illness (15,47,48); one did not (49). In two studies, improved knowledge had no effect on taking medication as prescribed (47,49); one study reported improved adherence (48).

In summary, research on broad-based psychoeducation indicates that it increases participants' knowledge about mental illness but does not affect the other outcomes studied. This finding may not be surprising: similar didactic information given to families of persons with schizophrenia has been found to increase their knowledge but not to affect their behavior (50,51). The reason for this may be that didactic information does not consider beliefs and illness representations already held by recipients (52). Nevertheless, psychoeducation remains important because access to information about mental illness is crucial to people's ability to make informed decisions about their own treatment, and psychoeducation is the foundation for more comprehensive programs (as reviewed below).

### *Medication-focused programs*

Studies that strove to foster collaboration between people with a mental illness and professionals regarding taking medication used psychoeducational or cognitive-behavioral approaches or a combination of the two.

Psychoeducation about medication involves providing information about the benefits and the side effects of medication and teaching strategies for managing side effects, so that people can make informed decisions about taking medication. These programs, summarized in Table 2, tended to be brief, with only two of eight programs (53,54) lasting more than one or two sessions. Three studies conducted posttreatment-only follow-up assessments (55–57), and five studies conducted follow-ups after the end of treatment (53,54,58–60). Most of the studies reported that participants increased their knowledge about medication. However, three studies reported no group differences in taking medication as prescribed (56,59,60); a fourth study reported improvements (53); and a fifth study reported deterioration in taking medication (54). The three studies that found no differences in taking medication as prescribed compared different psychoeducational methods (56,59,60). Only one study that assessed medication adherence included a no-treatment control group (54); this study found that clients who received psychoeducation were more likely than clients who received no psychoeducation to discontinue medication. A somewhat disconcerting finding was reported in the only other study with a no-treatment control group (58). This study found that psychoeducation increased clients' insight into their illness but also increased clients' suicidality; psychoeducation had no influence on other symptoms or on relapse rates. In summary, research on the effects of psychoeducation about medication indicates that it improves knowledge about medication, but little evidence indicates that it improves taking medication as prescribed or affects other areas of functioning.

Cognitive-behavioral programs that focused on medication used one of several techniques: behavioral tailoring, simplifying the medication regimen, motivational interviewing, or social skills training. Behavioral tailoring involves working with people to develop strategies for incorporating medication into their daily routine—for example, placing medica-

**Table 1**

## Randomized controlled trials of broad-based psychoeducation programs

Reference	Patients	Treatment and duration	Outcomes			
			Knowledge	Not taking medication as prescribed	Other	Comments
Goldman and Quinn (15)	N=60, all with schizophrenia	Psychoeducation and standard care; 25 hours a week for three weeks	Psychoeducation better than standard care	—	Psychoeducation better than standard care for negative symptoms; no group differences in distress	Highly comprehensive educational program
Bäuml et al. (48)	N=163, all with schizophrenia	Psychoeducation and standard care; eight sessions over three months	Psychoeducation better than standard care	Psychoeducation better than standard care	Psychoeducation better than standard care in hospitalizations	Separate psychoeducation groups for relatives
MacPherson et al. (47)	N=64, all with schizophrenia	Three sessions of psychoeducation; one session of psychoeducation; standard care; one or three weekly psychoeducation sessions	Three sessions of psychoeducation better than one session of psychoeducation better than standard care	No group differences	Three sessions of psychoeducation better than one session of psychoeducation and better than standard care for insight	Participants were hospitalized  Separate psychoeducation groups for relatives
Merinder et al. (49)	N=46, all with schizophrenia	Psychoeducation and standard care; eight sessions	No group differences	No group differences	—	

tion next to one's toothbrush so it is taken before brushing one's teeth (61). Behavioral tailoring may also include simplifying the medication regimen, such as taking medication once or twice a day instead of more often. Motivational interviewing, based on the approach developed for the treatment of substance abuse (62), involves helping people articulate personally meaningful goals and exploring how medication may be useful in achieving those goals. Social skills training involves teaching people skills to improve their interactions with prescribers, such as how to discuss medication side effects (63).

Cognitive-behavioral programs for medication are summarized in Table 3. All four studies of behavioral tailoring found improvements in taking medication as prescribed (61,64–66), as did the one study that evaluated the effect of simplifying the medication regimen (67). One study of motivational interviewing (68) also reported an increase in taking medication as prescribed, as well as fewer symptoms and relapses and improved so-

cial functioning. One broad-based cognitive-behavioral program also reported lower rates of rehospitalization (69). The two studies that examined social skills training were limited. One of these studies found that skills training had no effect on knowledge about medication, but medication adherence was not directly assessed (70). The other study showed that psychoeducation and skills training improved knowledge and social skills in medication-related interactions, but it did not assess taking medication as prescribed (71).

Thus controlled research, which has focused mainly on individuals with schizophrenia, provides the strongest support for the effects of cognitive-behavioral methods (chiefly, behavioral tailoring) for increasing their taking of medication as prescribed, whereas psychoeducation alone has limited, if any, impact. The strong effects of behavioral tailoring on taking medication, compared with the weak effects of psychoeducation, suggest that memory problems, which are common in schizophrenia (72), may interfere

with taking medication as prescribed and that behavioral tailoring may work by helping people develop their own cues to take medication, thereby compensating for cognitive impairments.

Most of the programs reviewed were response-based, with little effort made to understand the psychology of why people did not take medication as prescribed. This is very different from the theoretical position in health psychology, in which complex models such as the health belief model and the theory of planned action have been developed to understand health-related behavior. Preliminary studies investigating medication self-administration have used the concept of psychological reactance, which is a motivational state that can develop when a person perceives a threat to his or her personal freedom (73). In an analogue study, reactance-prone individuals rated themselves as being less likely to take medication if their freedom of choice was restricted, whereas no effect of freedom of choice was seen in non-reactance-prone participants (74). In a study of

**Table 2**

## Randomized controlled trials of psychoeducation programs focused on medication

Reference	Patients	Treatment and duration	Follow-up	Outcomes			Comments
				Knowledge	Not taking medication as prescribed	Other	
Seltzer et al. (53)	N=100, 66% with schizophrenia	Psychoeducation and standard care; nine sessions	Five months	No group differences	Psychoeducation better than standard care	Psychoeducation better than standard care on fear about medication	Both groups had high levels of knowledge
Munetz and Roth (60)	N=25, 88% with schizophrenia	Formal (written) psychoeducation and informal (oral) psychoeducation; one session	Two months	Informal psychoeducation better than formal psychoeducation	No group differences	No group differences in relapses	Brief intervention. Younger participants retained more information than older ones
Streicker et al. (54)	N=75, "mostly schizophrenia"	Psychoeducation and standard care; ten sessions	35 weeks	Psychoeducation better than standard care	Psychoeducation better than standard care	No group differences in hospitalizations	Peer counseling included in program
Brown et al. (56)	N=30, all with schizophrenia	Oral psychoeducation on medication and oral and written psychoeducation on medication; oral psychoeducation on medication and side effects; and oral and written psychoeducation on medication and side effects; two sessions	Posttreatment assessment only	All groups improved. No group differences	No group differences	All groups reported fewer side effects at posttreatment	Brief intervention
Kleinman et al. (59)	N=40, all with schizophrenia	Psychoeducation with and without a review session; one or two sessions	Six months	Both groups improved. No group differences	No group differences	No group differences in hospitalizations	Brief intervention
Kuipers et al. (57)	N=60, 55% with schizophrenia	Structured psychoeducation and unstructured psychoeducation; one session	Posttreatment assessment only	Both groups improved. No group differences	—	—	Brief intervention
Angunawela and Mullee (55)	N=249, 21% with schizophrenia	Information leaflets and standard care; one session	Four weeks after distribution of leaflets	Information leaflets and standard care	—	—	Brief intervention. People with schizophrenia learned less than people with affective and personality disorders
Owens et al. (58)	N=114, all with schizophrenia	Psychoeducation and standard care; 15-minute video and information booklets	One year	—	—	No group differences in relapse rates. Psychoeducation better than standard care for insight, but psychoeducation not better than standard care for suicidality	Very brief intervention

people with schizophrenia or schizoaffective disorder, individuals with higher psychological reactance

who perceived taking medication as a threat to their freedom of choice were less likely to have taken medica-

tion as prescribed in the past (75). Motivational interviewing may provide one strategy for improving peo-

**Table 3**

Randomized controlled trials of cognitive-behavioral programs focused on medication

Reference	Patients	Treatment and duration	Follow-up	Outcomes			Comments
				Knowledge	Not taking medication as prescribed	Other	
Boczkowski et al. (61)	N=36, all with schizophrenia	Psychoeducation; behavioral tailoring and standard care; one session	Three months	—	Behavioral tailoring better than psychoeducation and equal to standard care		Brief treatment
Dekle and Christensen (70)	N=18, 55% with schizophrenia	Psychoeducation and social skills training; general health instruction; and standard care; 12 weekly sessions	Post-treatment assessment only	Psychoeducation and social skills training equal to general health instruction and better than standard care	—		Small sample size
Kelly and Scott (66)	N=414, 64% with schizophrenia	Home psychoeducation and behavioral tailoring; clinic psychoeducation and behavioral tailoring; home and clinic psychoeducation and behavioral tailoring; and standard care; home three sessions, clinic two	Six months	—	Psychoeducation and behavioral tailoring better than standard care	Psychoeducation and behavioral tailoring better than standard care in symptoms and rehospitalizations	Three experimental groups combined into one group for analysis
Eckman et al. (1)	N=41, all with schizophrenia	Psychoeducation and social skills training; supportive group therapy; two weekly sessions for six months	One year	Psychoeducation and social skills training better than supportive group therapy	—	Psychoeducation and social skills training better than supportive group therapy in social skills	Social skills training addressed medication-related issues and symptom management
Razali and Yahya (67)	N=165, all with schizophrenia	Psychoeducation and simplifying regimen; and standard care; one session	One year	—	—	Psychoeducation and simplifying regimen better than standard care in rehospitalizations	Families included when available. Participants selected for nonadherence
Lecompte and Pele (69)	N=64, all with schizophrenia	Cognitive-behavioral therapy versus unstructured conversation	One year	—	Cognitive-behavioral therapy superior in aftercare appointments	Cognitive-behavioral therapy superior in rehospitalizations	
Azrin and Teichner (64)	N=39, 54% with schizophrenia	Psychoeducation; behavioral tailoring; and behavioral tailoring with client and family; one session	Two months	—	Both medication guidelines groups better than psychoeducation	—	Guidelines included psychoeducation, behavioral therapy, and other advice on taking medication. Brief treatment
Kemp et al. (68)	N=74, 58% with schizophrenia	Psychoeducation, motivational interviewing, and nonspecific counseling; four to six sessions	18 months	—	Psychoeducation and motivational interviewing better than nonspecific counseling	Psychoeducation and motivational interviewing superior in relapses and symptoms	Better social functioning for psychoeducation and motivational interviewing group
Cramer and Rosenheck (65)	N=60, 32% with schizophrenia	Behavioral tailoring and standard care; one session plus monthly checks	Six months	—	Behavioral tailoring better than standard care	—	Brief treatment



**Table 4**

## Randomized controlled trials of relapse prevention programs

Reference	Patients	Treatment and duration	Follow-up	Outcomes		Comments
				Relapse or rehospitalization	Other	
Buchkramer et al. (76,77)	N=66, all with schizophrenia	Relapse prevention; social skills training; standard care; ten weekly sessions	Two to five years	Relapse prevention better than social skills training but equal to standard care	—	Relatives' groups provided
Herz et al. (78)	N=82, all with schizophrenia	Relapse prevention and standard care; weekly groups for 18 months	Post-treatment assessment only	Relapse prevention better than standard	—	Relatives' groups provided
Perry et al. (79)	N=69, all with bipolar disorder	Relapse prevention and standard care; seven to 12 sessions	18 months	Relapse prevention better than standard care in manic relapses	Relapse prevention better than standard care in social adjustment and work	Participants selected after manic episode
Lam et al. (80)	N=25, all with bipolar disorder	Relapse prevention and standard care; six months, 12 to 20 sessions	One year	Relapse prevention better than standard care	Relapse prevention better than standard care in social functioning and coping strategies	Fewer antipsychotics prescribed at follow-up for relapse prevention group
Scott et al. (81)	N=42, all with bipolar disorder	Relapse prevention and standard care; six months	Six months, weekly sessions	Relapse prevention better than standard care	Relapse prevention better than standard care in symptoms and functioning	

ple's understanding of medication and addressing their concerns about taking medication, while respecting their decision about whether or not to use medication. However, only one controlled study has evaluated the effects of motivational interviewing on taking medication as prescribed, and this study is in need of replication.

#### Relapse prevention

Controlled studies of relapse prevention programs are summarized in Table 4. Relapse prevention programs focus on teaching people how to recognize environmental triggers and early warning signs of relapse and taking steps to prevent further symptom exacerbations (76–81). These programs also teach stress management skills. Because a person may not be fully aware that a relapse is happening (82,83), two of the five relapse prevention programs included groups to train relatives to help in the identification of early warning signs of relapse (76,78).

The five studies of relapse preven-

tion programs all showed decreases in relapse or rehospitalization. These findings are consistent with the findings of a large, uncontrolled study of 370 people with severe mental illness in which teaching the early warning signs of relapse was associated with better outcomes, including fewer relapses and rehospitalizations and lower treatment costs (84). This benefit of involving relatives in relapse prevention programs is consistent with research that shows that family intervention is effective in preventing relapses (7).

#### Coping skills training and comprehensive programs

Controlled studies of coping skills training and comprehensive programs are summarized in Table 5. Coping programs aim to increase people's ability to deal with symptoms or stress or with persistent symptoms (85–90). Comprehensive programs incorporate a broad array of illness management strategies, including psychoeducation,

relapse prevention, stress management, coping strategies, and goal setting and problem solving (91–94).

The four studies of coping skills were quite different, both in the methods employed and in the targets of the intervention. Leclerc and colleagues (85) taught an integrative coping skills approach based on Lazarus and Folkman's model of coping (95,96), which emphasizes the importance of cognitive appraisal in perceiving threat. Lecomte and colleagues (86) addressed general coping skills through building up participants' sense of empowerment. Schaub (87) and Schaub and Mueser (88) taught skills for managing stress and persistent symptoms, combined with basic psychoeducation about schizophrenia. Despite the differences in the programs, all the coping skills programs employed cognitive-behavioral techniques and produced uniformly positive results in reducing symptom severity. Thus research evidence shows that coping skills training is effective.

**Table 5**

## Randomized controlled trials of coping skills training and comprehensive programs

Reference	Patients	Treatment and duration	Follow-up	Outcomes		Comments
				Relapse or rehospitalization	Other	
Leclerc et al. (85)	N=99, all with schizophrenia	Coping skills and problem solving and standard care; 24 sessions over 12 weeks	Six months	—	Coping skills and problem solving better than standard care in delusions, hygiene, self-esteem. No group differences in negative symptoms	60% of participants were from long-stay wards
Lecomte et al. (86)	N=95, all with schizophrenia	Self-esteem and empowerment group and standard care; 12 weeks	Six months	—	Self-esteem and empowerment group better than standard care in psychotic symptoms. No group differences in negative symptoms	Self-esteem and empowerment group improved more in coping skills
Schaub (87)	N=20, all with schizophrenia	Coping-oriented therapy and unstructured discussion group; 24 sessions over 2.5 months	Post-treatment assessment only	No group differences	Coping-oriented therapy better than unstructured discussion group in knowledge of illness, social contacts, well-being, self-confidence, hospitalization. Coping-oriented therapy equal to unstructured discussion group in symptoms, leisure time, coping	
Schaub and Mueser (88)	N=156, all with schizophrenia	Coping-oriented therapy and supportive therapy; 16 sessions over three months	One year	—	Coping-oriented therapy better than supportive therapy in symptom severity, negative symptoms, anxiety-depression	Relatives' groups provided. Two-year follow-up under way
Atkinson et al. (91)	N=146, all with schizophrenia	Psychoeducation and problem solving and standard care; 20 weeks	Three months	—		Psychoeducation and problem solving better than standard care in social functioning, social networks, quality of life
Hogarty et al. (92,93)	N=151, all with schizophrenia	Personal therapy and supportive therapy; 94 sessions over three years	Post-treatment assessment only	Participants living with families: personal therapy better than supportive therapy. Participants living independently equal to supportive therapy and better than personal therapy	Personal therapy better than supportive therapy in social adjustment	Half of participants living at home received family therapy
Hornung et al. (94)	N=191, all with schizophrenia	Psychoeducation; psychoeducation and problem solving; psychoeducation and key person counseling; psychoeducation, problem solving, and key person counseling; and standard care; psychoeducation, ten sessions; problem solving, 15 sessions; key person counseling, 20 sessions	Five years	Psychoeducation, problem solving, and key person counseling better than other groups in hospitalizations	—	

The three studies of comprehensive programs—that is, those using a broad range of techniques—are somewhat difficult to compare because they differed in the clinical methods used. Atkinson and coworkers (91) evaluated a program that combined morning educational presentations and afternoon sessions in which problem solving was applied to the educational topics. Hogarty and associates (92,93) evaluated the effects of personal therapy, a broad-based approach incorporating psychoeducation, stress management, and development of adaptive coping skills to promote social reintegration, and compared these effects with the effects of supportive therapy. They found that personal therapy prevented relapses only for people living with families. However, people receiving personal therapy improved in social functioning, whether they were living at home or not. Hornung and colleagues (94) examined the effects of different combinations of psychoeducation, problem-solving training, and key-person counseling (such as counseling family members) and found that people who received all three had fewer relapses over five years. These three studies suggest that comprehensive programs improve the outcome of schizophrenia, but the differences between programs preclude any definitive conclusions about which approaches may be most effective.

#### *Cognitive-behavioral treatment of psychotic symptoms*

Over the past 50 years, since the early work of Beck (97), cognitive-behavioral therapy has been used to help clients with psychotic symptoms cope more effectively with the distress associated with symptoms or to reduce symptom severity. Cognitive-behavioral approaches to psychosis include teaching coping skills, such as distraction techniques to reduce preoccupation with symptoms (98), and modifying clients' dysfunctional beliefs about the illness, the self, or the environment (99). In recent years, several manuals have been developed for cognitive-behavioral therapy for psychosis (100–102).

Over the past decade, eight controlled studies of time-limited cogni-

tive-behavioral therapy for psychosis have been conducted—six in England (89,90,103–112), one in Canada (113), and one in Italy (114). Because several comprehensive reviews of this research (115), including two meta-analyses (116,117), have recently been published, we do not review the results of these studies in detail here. The consistent finding across these studies has been that cognitive-behavioral treatment is more effective than supportive counseling or standard care in reducing the severity of psychotic symptoms. Furthermore, studies that assess negative symptoms, such as social withdrawal and anhedonia, also report beneficial effects from cognitive-behavioral therapy on these symptoms.

#### *Summary of research*

The results of controlled research indicate that when illness management is conceptualized as a group of specific interventions, it is an evidence-based practice. The core components of illness management and the evidence supporting them can be summarized as follows. With respect to the more proximal outcomes, three studies (15,47,48) found that psychoeducation was effective at increasing knowledge about mental illness, and a fourth (49) did not. Similarly, all four studies of behavioral tailoring found that it was effective in improving the taking of medication as prescribed (61,64–66). In terms of the more distal outcomes, all five studies of training in relapse prevention found that it reduced relapses and rehospitalizations (76–81), all four studies of teaching coping skills found that it reduced the severity of symptoms (85–88), and all eight studies of cognitive-behavioral treatment of persistent psychotic symptoms reported that it reduced the severity of psychotic symptoms (89,103,107–109,112–114). Although some studies of coping skills training differed in the symptoms they targeted, they all employed time-limited, cognitive-behavioral interventions. Thus psychoeducation, behavioral tailoring for medication, training in relapse prevention, and coping skills training employing cognitive-behavioral techniques are strongly supported components of illness management. Confidence in these findings is bol-

stered by the fact that the majority of the studies cited above were based on treatment manuals, and all except the studies by Schaub (87) and Schaub and Mueser (88) and the study by Tarrier and colleagues (89,112) were conducted by different groups of investigators.

The three studies of comprehensive illness management (91–94) suggest emerging evidence of the effectiveness of such programs. Improvements were seen in several important areas, such as social adjustment (92,93) and quality of life (91). However, the differences between the components of the programs and their target outcomes preclude the drawing of any definitive conclusions about them.

Although the results of these studies support several components of illness management, the studies' limitations should be acknowledged. First, most research has focused on persons with schizophrenia, which limits the findings' generalizability. Second, few replications of standardized interventions have been published. Third, most research examines the effects of teaching illness management, with less attention paid to recovery. Although coping and symptom relief are important aspects of recovery (27,30,42), little controlled research has examined the effect of interventions on the broader dimensions of recovery, such as developing hope, meaning, and a sense of purpose in one's life.

#### **Implementation and dissemination issues**

Strategies for implementing and disseminating evidence-based practices are critical to keeping these practices from languishing on the academic shelf and yielding little effect in routine mental health settings. Some illness management strategies, including psychoeducation, behavioral tailoring to address willingness to take medication as prescribed, relapse prevention skills, and cognitive-behavioral treatment of persistent symptoms, are available in some settings, but no empirically supported programs are in widespread use. Generic strategies for implementing new psychiatric treatment and rehabilitation programs have been described elsewhere (118). We consider implementation and dissemination issues from the perspec-

tives of four stakeholders: mental health system administrators, program directors, people with mental illness, and family members of people with mental illness. As virtually no controlled data are available on specific strategies for disseminating and implementing new programs, the recommendations provided below are based on the experiences of the authors and other reports in the literature.

#### *Mental health system administrators*

Several issues are relevant for administrators attempting to implement illness management approaches, including the selection or development of manuals, monitoring adherence to the model, policies and procedures, and funding.

Although the research supports several practices for teaching illness management, the specific components have not previously been conceptualized and standardized as a unitary package or manual, except in the context of comprehensive programs that go well beyond what the evidence supports. The availability of a treatment manual is critical for broad-scale implementation of a practice. The identification of critical practice components for illness management, supported by research, may facilitate the development of such a manual.

Policies supporting illness management as a core capacity in a service system are important for implementing such programs (119). These policies include the development of program standards that identify illness management as a specific service modality and require it as a necessary capacity in contracts with service providers and managed care entities. Compared with other evidence-based practices, illness management services are not expensive, nor do they require major organizational restructuring to implement. In fact, clinicians routinely work to help people with mental illness improve their capacity to manage their illness and achieve their personal goals. The identification and standardization of core ingredients of illness management will allow clinicians to do what they are already trying to do in a more organized, systematic, and effective manner.

Both the clinic and the rehabilitation options in state Medicaid plans can be used to support illness management services if the services are led by traditionally credentialed staff. When partnerships are sought between clinical staff and peer facilitators as leaders in teaching illness management skills, available resources must support curriculum development and implementation must include ways to accomplish this expansion. Although research has not examined the effects of partnerships between professionals and peers in providing illness management skills, the overlap in curriculum between the programs reviewed here and peer-based illness self-management programs (20) suggests that such collaborations should be considered. Many states that have implemented these initiatives have used combinations of federal block grant funds, Community Action Grants from the Center for Mental Health Services, and legislatively appropriated county and state funds.

The continuity of an illness management program is strengthened by the development of a leadership group that meets regularly and is composed of people with mental illness, their family members, mental health service providers, and mental health service administrators. Such a group can review the progress of the program, develop evaluation plans, assist in addressing system barriers, and create policies as needed to support the program. Finally, such a group can facilitate the regular meeting of providers of illness management training to share teaching experiences, provide mutual support, and assist in curriculum refinement.

#### *Mental health program directors*

Program directors need to select a curriculum that successfully integrates psychosocial and medical approaches to illness management. If the approach that is adopted involves people with psychiatric disorders as peer educators, a variety of policies and procedures need to be in place. These include supporting the employment of peers, practices that support reasonable accommodations for employees with disabilities, and su-

pervision to help ensure appropriate boundaries between staff, peer-staff, and the people with mental illness who are the focus of treatment.

Another consideration is whom to target for illness management. Many program directors extend the opportunity to anyone who wants to attend, regardless of symptoms or rehabilitation status, on the grounds that desire to participate is the most important criterion for selection.

Program directors may find it helpful to integrate illness management principles throughout their organization. Case managers, therapists, crisis clinicians, and prescribing psychiatrists all have important roles in helping people use skills and in reinforcing management concepts. As with other service initiatives, the effect of illness management education is enhanced when the organization adopts its principles widely. Offering ongoing training rather than one-time courses can enhance the impact of illness management education. In addition, teaching a curriculum in short segments that are often repeated can be successful.

#### *People with mental illness and their family members*

The potential effect of illness management initiatives on people with mental illness is significant. Although the benefits of learning how to manage one's illness and make progress toward recovery are compelling, people report that recovery is hard work (26,120). The switch from being a passive recipient of care to an active partner is very challenging. People with psychiatric disorders and their relatives may feel justifiably ambivalent about these approaches (121). For example, a person learning about ways that others cope with symptoms may consider it a personal failure if he or she uses these methods but continues to experience symptoms. Programs that adopt fail-safe principles, such as unconditional support, zero exclusion, and easy reentry, support individuals' own recoveries and prevent people from internalizing a sense of failure.

Family members may be concerned that educational approaches will be used in lieu of established medical and psychosocial treatments. Family members may consider the

idea of recovery unrealistic, or they may be concerned that their relative is not ready to assume a more responsible role in treatment. Whether or not the person lives with relatives, relatives are likely to have a significant, although perhaps a subtly perceived, role in their family member's attitude toward recovery. Thus it is critical that the family understand and be involved in illness management education and that they appreciate its relevance to recovery.

## Conclusions

It is now widely recognized that people with mental illness can participate actively in their own treatment and can become the most important agents of change for themselves. Illness management skills, ranging from greater knowledge of psychiatric illness and its treatment to coping skills and relapse prevention strategies, play a critical role in people's recovery from mental illness. Research on illness management has thus far focused on programs developed and run by professionals. This research provides support for illness management programs and guidance on their effective components. Similar research on peer-based illness self-management programs may inform professional-based services and lead to collaborative efforts. ♦

## References

- Drake RE, Goldman HH, Leff HS, et al: Implementing evidence-based practices in routine mental health service settings. *Psychiatric Services* 52:179–182, 2001
- Lehman AF, Steinwachs DM: Translating research into practice: the Schizophrenia Patient Outcomes Research Team (PORT) treatment recommendations. *Schizophrenia Bulletin* 24:1–10, 1998
- Chambless DL, Ollendick TH: Empirically supported psychological interventions: controversies and evidence. *Annual Review of Psychology* 52:685–716, 2001
- Weisz JR, Hawley KM, Pilkonis PA, et al: Stressing the (other) three Rs in search for empirically supported treatments: review procedures, research quality, relevance to practice, and the public interest. *Clinical Psychology: Science and Practice* 7:243–258, 2000
- Bond GR, Drake RE, Mueser KT, et al: Assertive community treatment for people with severe mental illness: critical ingredients and impact on clients. *Disease Management and Health Outcomes* 9:141–159, 2001
- Bond GR, Drake RE, Becker DR, et al: Effectiveness of psychiatric rehabilitation approaches for employment of people with severe mental illness. *Journal of Disability Policy Studies* 10:18–52, 1999
- Pitschel-Walz G, Leucht S, Bäuml J, et al: The effect of family interventions on relapse and rehospitalization in schizophrenia: a meta-analysis. *Schizophrenia Bulletin* 27:73–92, 2001
- Drake RE, Essock SM, Shaner A, et al: Implementing dual diagnosis services for clients with severe mental illness. *Psychiatric Services* 52:469–476, 2001
- Torrey WC, Drake RE, Dixon L, et al: Implementing evidence-based practices for persons with severe mental illnesses. *Psychiatric Services* 52:45–55, 2001
- Hanson RW: Physician-patient communication and compliance, in *Compliance: The Dilemma of the Chronically Ill*. Edited by Gerber KE, Nehemkis AM. New York, Springer, 1986
- Masur FT: Adherence to health care regimens, in *Medical Psychology: Contributions to Behavioral Medicine*. Edited by Prokop CK, Bradley LA. New York, Academic Press, 1981
- Swezey RL, Swezey AM: Educational theory as a basis for patient education. *Journal of Chronic Diseases* 29:417–422, 1976
- Anderson CM, Reiss DJ, Hogarty GE: *Schizophrenia and the Family*. New York, Guilford, 1986
- Daley DC, Bowler K, Cahalane H: Approaches to patient and family education with affective disorders. *Patient Education and Counseling* 19:162–174, 1992
- Goldman CR, Quinn FL: Effects of a patient education program in the treatment of schizophrenia. *Hospital and Community Psychiatry* 39:282–286, 1988
- Chamberlin J: *On Our Own: Patient-Controlled Alternatives to the Mental Health System*. New York, Hawthorne, 1978
- Frese FJ, Davis WW: The consumer-survivor movement, recovery, and consumer professionals. *Professional Psychology: Research and Practice* 28:243–245, 1997
- Segal SP, Silverman C, Temkin T: Empowerment and self-help agency practice for people with mental disabilities. *Social Work* 38:705–712, 1993
- Baxter EA, Diehl S: Emotional stages: consumers and family members recovering from the trauma of mental illness. *Psychiatric Rehabilitation Journal* 21:349–355, 1998
- Copeland ME: *Wellness Recovery Action Plan*. Brattleboro, Vt, Peach Press, 1997
- Low AA: *Mental Health Through Will-Training: A System of Self Help in Psychotherapy as Practiced by Recovery*, Incorporated, 7th ed. Boston, Christopher Publishing House, 1957
- Spaniol L, Koehler M, Hutchinson D: *The Recovery Workbook: Practical Coping and Empowerment Strategies for People With Psychiatric Disability*. Boston, Center for Psychiatric Rehabilitation, Sargent College of Allied Health Professions, Boston University, 1994 ♦
- Anthony WA: Recovery from mental illness: the guiding vision of the mental health service system in the 1990s. *Psychosocial Rehabilitation Journal* 16:11–23, 1993
- Deegan P: Recovery: the lived experience of rehabilitation. *Psychosocial Rehabilitation Journal* 11:11–19, 1988
- Fisher DB: Humanizing the recovery process. *Resources* 4:5–6, 1992
- Leete E: How I perceive and manage my illness. *Schizophrenia Bulletin* 15:197–200, 1989
- Beale V, Lambric T: *The Recovery Concept: Implementation in the Mental Health System: A Report by the Community Support Program Advisory Committee*. Columbus, Ohio, Department of Mental Health, Office of Consumer Services, 1995
- Carling PJ: Recovery as the Core of Our Work: The Challenge to Mental Health Systems and Professionals. Presented at the New Hampshire Partners for Change Conference on Recovery held Sept 5, 1997, in Nashua, NH
- Ralph RO: Review of Recovery Literature: A Synthesis of a Sample of Recovery Literature, 2000. Portland, Maine, University of Southern Maine, Edmund S. Muskie Institute of Public Affairs, 2000
- Ralph RO: Recovery. *Psychiatric Rehabilitation Skills* 4:480–517, 2000
- Carpinello SE, Knight E, Markowitz F, et al: The development of the Mental Health Confidence Scale: a measure of self-efficacy in individuals diagnosed with mental disorders. *Psychiatric Rehabilitation Journal* 23:236–243, 2000
- Corrigan PW, Gifford D, Rashi, F, et al: Recovery as a psychological construct. *Community Mental Health Journal* 35:231–240, 1999
- DeMasi ME, Markowitz FE, Videka-Sherman L, et al: Specifying Dimensions of Recovery. Presented at the annual National Conference on State Mental Health Agency Services Research and Program Evaluation held Dec 8–10, 1996, in Arlington, Va
- Ralph RO, Lambert D: Needs Assessment Survey of a Sample of AMHI Consent Decree Class Members. Portland, Maine, University of Southern Maine, Edmund S. Muskie Institute of Public Affairs, 1996
- Campbell J: How consumers/survivors are evaluating the quality of psychiatric care. *Evaluation Review* 21:357–363, 1997
- Corrigan PW, Liberman RP, Engle JD: From noncompliance to collaboration in the treatment of schizophrenia. *Hospital and Community Psychiatry* 41:1203–1211, 1990
- Scott A: Consumers/survivors reform the system, bringing a “human face” to research. *Resources* 5:3–6, 1993
- Boisen AT: *The Exploration of the Inner World*. New York, Harper and Brothers, 1962
- Dabrowski K: *Positive Disintegration*. Boston, Little, Brown, 1964
- Miller JS: Mental illness and spiritual crisis: implications for psychiatric rehabilitation. *Psychosocial Rehabilitation Journal* 14:29–45, 1990 ♦

41. Carpinello SE, Knight E, Jatulis LL: A Study of the Meaning of Self-Help, Self-Help Group Processes, and Outcomes. Presented at the annual meeting of the National Association of State Mental Health Program Directors (NASMHPD) held July 12–14, 1992, in Arlington, Va
42. Copeland ME: *Living Without Depression and Manic Depression*. Oakland, Calif, New Harbinger, 1994
43. Davis JM, Barter JT, Kane JM: Antipsychotic drugs, in *Comprehensive Textbook of Psychiatry*, vol 5. Edited by Kaplan HI, Sadock BJ. Baltimore, Williams & Wilkins, 1989
44. Goodwin FK, Jamison KR: *Manic Depressive Illness*. New York, Oxford University Press, 1990
45. Fenton WS, Blyler CR, Heinssen RK: Determinants of medication compliance in schizophrenia: empirical and clinical findings. *Schizophrenia Bulletin* 23:637–651, 1997
46. Weiden PJ, Dixon L, Frances A, et al: Neuroleptic noncompliance in schizophrenia, in *Advances in Neuropsychiatry and Psychopharmacology: Schizophrenia Research*. Edited by Tamminga CA, Schulz SC. New York, Raven, 1991
47. MacPherson R, Jerrom B, Hughes A: A controlled study of education about drug treatment in schizophrenia. *British Journal of Psychiatry* 168:709–717, 1996
48. Bäumel J, Kissling W, Pitschel-Walz G: Psychoedukative gruppen für schizophrene Patienten: Einfluss auf Wissensstand und Compliance. *Nervenheilkunde* 15:145–150, 1996
49. Merinder L-B, Viuff AG, Laugesen HD, et al: Patient and relative education in community psychiatry: a randomized controlled trial regarding its effectiveness. *Social Psychiatry and Psychiatric Epidemiology* 34:287–294, 1999
50. Barrowclough C, Tarrier N, Watts S, et al: Assessing the functional value of relatives' reported knowledge about schizophrenia: a preliminary study. *British Journal of Psychiatry* 151:1–8, 1987
51. Tarrier N, Barrowclough C, Vaughn C, et al: The community management of schizophrenia: a controlled trial of a behavioural intervention with families. *British Journal of Psychiatry* 153:532–542, 1988
52. Tarrier N, Barrowclough C: Providing information to relatives about schizophrenia: some comments. *British Journal of Psychiatry* 149:458–463, 1986
53. Seltzer A, Roncari I, Garfinkel P: Effect of patient education on medication compliance. *Canadian Journal of Psychiatry* 25:638–645, 1980
54. Streicker SK, Amdur M, Dincin J: Educating patients about psychiatric medications: failure to enhance compliance. *Psychosocial Rehabilitation Journal* 9:15–28, 1986
55. Angunawela II, Mullett MA: Drug information for the mentally ill: a randomised controlled trial. *International Journal of Psychiatry in Clinical Practice* 2:121–127, 1998
56. Brown CS, Wright RG, Christensen DB: Association between type of medication instruction and patients' knowledge, side effects, and compliance. *Hospital and Community Psychiatry* 38:55–60, 1987
57. Kuipers J, Bell C, Davidhizar R, et al: Knowledge and attitudes of chronic mentally ill patients before and after medication education. *Journal of Advanced Nursing* 20:450–456, 1994
58. Owens DGC, Carroll A, Fattah S, et al: A randomized, controlled trial of a brief interventional package for schizophrenic outpatients. *Acta Psychiatrica Scandinavica* 103:362–369, 2001
59. Kleinman I, Schachter D, Jeffries J, et al: Effectiveness of two methods for informing schizophrenic patients about neuroleptic medication. *Hospital and Community Psychiatry* 44:1189–1191, 1993
60. Munetz MR, Roth LH: Informing patients about tardive dyskinesia. *Archives of General Psychiatry* 42:866–871, 1985
61. Boczkowski J, Zeichner A, DeSanto N: Neuroleptic compliance among chronic schizophrenic outpatients: an intervention outcome report. *Journal of Consulting and Clinical Psychology* 53:666–671, 1985
62. Miller WR, Rollnick S: *Motivational Interviewing: Preparing People to Change Addictive Behavior*. New York, Guilford, 1991
63. Eckman TA, Liberman RP, Phipps CC, et al: Teaching medication management skills to schizophrenic patients. *Journal of Clinical Psychopharmacology* 10:33–38, 1990
64. Azrin NH, Teichner G: Evaluation of an instructional program for improving medication compliance for chronically mentally ill outpatients. *Behaviour Research and Therapy* 36:849–861, 1998
65. Cramer JA, Rosenheck R: Enhancing medication compliance for people with serious mental illness. *Journal of Nervous and Mental Disease* 187:53–55, 1999
66. Kelly GR, Scott JE: Medication compliance and health education among outpatients with chronic mental disorders. *Medical Care* 28:1181–1197, 1990
67. Razali MS, Yahya H: Compliance with treatment in schizophrenia: a drug intervention program in a developing country. *Acta Psychiatrica Scandinavica* 91:331–335, 1995
68. Kemp R, Kirov G, Everitt B, et al: Randomised controlled trial of compliance therapy: 18-month follow-up. *British Journal of Psychiatry* 173:271–272, 1998
69. Lecompte D, Pele I: A cognitive-behavioral program to improve compliance with medication in patients with schizophrenia. *International Journal of Mental Health* 25: 51–56, 1996
70. Dekle D, Christensen L: Medication management [letter]. *Hospital and Community Psychiatry* 41:96–97, 1990
71. Eckman TA, Wirshing WC, Marder SR, et al: Technique for training schizophrenic patients in illness self-management: a controlled trial. *American Journal of Psychiatry* 149:1549–1555, 1992
72. Saykin AJ, Gur RC, Gur RE, et al: Neuropsychological function in schizophrenia: selective impairment in memory and learning. *Archives of General Psychiatry* 48:618–624, 1991
73. Brehm JW: *A Theory of Psychological Reactance*. New York, Academic Press, 1966
74. Sellwood W, Tarrier N: Reactance and the induction of non-compliance with antipsychotic medication: an analogue study. Manchester, England, University of Manchester, Academic Division of Clinical Psychology, 2001
75. Moore A, Sellwood W, Stirling J: Compliance and psychological reactance in schizophrenia. *British Journal of Clinical Psychology* 39:287–296, 2000
76. Buchkremer G, Fiedler P: Kognitive vs. handlungsorientierte Therapie [Cognitive vs action-oriented treatment]. *Nervenarzt* 58:481–488, 1987
77. Lewandowski L, Buchkremer G, Stark M: Das Gruppenklima und die Therapeut-Patient-Beziehung bei zwei Gruppentherapiestrategien für schizophrene Patienten: ein Beitrag zur Klärung differentieller Therapieeffekte. *Psychotherapie Psychosomatik Medizinische Psychologie* 44:115–121, 1994
78. Herz MI, Lamberti JS, Mintz J, et al: A program for relapse prevention in schizophrenia: a controlled study. *Archives of General Psychiatry* 57:277–283, 2000
79. Perry A, Tarrier N, Morriss R, et al: Randomised controlled trial of efficacy of teaching patients with bipolar disorder to identify early symptoms of relapse and obtain treatment. *British Medical Journal* 318:149–153, 1999
80. Lam DH, Bright J, Jones S, et al: Cognitive therapy for bipolar illness: a pilot study of relapse prevention. *Cognitive Therapy and Research* 24:503–520, 2000
81. Scott J, Garland A, Moorhead S: A pilot study of cognitive therapy in bipolar disorders. *Psychological Medicine* 31:459–467, 2001
82. Amador X, Strauss D, Yale S, et al: Awareness of illness in schizophrenia. *Schizophrenia Bulletin* 17:113–132, 1991
83. Amador XF, Gorman JM: Psychopathologic domains and insight in schizophrenia. *Psychiatric Clinics of North America* 21:27–42, 1998
84. Novacek J, Raskin R: Recognition of warning signs: a consideration for cost-effective treatment of severe mental illness. *Psychiatric Services* 49:376–378, 1998
85. Leclerc C, Lesage AD, Ricard N, et al: Assessment of a new rehabilitative coping skills module for persons with schizophrenia. *American Journal of Orthopsychiatry* 70:380–388, 2000
86. Lecomte T, Cyr M, Lesage AD, et al: Efficacy of a self-esteem module in the empowerment of individuals with schizophrenia. *Journal of Nervous and Mental Disease* 187:406–413, 1999
87. Schaub A: Cognitive-behavioural coping-orientated therapy for schizophrenia: a new treatment model for clinical service

- and research, in *Cognitive Psychotherapy of Psychotic and Personality Disorders: Handbook of Theory and Practice*. Edited by Perris C, McGorry PD. Chichester, England, John Wiley & Sons, 1998
88. Schaub A, Mueser KT, Coping-Oriented Treatment of Schizophrenia and Schizoaffective Disorder: Rationale and Preliminary Results. Presented at the annual convention of the Association for the Advancement of Behavior Therapy held Nov 16–19, 2000, in New Orleans
  89. Tarrier N, Beckett R, Harwood S, et al: A trial of two cognitive behavioral methods of treating drug-resistant residual psychotic symptoms in schizophrenic patients: I. outcome. *British Journal of Psychiatry* 162: 524–532, 1993
  90. Tarrier N, Sharpe L, Beckett R, et al: A trial of two cognitive behavioural methods of treating drug-resistant residual psychotic symptoms in schizophrenia patients: II. treatment-specific changes in coping and problem-solving skills. *Psychiatry and Psychiatric Epidemiology* 28:5–10, 1993
  91. Atkinson JM, Coia DA, Gilmour WH, et al: The impact of education groups for people with schizophrenia on social functioning and quality of life. *British Journal of Psychiatry* 168:199–204, 1996
  92. Hogarty GE, Greenwald D, Ulrich RF, et al: Three year trials of personal therapy among schizophrenic patients living with or independent of family: II. effects of adjustment on patients. *American Journal of Psychiatry* 154:1514–1524, 1997
  93. Hogarty GE, Kornblith SJ, Greenwald D, et al: Three year trials of personal therapy among schizophrenic patients living with or independent of family: I. description of study and effects on relapse rates. *American Journal of Psychiatry* 154:1504–1513, 1997
  94. Hornung WP, Feldman R, Klingberg S, et al: Long-term effects of a psychoeducational psychotherapeutic intervention for schizophrenic outpatients and their key-persons: results of a five-year follow-up. *European Archives of Psychiatry and Clinical Neuroscience* 249:162–167, 1999
  95. Folkman S, Chesney M, McKusick L, et al: Translating coping theory into an intervention, in *The Social Context of Coping*. Edited by Eckenrode J. New York, Plenum, 1991
  96. Lazarus RS, Folkman S: *Stress, Appraisal, and Coping*. New York, Springer, 1984
  97. Beck AT: Successful outpatient psychotherapy with a schizophrenic with a delusion based on borrowed guilt. *Psychiatry* 15: 305–312, 1952
  98. Tarrier N: Management and modification of residual positive psychotic symptoms, in *Innovations in the Psychological Management of Schizophrenia*. Edited by Birchwood M, Tarrier, N. Chichester, England, John Wiley & Sons, 1992
  99. Perris C: *Cognitive Therapy With Schizophrenic Patients*. New York, Guilford, 1989
  100. Chadwick P, Birchwood M, Trower P: *Cognitive Therapy for Delusions, Voices, and Paranoia*. Chichester, England, John Wiley & Sons, 1996
  101. Fowler D, Garety P, Kuipers E: *Cognitive Behaviour Therapy for Psychosis: Theory and Practice*. Chichester, England, John Wiley & Sons, 1995
  102. Kingdon DG, Turkington D: *Cognitive-Behavioral Therapy of Schizophrenia*. New York, Guilford, 1994
  103. Drury V, Birchwood M, Cochrane R, et al: Cognitive therapy and recovery from acute psychosis: a controlled trial: I. impact on psychotic symptoms. *British Journal of Psychiatry* 169:593–601, 1996
  104. Drury V, Birchwood M, Cochrane R, et al: Cognitive therapy and recovery from acute psychosis: a controlled trial: II. impact on recovery time. *British Journal of Psychiatry* 169:602–607, 1996
  105. Garety P, Fowler D, Kuipers E, et al: London–East Anglia randomised controlled trial of cognitive-behavioural therapy for psychosis: II. predictors of outcome. *British Journal of Psychiatry* 171:420–426, 1997
  106. Kuipers E, Garety P, Fowler D, et al: London–East Anglia randomised controlled trial of cognitive-behavioural therapy for psychosis: I. effects of the treatment phase. *British Journal of Psychiatry* 171: 319–327, 1997
  107. Kuipers E, Fowler D, Garety P, et al: London–East Anglia randomised controlled trial of cognitive-behavioural therapy for psychosis: III. follow-up and economic evaluation at 18 months. *British Journal of Psychiatry* 173:61–68, 1998
  108. Lewis S, Tarrier N, Haddock G, et al: Randomised Controlled Trial of Cognitive-Behaviour Therapy in Early Schizophrenia: 18-Month Outcomes. Presented at the International Conference on Psychological Treatments for Schizophrenia held Sept 6–7, 2001, in Cambridge, England
  109. Sensky T, Turkington D, Kingdon D, et al: A randomized controlled trial of cognitive-behavioral therapy for persistent symptoms in schizophrenia resistant to medication. *Archives of General Psychiatry* 57:165–172, 2000
  110. Tarrier N, Yusupoff L, Kinney C, et al: Randomised controlled trial of intensive cognitive behaviour therapy for patients with chronic schizophrenia. *British Medical Journal* 317:303–307, 1998
  111. Tarrier N, Wittkowski A, Kinney C, et al: Durability of the effects of cognitive-behavioural therapy in the treatment of chronic schizophrenia: 12-month follow-up. *British Journal of Psychiatry* 174:500–504, 1999
  112. Tarrier N, Kinney C, McCarthy E, et al: Two-year follow-up of cognitive-behavioral therapy and supportive counseling in the treatment of persistent symptoms in chronic schizophrenia. *Journal of Consulting and Clinical Psychology* 68:917–922, 2000
  113. Rector NA, Seeman MV, Segal ZV: Cognitive therapy for schizophrenia: treatment outcomes and follow-up effects from the Toronto Trial Study. Presented at the annual meeting of the American Psychiatric Association held May 15–20, 1999, in Chicago
  114. Pinto A, La Pia S, Mennella R, et al: Cognitive-behavioral therapy and clozapine for clients with treatment-refractory schizophrenia. *Psychiatric Services* 50: 901–904, 1999
  115. Garety PA, Fowler D, Kuipers E: Cognitive-behavioral therapy for medication-resistant symptoms. *Schizophrenia Bulletin* 26:73–86, 2000
  116. Gould RA, Mueser KT, Bolton E, et al: Cognitive therapy for psychosis in schizophrenia: a preliminary meta-analysis. *Schizophrenia Research* 48:335–342, 2001
  117. Rector NA, Beck AT: Cognitive behavioral therapy for schizophrenia: an empirical review. *Journal of Nervous and Mental Disease* 189:278–287, 2001
  118. Corrigan PW, Steiner L, McCracken SG, et al: Strategies for staff dissemination of evidence-based practices for people with serious mental illness. *Psychiatric Services* 52:1598–1606, 2001
  119. Jacobson N, Curtis L: Recovery as policy in mental health services: strategies emerging from the states. *Psychiatric Rehabilitation Journal* 23:333–341, 2000
  120. Deegan PE, Affa C: *Coping With Voices: Self-Help Strategies for People Who Hear Voices That Are Distressing*. Lawrence, Mass, National Empowerment Center, 1995
  121. Baxter EA, Diehl S: Emotional stages: consumer and family members recovering from the trauma of mental illness. *Psychiatric Rehabilitation Journal* 21:349–355, 1998





## The Evidence

### Selected Bibliography

#### Literature reviews

Drake, R. E., Merrens, M. R., & Lynde, D. W. (2005). *Evidence-Based Mental Health Practice: A Textbook*, New York: WW Norton.

- Introduces readers to the concepts and approaches of evidence-based practices for treating severe mental illnesses.
- Describes the importance of research in intervention science and the evolution of evidence-based practices.
- Contains a chapter for each of five evidence-based practices and provides historical background, practice principles, and an introduction to implementation. Vignettes highlight the experiences of staff and consumers.
- Is a readable primer for the *Evidence-Based Practices Implementation Resource KITS*.

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## Psychoeducation

Copeland, M. E. (1999). *The depression workbook*. Oakland: New Harbinger Publications.

DePaulo, J. R. (2002). *Understanding depression: What we know and what you can do about it*. Chichester, England: John Wiley & Sons.

Fawcett, P., Golden, B., & Rosenfeld, N. (2000). *New hope for people with bipolar disorder*. New York: Prima Publishing.

Goldman, C. R., & Quinn, F. L. (1988). Effects of a patient education program in the treatment of schizophrenia. *Hospital and Community Psychiatry* 39, 282-286.

Herz, M., & Marder, S. (2002). *The comprehensive treatment and management of schizophrenia*. Baltimore: Lippincott, Williams, and Wilkins.

Macpherson, R., Jerrom, B., & Hughes, A. (1996). A controlled study of education about drug treatment in schizophrenia. *British Journal of Psychiatry* 168, 709-717.

Miklowitz, D. (2002). *The bipolar survival guide: What you and your family need to know*. New York: Guilford.

---

## Cognitive-behavioral Therapy

Fowler, D. (2000). Cognitive behavioral therapy for psychosis: From understanding to treatment. *Psychiatric Rehabilitation Skills* 4, 199-215.

Rector, N., & Beck, A. (2001). Cognitive behavioral therapy for schizophrenia: An empirical review. *Journal of Nervous and Mental Disease* 189, 278-287.

Tarrier, N., & Haddock, G. (2002). Cognitive-behavioral therapy for schizophrenia: A case formulation approach. In: S. G. Hoffman & M. C. Tompson (Eds.), *Treating chronic and severe mental disorders: A handbook of empirically supported interventions* (pp. 69-95). New York: Guilford Press.

---

## Motivational Interviewing and engagement

Amador, X., & Johanson, A. (2000). *I am not sick: I don't need help*. Petonic, NY: Vida Press.

Amador, X., & Gorman, J. (1998). Psychopathologic domains and insight in schizophrenia. *The Psychiatric Clinics of North America* 21, 27-42.

Miller, W. R., & Rollnick, S. (1991). *Motivational interviewing: Preparing people to change*. 2nd ed. New York: Guilford.

---

## Behavioral Tailoring for Medications

Azrin, N. H., & Teichner, G. (1998). Evaluation of an instructional program for improving medication compliance for chronically mentally ill outpatients. *Behaviour Research and Therapy* 36, 849-861.

Boczkowski, J., Zeichner, A., & DeSanto, N. (1985). Neuroleptic compliance among chronic schizophrenic outpatients: An intervention outcome report. *Journal of Consulting and Clinical Psychology* 53, 666-671.

Cramer, J. A., & Rosenheck, R. (1999). Enhancing medication compliance for people with serious mental illness. *The Journal of Nervous and Mental Disease* 187, 53-55.

Kelly, G. R., & Scott, J. E. (1990). Medication compliance and health education among outpatients with chronic mental disorders. *Medical Care* 28, 1181-1197.

---

## Relapse Prevention

- Herz, M. I., Lamberti, J. S., Mintz, J., et al. (2000). A program for relapse prevention in schizophrenia: A controlled study. *Archives of General Psychiatry* 57, 277-283.
- Perry, A., Tarrier, N., Morriss, R., et al. (1999). Randomised controlled trial of efficacy of teaching patients with bipolar disorder to identify early symptoms of relapse and obtain treatment. *British Medical Journal* 318, 149-153.

---

## Coping Skills Training

- Leclerc, C., Lesage, A. D., Ricard, N., et al. (2000). Assessment of a new rehabilitative coping skills module for persons with schizophrenia. *American Journal of Orthopsychiatry* 70, 380-388.
- Lecomte, T., Cyr, M., Lesage, A. D., et al. (1999). Efficacy of a self-esteem module in the empowerment of individuals with schizophrenia. *Journal of Nervous and Mental Disease* 187, 406-413.

---

## Social skills training

- Bellack, A., Mueser, K. T., Gingerich, S., & Agresta, J. (1997). *Social skills training for schizophrenia: A step-by-step guide*. New York: Guilford Press.
- Gingerich, S. (2002). Guidelines for social skills training for persons with mental illness. In A. Roberts & G. Greene, *Social workers' desk reference* (pp. 392-396). New York: Oxford University Press.

---

## Family Interventions

- McFarlane, W. (2002). *Multifamily groups in the treatment of severe psychiatric disorders*. New York: Guilford Press.
- Mueser, K. T., & Glynn, S. (1999). *Behavioral family therapy for psychiatric disorders*. Oakland: New Harbinger Publications.
- Mueser, K., & Gingerich, S. (1994). *Coping with schizophrenia: A guide for families*. Oakland: New Harbinger Publications.

---

## Substance Use

- Connors, G., Donovan, D., & DiClemente, C. (2001). *Substance abuse treatment and the stages of change*. New York: Guilford Press.
- Velasquez, M., Maurer, G., Crouch, D., & DiClemente, C. (2001). *Group treatment for substance abuse: A stages-of-change therapy manual*. New York: Guilford Press.



## Additional readings for program leaders and public mental health authorities

Batalden, P. B., & Stoltz, P. K. (1993). A framework for the continual improvement of healthcare: Building and applying professional and improvement knowledge to test changes in daily work. *The Joint Commission Journal on Quality Improvement*, 19:10, 424-445.

Gowdy, E., & Rapp, C. A. (1989). Managerial behavior: The common denominators of successful community based programs. *Psychosocial Rehabilitation Journal*, 13(2), 31-51.

Nelson, E. C., Batalden, P. B., Ryer, J. C. (Eds.). (1998). *Clinical Improvement Action Guide*. Oakbrook Terrace, Illinois: Joint Commission on Accreditation of Healthcare Organizations.

Rapp, C. A. (1998). The Strengths Model: Case Management with People Suffering from Severe and Persistent Mental Illness. Chapter 8—*Supported Case Management Context: Creating the Conditions for Effectiveness*. New York: Oxford University Press.

Rapp, C. A. (1993) Client-centered performance management for rehabilitation and mental health services. In R. W. Flexer & P. L. Solomon (Eds.), *Community and social support for people with severe mental disabilities*. Boston, MA: Andover. pp. 183-192.

*Supervisor's Tool Box*. (1997). Lawrence KS: The University of Kansas School of Social Welfare.

## First-person accounts

Corrigan, P., & Lundin, R. (2001). *Don't call me nuts: Coping with the stigma of mental illness*. Chicago: Recovery Press.

Wahl, O. (1999). Telling is risky business: Mental health consumers confront stigma. New Brunswick, NJ: Rutgers University Press.

## Recovery research and resources

Anthony, W. A. (1993). Recovery from mental illness: The guiding vision of the mental health service system in the 1990s. *Psychosocial Rehabilitation Journal*, 16, 11-23.

Ralph, R. (2000). Recovery. *Psychiatric Rehabilitation Skills* 3, 488-517.

### SAMHSA Center for Mental Health Services

The Substance Abuse and Mental Health Services Agency (SAMHSA) provides a large variety of free (or very inexpensive) publications and videotapes about mental illnesses and effective treatment.

(800) 789-CMHS

Web site: <http://www.samhsa.gov/cmhs>

### Consumer Organization and Networking Technical Assistance Center (CONTAC)

CONTAC provides technical assistance to consumers throughout the U.S.

(800) 598-8847

Web site: <http://www.contac.org>

### Depression and Bipolar Support Alliance (DBSA)

DBSA is a membership organization that provides direct support services to people with mental illnesses and their families, legislation and public policy advocacy, litigation to prevent discrimination, public education, and technical assistance to local affiliates.

Web site: <http://www.dbsalliance.org>

**Mental Illness Education Project (MIEP)**

The Mental Illness Education Project seeks to improve understanding of mental illnesses by producing video-based programs for use by consumers, their families, mental health practitioners, administrators, and educators, as well as the general public.

(800) 343-5540

*Web site:* <http://www.miepvideos.org>

**Mental Health America (MHA)**

MHA provides information and referral services for people in the process of recovery.

*Web site:* <http://www.mentalhealthamerica.net>

**Mental Health Recovery**

Mary Ellen Copeland has developed a number of publications and programs for helping people in the recovery process, including the Wellness Recovery Action Plan (WRAP). Her web site offers a free newsletter and articles and a list of publications and workshops that can be purchased.

(802) 254-2092

*Web site:* <http://www.mentalhealthrecovery.com>

**National Alliance on Mental Illness (NAMI)**

NAMI is a support and advocacy organization of consumers, families, and friends of people with mental illnesses. It provides education about severe brain disorders, supports increased funding for research, and advocates for adequate health insurance, housing, rehabilitation, and jobs for people with mental illnesses. Each state has a chapter and many communities have their own chapters. NAMI offers a consumer-led educational program called *Peer-to-Peer*.

*Helpline:* (800) 950-NAMI

*Web site:* <http://www.nami.org>

**National Empowerment Center (NEC)**

NEC is a provider of mental health information, programs, and materials that focus on recovery. NEC provides referrals to local support groups and helps people set up new groups. Newsletter and audiovisual materials are also available.

*Web site:* <http://www.power2u.org>

**National Institute for Mental Health (NIMH)**

NIMH is engaged in research for better understanding, more effective treatment, and eventually prevention of mental illnesses. Its web site provides educational materials and an excellent list of free publications on mental illnesses, including a comprehensive listing of resources for help.

*Web site:* <http://www.nimh.nih.gov>

**National Mental Health Consumers' Self-help Clearinghouse**

This organization provides information about mental illnesses, technical support for existing or newly starting self-help groups, and a free quarterly newsletter for consumers. It sponsors an annual conference. Spanish language services are available.

*Web site:* <http://www.mhselfhelp.org>

**Resource Center to Address Discrimination and Stigma Associated with Mental Illness**

This center provides resources and information to help people implement and operate programs and campaigns to reduce the stigma of mental illnesses.

(800) 540-0320

*Web site:* <http://www.adscenter.org>

**U.S. Psychiatric Rehabilitation Association (USPRA)**

USPRA is a nonprofit organization committed to promoting, supporting, and strengthening community-based psychosocial rehabilitation services and resources. It also publishes a journal, newsletters, and a resource catalogue.

(410) 789-7054

*Web site:* <http://www.uspra.org>





## The Evidence

### References

*The following list includes the references for all citations in this KIT.*

- Anthony, W. A. (1993). Recovery from mental illness: The guiding vision of the mental health service system in the 1990s. *Psychosocial Rehabilitation Journal*, 16, 11-23.
- Becker, D. R., Bond, G. R., McCarthy, D., Thompson, D., Xie, H., McHugo, G. J., et al. (2001). Converting day treatment centers to supported employment programs in Rhode Island. *Psychiatric Services*, 52, 351-357.
- Becker, D. R., Smith, J., Tanzman, B., Drake, R. E., & Tremblay, T. (2001). Fidelity of supported employment programs and employment outcomes. *Psychiatric Services*, 52, 834-836.
- Bond, G. R., & Salyers, M. P. (2004). Prediction of outcome from the Dartmouth Assertive Community Treatment Fidelity Scale. *CNS Spectrums*, 9, 937-942.
- Caras, S. (1999). Reflections on the recovery model. Unpublished paper.
- Cohan, K., & Caras, S. (1998, unpublished paper) *Transformation*.
- Ganju, V. (2004). *Evidence-based Practices: Responding to the Challenge*. Presented at the 2004 NASMHPD Commissioner's Meeting, San Francisco, CA: June 22-24, 2004.



- Hyde, P. S., Falls, K., Morris, J. A., & Schoenwald, S. K. (2003). *Turning Knowledge into Practice: A Manual for Behavioral Health Administrators and Practitioners about Understanding and Implementing Evidencebased Practices*. Boston, MA: Technical Assistance Collaborative, Inc. Available through <http://www.tacinc.org> or <http://www.acmha.org>.
- Ingram, R., & Luxton, D. (2005). Vulnerability and stress models. In *Development and Psychopathology: A Vulnerability-Stress Perspective*. Benjamin Hankin & John Abela (Eds.). Thousand Oaks, CA: Sage Publications.
- Institute of Medicine (2006). Improving the Quality of Health Care for Mental and Substance-Use Conditions: *Quality Chasm Series*. Washington, DC: National Academy of Sciences.
- Jerrel, J.M., & Ridgely, M.S. (1995). Comparative effectiveness of three approaches to serving people with severe mental illness and substance abuse disorders. *The Journal of Nervous and Mental Disease*, 183(9), 566-576.
- Leete, E. (1989). How I perceive and manage my mental illness. *Schizophrenia Bulletin*, 15, 197-200.
- Mueser, K. T., Corrigan, P. W., Hilton, D. W., Tanzman, B., Schaub, A., Gingerich, S., et al. (2002). Illness management and recovery: A review of the research. *Psychiatric Services*, 53, 1272-1284.
- National Advisory Mental Health Council Workgroup on Child and Adolescent Mental Health Intervention Development and Deployment. *Blueprint for Change: Research on Child and Adolescent Mental Health*. Washington, DC: 2001. Available through <http://www.nimh.nih.gov>.
- New Freedom Commission on Mental Health. *Achieving the Promise: Transforming Mental Health Care in America. Final Report*. DHHS Pub. No. SMA-03-3832. Rockville, MD: 2003.
- Peters, T. J., & Waterman, R. H. (1982). *In Search of Excellence*. New York: Harper & Row.
- Ralph, R. (2000). A review of the recovery literature. A synthesis of a sample of the recovery literature. Prepared for the National Technical Assistance Center for State Mental Health Planning and the National Association of State Mental Health Program Directors. Alexandria, VA.
- Teague, G. R., Drake, R. E., & Ackerson, T. (1995). Evaluating use of continuous treatment teams for persons with mental illness and substance abuse. *Psychiatric Services*, 46, 689695.
- U.S. Department of Health and Human Services. (1999). *Mental Health: A Report of the Surgeon General*. Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, and National Institutes of Health, National Institute of Mental Health.
- U.S. Department of Health and Human Services. (2001). *Mental Health: Culture, Race, and Ethnicity. A Supplement to Mental Health: A Report of the Surgeon General*. Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services.
- U.S. Department of Health and Human Services. (2005). *Using Medicaid to Support Working Age Adults with Serious Mental Illnesses in the Community: A Handbook*. Assistant Secretary of Planning and Evaluation.



## The Evidence

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