Psychiatric Rehabilitation Journal

# Implementing Illness Management and Recovery Within Assertive Community Treatment Teams: A Qualitative Study

Gary Morse, Maria Monroe-DeVita, Mary M. York, Roselyn Peterson, Joris Miller, MacKenzie Hughes, Elizabeth Carpenter-Song, Christopher Akiba, and Gregory J. McHugo

Online First Publication, September 2, 2019. http://dx.doi.org/10.1037/prj0000387

CITATION

Morse, G., Monroe-DeVita, M., York, M. M., Peterson, R., Miller, J., Hughes, M., Carpenter-Song, E., Akiba, C., & McHugo, G. J. (2019, September 2). Implementing Illness Management and Recovery Within Assertive Community Treatment Teams: A Qualitative Study. *Psychiatric Rehabilitation Journal*. Advance online publication. http://dx.doi.org/10.1037/prj0000387

American Psychological Association

Psychiatric Rehabilitation Journal

© 2019 American Psychological Association
ISSN: 1095-158X

http://dx.doi.org/10.1037/prj0000387

# Implementing Illness Management and Recovery Within Assertive Community Treatment Teams: A Qualitative Study

Gary Morse
Places for People, St. Louis, Missouri

Maria Monroe-DeVita
University of Washington-Seattle

Mary M. York
Southern Illinois University-Carbondale

Roselyn Peterson
University of Central Florida

Joris Miller
Places for People, St. Louis, Missouri

MacKenzie Hughes
Georgia Institute of Technology

Elizabeth Carpenter-Song
Dartmouth College

Christopher Akiba
University of North Carolina–Chapel Hill

Gregory J. McHugo
Dartmouth College

***Objective:*** The study purpose was to assess the feasibility, advantages/disadvantages, and factors that hinder or facilitate the implementation of illness management and recovery (IMR) within assertive community treatment (ACT) teams. ***Method:*** A qualitative study was conducted with 11 ACT teams that implemented IMR. We conducted semistructured individual interviews with 17 persons enrolled in services and 55 ACT staff in individual and focus groups. Questions were designed to assess perceptions of IMR implementation, effects of IMR, staff training considerations, and recommendations. Data were analyzed using an inductive, consensus-building, thematic analysis, which included multiple research staff reviewing interview transcripts and field notes, developing and refining a codebook, constructing data summaries, and thematic synthesis. ***Results:*** The analysis revealed six major themes: (a) a generally positive fit exists between the two models and population served, (b) both people with serious mental illness and staff benefited from ACT + IMR, (c) ACT teams encountered significant implementation barriers, (d) relationships and engagement with participants facilitated implementation, (e) taking a flexible approach to IMR and ACT improved implementation, and (f) programs should focus on greater integration of IMR within ACT teams. ***Conclusions and Implications for Practice:*** While there can be barriers to implementing IMR within ACT teams, there is generally a positive fit, it is feasible to implement, and it offers meaningful benefits. ACT teams should improve their recovery orientation by more widespread implementation of IMR. Future research on ACT + IMR should include mixed-methods approaches, implementation methodologies to identify barriers and facilitators, and idiographic measures that capture the individualized recovery goals of people with serious mental illness.

This document is copyrighted by the American Psychological Association or one of its allied publishers.
This article is intended solely for the personal use of the individual user and is not to be disseminated broadly.

Gary Morse, Places for People, St. Louis, Missouri; Maria Monroe-DeVita, Department of Psychiatry and Behavioral Sciences, University of Washington-Seattle; Mary M. York, Department of Psychology, Southern Illinois University-Carbondale; Roselyn Peterson, Department of Psychology, University of Central Florida; Joris Miller, Places for People; MacKenzie Hughes, School of Psychology, Georgia Institute of Technology; Elizabeth Carpenter-Song, Department of Anthropology, Dartmouth College; Christopher Akiba, Department of Health Behavior, University of North Carolina–Chapel Hill; Gregory J. McHugo, The Geisel School of Medicine, Dartmouth College.

This project was supported by a Collaborative R34 research and development grant from the National Institute of Mental Health (Grants 5 R34 MH090135 and 5 R34 MH090477). We thank the assertive community treatment teams and consumers who participated in this study. We could not have completed this study without their collaboration. We are also grateful to Kim Mueser and Susan Gingerich for their invaluable collaboration on the illness management and recovery project and to Bonnie Barbareck for her administrative support.

Correspondence concerning this article should be addressed to Gary Morse, Places for People, 4130 Lindell Boulevard, St. Louis, MO 63108. E-mail: gmorse@placesforpeople.org

***Impact and Implications***

There were barriers to overcome and the process took time, but adding illness management and recovery to assertive community treatment (ACT) facilitated important benefits for people with serious mental illness and the staff who served them. Most importantly, people with severe psychiatric disabilities were able to achieve meaningful, personal goals for recovery. ACT teams should follow the lessons learned from this qualitative study to better support recovery from serious mental illness.

*Keywords:* assertive community treatment, illness management and recovery, implementation, recovery

This document is copyrighted by the American Psychological Association or one of its allied publishers.
This article is intended solely for the personal use of the individual user and is not to be disseminated broadly.

Assertive community treatment (ACT) is a widely disseminated, community-based treatment program for persons with severe mental illness, especially for those with the most disabling symptoms who are often difficult to engage in services (Deci, Santos, Hiott, Schoenwald, & Dias, 1995; Morse & McKasson, 2005). ACT is effective in a number of important domains, including psychiatric hospitalizations, housing stability, treatment retention, and consumer and family service satisfaction (Bond, Drake, Mueser, & Latimer, 2001; Burns & Santos, 1995; Coldwell & Bender, 2007; Herdelin & Scott, 1999). ACT is less effective in areas of symptom management and social functioning. Further, ACT has sometimes been criticized for not being recovery oriented (Fisher & Ahern, 2000; Gomory, 2002). These limitations could be addressed by adding illness management and recovery (IMR) services to ACT teams (Morse, Glass, & Monroe-DeVita, 2016; Salyers & Tsemberis, 2007), which could both enhance their approach to recovery and improve outcomes.

IMR is designed (Gingerich & Mueser, 2012) to help people with serious mental illness with personal recovery goals, symptoms, and functioning. IMR has been widely implemented and experimental studies have found it effective for illness self-management, symptom severity, and quality of life when compared to treatment as usual (Hasson-Ohayon, Roe, & Kravetz, 2007; McGuire et al., 2014). However, most studies on the effectiveness of IMR have been conducted in outpatient settings, rather than ACT teams, which often serve people with the most severe mental health disabilities.

Few studies have examined the integration of ACT and IMR. A recent randomized controlled trial (RCT) comparing IMR and ACT to an active control reported no significant differences for the two approaches, although secondary analysis showed those persons who attended more IMR sessions showed a decrease in hospital usage (Salyers et al., 2010). Meanwhile, a quasi-experimental study of IMR within ACT found significant reductions in psychiatric hospitalizations and emergency room visits (Salyers, Rollins, Clendenning, McGuire, & Kim, 2011). These results hold promise for the effectiveness of adding IMR to ACT, although the results need replication in RCT studies.

Studies of IMR within ACT have experienced implementation difficulties, including low rates of IMR treatment exposure (e.g., Salyers et al., 2010), which perhaps resulted in part from limiting IMR training to only two ACT staff members; however, prior studies have not conducted in-depth implementation research, and thus little knowledge exists concerning how to implement IMR within ACT, including likely barriers and facilitators. More generally, few studies of IMR in any setting have examined implementation strategies and barriers (McGuire et al., 2014; McGuire, White, White, & Salyers, 2013; Salyers, Rollins, McGuire, & Gearhart, 2009; van Langen, Beentjes, van Gaal, Nijhuis-van der Sanden, & Goossens, 2016; Whitley, Gingerich, Lutz, & Mueser, 2009). Further research on how best to implement IMR, especially within ACT teams, is needed to improve our understanding of service delivery and outcomes for people with serious mental illness.

This study examined the implementation of IMR within ACT using qualitative methods within a larger research-development project. The parent project had four stages: (a) development of a manual to guide ACT providers in implementing IMR, (b) a pilot trial to examine implementation of IMR in three ACT teams, (c) a small-scale RCT with eight ACT teams to examine clinical outcomes from implementing IMR within ACT, and (d) a subsequent pilot study further testing IMR implementation strategies in four ACT teams. Qualitative data were collected from Stages 2 through 4.

The initial qualitative evaluation goal was to assess the feasibility and acceptability of implementing IMR within ACT. As the project progressed, we found that implementing IMR in ACT was more challenging and nuanced than anticipated. Multiple factors hindered or helped implementation, but many implementation facets were not being assessed. Therefore, we expanded our qualitative evaluation to address the following questions. (a) Is it feasible to implement IMR within ACT? (b) What are the advantages and disadvantages of adding IMR to ACT? (c) What factors impair implementing IMR within ACT? (d) What factors facilitate implementation? (e) What lessons and recommendations can be identified for future efforts to implement IMR in ACT?

## Method

### Study Settings and Participants

**Settings.** Three ACT teams in Stage 2 (2 in Washington, one in Missouri), four new ACT + IMR teams (2 in each state) in Stage 3 (Monroe-DeVita et al., 2018), and four additional ACT teams in Stage 4 (2 in each state) were recruited to implement IMR and participate in the qualitative study. All teams were selected on the basis of their interest in implementing IMR, willingness to participate in a research study, and moderate or high level of ACT fidelity (ACT fidelity was assessed for the teams in Stage 3 and found to be in a "good" level of fidelity, with a mean score of 4.11 and an *SD* of .26), and lack of previous experience with IMR. Seven of the ACT teams in the qualitative study served urban areas; four served smaller cities and rural areas.

The interventions were implemented and data collected from 2012 to 2015, and qualitative data were coded and analyzed from 2015 to 2018; the study was approved by three institutional review boards (IRBs; University of Washington, Dartmouth College, Places for People) with which the researchers were affiliated.

**Interventions.** ACT is a multidisciplinary, team-based approach to providing community treatment, rehabilitation, and support to high-need, high-risk people with serious mental illness; most services are provided in the person's home or community and services are available 24 hr a day, 7 days a week (Allness & Knoedler, 2003; Morse & McKasson, 2005). ACT teams range from smaller teams (often in less populated areas, or when funding is limited) with six or seven staff serving 40–50 persons, to larger teams (often used in urban areas) with 10 to 12 staff serving 80–100 persons (both size teams were used in this study). Both smaller and larger teams included prototypic ACT core staff of a team leader, a prescriber (psychiatrist or nurse practitioner), nurses, a substance abuse specialist, an employment specialist, a mental health specialist, a peer specialist, a case manager, and a program assistant; all positions except the program assistant provide some direct service, especially in their area of specialty (e.g., nurses administer medications and offer health education and assistance, etc.). ACT teams and staff typically receive intensive training on the model at program startup (e.g., treatment philosophy, staff roles, team operations including daily team meetings, an overview of core services including case management, engagement, crisis intervention, and specialty areas, etc.) but rarely receive in-depth skills training on psychosocial interventions (for additional information on ACT, please see Allness & Knoedler, 2003; Morse & McKasson, 2005).

IMR utilizes a manualized, 11-module curriculum (Gingerich & Mueser, 2012) to help individuals manage their psychiatric illnesses and pursue personal recovery goals. Information, skills, and strategies are taught in either group or individual modalities for each IMR module topic (recovery, practical facts about mental illness, the stress-vulnerability model, building social support, using medications effectively, drug and alcohol use, reducing relapses, coping with stress, coping with persistent symptoms, getting needs met in the mental health system, and healthy lifestyles). Personal recovery goals are heavily emphasized in IMR. Throughout the curriculum, participants are actively supported in developing a personal definition of recovery, identifying personal recovery goals, and identifying manageable steps to achieve those goals. During each IMR session, participants' personal recovery goals are reviewed, as is their ongoing application of IMR-taught skills and information to the step-by-step progress to achieve those goals.

The ACT + IMR model was developed and manualized for this study (Gingerich et al., 2013). This approach involved training all ACT team members in the ACT + IMR condition in IMR. Three to four ACT + IMR specialists per team provided intensive individual and group-based IMR, and all team members provided community follow-up assistance (e.g., conducting role plays, providing prompts) to support persons enrolled in services with strengthening IMR skills and pursuing recovery goals in daily life. ACT + IMR teams communicated regularly (e.g., during daily meetings) regarding participants' IMR goals, progress, and follow-up interventions. The ACT team leader, also trained as an ACT + IMR specialist, provided regular IMR supervision. Strategies used for implementing and integrating IMR within ACT included developing and using the new treatment manual, pilot study and formative evaluation of methods for implementing IMR within three ACT teams, in-depth training by international experts on IMR and ACT, regular consulting and coaching calls conducted by IMR experts, and follow-up booster training sessions, which were also informed by formative evaluation efforts on early lessons learned from the ACT teams and the consultants about implementing IMR within ACT.

**Participants.** Qualitative data was obtained from all 17 persons served by ACT + IMR teams in Stage 2; 65% of the participants were male, and 47% were African American (47% were White, and 6% Saudi/African).

**Staff.** Qualitative data were also obtained from 55 ACT staff across the 11 ACT teams. ACT staff roles included (a) team members who trained to function as "specialists" to provide IMR in group and individual modalities, (b) other ACT team members who were to provide general support for IMR interventions (e.g., helping individuals enrolled in services to practice IMR skills and pursue individual IMR goals), and (c) ACT team supervisors. Staff members included both men and women, Whites and African Americans; unfortunately, specific demographic data were not recoded on all ACT staff.

**Researchers.** Five research assistants (RAs) who were involved in both the qualitative and quantitative aspects of the study conducted the qualitative interviews and focus groups with individuals enrolled in services and staff participants. Coding of the qualitative data was conducted by five researchers, four of whom were research assistants and a study coinvestigator; methodological and content consultation was provided by four PhD level researchers (two coinvestigators and two outside qualitative research experts). The final thematic analysis and synthesis was conducted by three RAs, a coinvestigator, and two collaborating PhD researchers with extensive qualitative research experience.

**Participant selection.** All individuals with serious mental illness who were provided with IMR during Stage 2 were asked to participate in the qualitative interviews (all agreed, though one refused the follow-up interview). Researchers contacted these individuals either in person at the ACT offices or over the telephone. Researchers provided a description of the purpose and methods of the study and individuals enrolled in services were provided with informed consent information and told that their study participation (or lack of participation) would not affect their ACT services and that responses were confidential.

**Staff.** All ACT staff members were recruited for interviews during Stages 2 and 3; during Stage 4, only ACT staff who specialized in providing IMR and their supervisors were recruited for interviews, due to resource limitations. All staff participants were also provided human subject and confidentiality assurances.

## Data Collection

### Qualitative interview procedures and questions.

***Individuals with serious mental illness.*** Qualitative interviews were designed to assess the perceptions of persons enrolled in services of IMR implementation (e.g., modifications, facilitators, barriers) and the IMR model itself (e.g., benefits or disadvantages). Persons receiving IMR services from the ACT team were asked a total of 11 questions related to their personal reac-

This document is copyrighted by the American Psychological Association or one of its allied publishers.
This article is intended solely for the personal use of the individual user and is not to be disseminated broadly.

tions, goals, and experiences (Table 1). Interviews were conducted individually and face-to-face, typically in ACT offices but occasionally in the homes of persons served, approximately 3 and 9 months after starting IMR services.

***Staff.*** During Stage 2, individual interviews were conducted after about 3 months of implementing IMR with ACT staff trained to deliver intensive IMR interventions in either individual or group modalities, other ACT team members who provided general follow-up community support to persons receiving IMR, and ACT team supervisors. Later in Stage 2 (at about 9 months), focus group interviews were also conducted jointly with all ACT team members (specialists, supporters, and supervisors). In Stage 3 interviews were conducted in focus groups with all ACT team members combined (IMR specialists, other team members, and supervisors) both early (at 3 months) and later (6 to 9 months) after IMR implementation. In Stage 4, only focus group interviews were conducted with those ACT staff who specialized in IMR delivery and their supervisors. Across the study, a mix of individual and focus groups interview methods were selected to delve more deeply into IMR service delivery soon after initial implementation (Stage 2) to maximize early learning, while also subsequently creating an opportunity to capture the experiences and perceptions of all ACT team members together and to allow for a possible interplay of perspectives through group discussion. Resource limitations, which became more significant later in the qualitative project, also influenced the choice of increasing the use of focus groups rather than individual interviews over time. Across the project, 45 ACT staff participated in at least one individual interview and staff focus group interviews were conducted with all 11 ACT teams that implemented ACT over Stages 2 through 4.

Semistructured questions were also used for both staff individual interviews and focus groups. The interview protocol was modified somewhat across stages and interviews (e.g., interviews at 6 to 9 months asked additional questions about upcoming project booster training needs), but remained generally consistent in asking questions in four general categories: (a) implementation experiences, including general observations, successes and facilitative factors, and potential barriers; (b) effects for people with serious mental illness, for individual ACT staff, and for the ACT team as whole; (c) staff training considerations, and (d) recommendations (see Table 1 for example questions).

Due to differential IRB approvals across institutions, only the qualitative interviews in Missouri were audio-recorded (and subsequently transcribed). Qualitative interviewers in Washington took detailed field notes during the individual and focus group interviews, and documented participant statements in paraphrased or direct quotes; field notes were subsequently expanded to capture more details of the interview.

## Analysis

Data were analyzed using an inductive, consensus-building, thematic analysis method (Braun & Clarke, 2006). Six research staff reviewed interview transcripts and field notes to identify salient concepts, keywords, and preliminary patterns in the data to inform the development of a preliminary codebook, which included six broad, a priori coding categories (feasibility, advantages/disadvantages, barriers, remedial strategies, facilitators, and lessons learned/recommendations) based on our knowledge of the implementation literature and our a priori research questions. All qualitative data were initially reviewed by three research staff within each state, and then discussed in several consensus calls among research staff across both states to develop a common codebook. Using the codebook, two researchers in each state independently systematically reviewed and coded each transcript and field notes from the interviews and focus groups, then developed consensus coding for each transcript and field note; the codebook was revised as needed during the process (the remedial strategies category was combined with the facilitators code as the qualitative results were highly similar and repetitive). After this iterative process, the research team constructed data summaries to aggregate and

Table 1
*ACT + IMR Qualitative Interview Questions*

| |
|---|
| Questions for individuals with serious mental illness |
| Now that you've been receiving IMR services for a while, what are your reactions? What have you noticed? |
| Are there things you thought you'd get help with through IMR, but haven't yet? |
| What are your recovery goals? Do you think the IMR program has helped you to achieve those goals? |
| Let's talk about those things that are going well with IMR. What have been the good things about this program? Has the program helped you in any particular way? How? |
| Now let's talk about the things that are not going so well. What have been the challenges for you in IMR? |
| Staff (selected example) questions |
| Implementation experiences |
| Now that you've been providing IMR services for a while, what are your reactions? What have you noticed? |
| What have been successes in implementing IMR within your team? |
| What resources or other factors contributed to that success? |
| Now let's talk about things that are not going so well. What have been the challenges/barriers to implementing IMR within your ACT team? |
| Effects of IMR |
| What effects or changes have you seen in consumers since they've been receiving services? |
| Has IMR changed your perspective or outlook in any ways? |
| What changes or adaptations have you noticed in the ACT program or in the way ACT operates as a result of adding IMR? |
| Staff training considerations |
| Did the initial ACT + IMR training prepare you and your team to implement and actively support the IMR goals and activities? |
| Recommendations |
| What advice would you give another ACT team that was planning to implement the ACT + IMR model? |

*Note*. A list of all questions is available from the authors. ACT = assertive community treatment; IMR = illness management and recovery.

This document is copyrighted by the American Psychological Association or one of its allied publishers.
This article is intended solely for the personal use of the individual user and is not to be disseminated broadly.

synthesize coded data for the following five content areas concerning the implementation of IMR within ACT: feasibility, advantages/disadvantages, barriers, facilitators, and recommendations. Two researchers then reviewed each of the data summaries, first independently identifying broader themes and then collaboratively reaching consensus on the main themes. This multistep analytic process involving multiple team members and occurring over time enhanced the trustworthiness (Shenton, 2004) of our analyses by facilitating multiple interpretations of the data and opportunities to identify and resolve interpretive differences.

This document is copyrighted by the American Psychological Association or one of its allied publishers.
This article is intended solely for the personal use of the individual user and is not to be disseminated broadly.

## Results

The qualitative methods yielded a large number of comments and the iterative process for coding produced significant themes in each of the five major areas of investigation. The major themes are summarized in Table 2 and are described below.

### Feasibility of Implementing IMR Within ACT

**Theme 1: Although there were some difficulties for individuals enrolled in services, and it took a while for ACT to learn the practice, there was, in general, a positive fit between IMR and the ACT model and the population served that made implementing ACT + IMR feasible.** All 11 ACT teams that participated in the qualitative study found it feasible to provide IMR to persons enrolled through either group or individual (or both) modalities. Further, participants generally reported a good fit between the population served and the ACT + IMR model. Both individuals with serious mental illness and staff noted that persons served not only attended IMR sessions but they were also often actively engaged in the process. ACT staff noted persons enrolled in services embraced IMR "home assignments" that involved applying and practicing new IMR skills, especially as they related to personal recovery goals. Staff noted that active interest and engagement in IMR was evident across the range of people enrolled in services, even those with the most severe and disabling levels of symptoms. The IMR materials, structure, and services also proved to be a good fit for many persons enrolled in ACT, according to the people with serious mental illness and ACT staff.

Although implementing IMR proved feasible, a second subtheme expressed exclusively by staff was that it takes time to learn and implement IMR within an existing ACT team, In particular, it is necessary for ACT staff to learn the extensive IMR curriculum in depth so that they can skillfully and confidently engage persons with serious mental illness and provide IMR interventions. As one ACT staff person commented, this is a "learning process that takes time for the clinicians, too." Finding the time to learn IMR amid already busy daily work schedules for ACT staff was sometimes a challenge and required teams to set aside time for training and preparation. Some teams found that it took longer than originally expected to initiate IMR services, but that implementation was still achievable. Staff noted the process was similar in a positive way to starting up a new ACT team, and that "actually delivering IMR is how everything starts to click."

### Advantages to Implementing IMR Within ACT

**Theme 2: Persons with serious mental illness and staff alike benefited from implementing IMR within ACT—and no disadvantages themes were noted.** In particular, the qualitative findings revealed three strong, dominant subthemes to this main point. First, IMR improves the recovery focus of both persons with serious mental illness and staff in ACT teams. A number of comments from those served and staff indicated that people with serious mental illness became more hopeful about their lives and more focused on recovery with IMR. One staff person explained that "IMR has helped turn the concept of recovery into a tangible thing" for many of those enrolled in services. For many persons with serious mental illness, the most tangible aspect involved setting and pursuing personal recovery goals. The content of goals varied widely across individuals and included getting sober, finding a job, paying off utility bills, improving health, improving coping with severe mental illness symptoms, and reducing stress and anxiety. Other goals reflected more unique aspects of personal recovery, such as going to church, learning how to drive a car, saving money, and learning how to better deal with instead of avoid difficult situations. IMR recovery goals were very popular with participants and proved to be advantageous in multiple ways, including providing a sense of ownership of recovery.

Persons with serious mental illness noted that their personal goals helped them to focus on recovery and to live a more purposeful life: "It helps to focus on goals and not be distracted by my chaotic apartment, but to focus on what's really important. I have momentum; I'm not getting side-tracked; I take small steps and I have support from [ACT staff]." Staff also noted that the IMR goals helped participants to pursue more satisfying lives:

> My client's goal changed from 'stay out of the hospital' to 'have more fun.' The goals are beyond the standard ADL [activities of daily living] stuff—it's a higher level. It's exciting to have clients define what they want their life to be.

In addition, participants also noted that the very process of setting and following goals was helpful for making personal progress.

Staff comments indicated the heightened focus on recovery also occurred for ACT team members. Early in the project, one staff commented on the promise of IMR for improving the team's recovery orientation:

> IMR will keep us focused. IMR is very recovery-focused. I think sometimes we can get away from that, like getting caught-up in preventing crises, addressing crises, driving clients to appointments. . . . I think IMR might start more of a foundation just for recovery and what we should be doing everyday anyway.

After about 9 months of implementing IMR, staff commented that IMR had indeed been helpful for keeping the team focused on the recovery of those enrolled in services.

A second key subtheme indicated another advantage of adding IMR is that people with major mental illness improved in their personal outcomes. A large number of comments from both persons served and staff stated that participants improved in a wide range of areas related to personal goals and needs. Some individuals enrolled in services commented they had become more knowledgeable about their mental illness. Others indicated that they had improved in managing symptoms (including anxiety,

This document is copyrighted by the American Psychological Association or one of its allied publishers.
This article is intended solely for the personal use of the individual user and is not to be disseminated broadly.



Table 2
*Major ACT + IMR Qualitative Themes*

| Theme family | Subtheme | Total theme comments[a] | Illustrative quote |
|---|---|---|---|
| Theme 1: Although there were some difficulties for some people with serious mental illness, and it took a while for ACT to learn the practice, there was, in general, a positive fit between IMR and the ACT model and population served that made implementing IMR in ACT feasible | 1a. In general, a good fit existed between the population served and the ACT + IMR model<br>1b. It takes time to learn and implement IMR within an existing ACT team, especially at the outset | 329 (27.3% from persons enrolled in services, 72.7% staff)<br>15 (100% from staff) | "The biggest thing [is] that some of the consumers are engaged and they come and they participate and I think that is really positive." (Staff)<br>"The structure of the manual seems to kind of bring that out . . . they can start to talk about other real life goals." (Staff)<br>"It's kind of like what it was like starting an ACT team. It's one of those things you get the idea, then you get this information, and you know what it should kind of look like, but until you start doing it and then you realize, 'Oh, I could do this differently,' or 'I could try this,' or those kind of things. I picture IMR the same way, it's such a new thing and you go through it and then you start to figure out what you might do differently" (Staff) |
| Theme 2: Persons with serious mental illness and staff alike benefited from implementing IMR within ACT | 2a. IMR improves the recovery focus of both individuals enrolled in services and staff in ACT teams<br>2b. Adding IMR within ACT teams helps improve the outcomes of people with serious mental illness<br>2c. Staff also benefit | 144 (26.4% from persons enrolled in services, 73.6% staff)<br>155 (29.4% from persons enrolled in services; 70.6% staff)<br>37 (4.2% from persons enrolled in services, 95.8% staff) | "Yeah, you set your own goals that are realistic to yourself . . . you don't have anyone saying, 'well, we are going to see how many you can do in two weeks' . . . it's not like that. It's like you're setting your own goals that you know you can achieve." (Person enrolled in services)<br>"And it's like baby steps and I just keep setting little goals for myself, little by little, and like I said, it's just, I set my own goals. And I do 'em, kind of like on my own time. You know, I set my own timeline and IMR just makes sure that you stay within your own guidelines. It gives you structure, it reminds you that this is what you're supposed to be doing today, follow your steps, follow your steps at your own pace. And that's what I like about IMR." (Person enrolled in services)<br>"Paths to recovery have been more clear . . . just like for the clients." (Staff)<br>"Each time I go to the (IMR) session, I find myself understanding my disability more . . . and that's a good thing. I knew there was something wrong, but I didn't quite understand." (Person enrolled in services)<br>IMR "helps me cope with daily problems." (Person enrolled in services) |
| Theme 3: ACT teams encountered significant barriers (though they were not insurmountable) at multiple levels when trying to implement IMR | 3a. The symptoms, functioning, and psychosocial needs of individuals enrolled in services sometimes posed barriers to implementing IMR<br>3b. Multiple service responsibilities and a lack of integration of the new practice within team operations sometimes made it challenging for ACT staff to fully implement IMR<br>3c. The duration and the frequency of IMR sessions created a participation barrier for some people with serious mental illness | 124 (30.9% from persons enrolled in services, 69.1% staff)<br>135 (2.7% from persons enrolled in services, 97.3% staff)<br>21 (42.9% from persons enrolled in services, 57.1% staff) | "Some of the clients are so depressed or disorganized in a couple cases that they just cannot make it to group." (Staff)<br>"Because we have members in our group who are more symptomatic, we have some problems along those lines . . . there are still some people who can't visualize a goal, and some who are so far into their illness at this time that they can't really tolerate sitting and learning for extended periods." (Staff)<br>"Transportation was a big issue since we cover such a large area. Some people were a good twenty-five miles away from the office." (Staff)<br>"Sometimes I take two buses. But sometimes I don't have no way of getting back home." (Person enrolled in services) |

(*table continues*)

This document is copyrighted by the American Psychological Association or one of its allied publishers.
This article is intended solely for the personal use of the individual user and is not to be disseminated broadly.

Table 2 (*continued*)

| Theme family | Subtheme | Total theme comments[a] | Illustrative quote |
|---|---|---|---|
| Theme 4: Developing and building upon relationships and engaging people with serious mental illness facilitated the implementation of IMR within ACT | 4a. IMR was facilitated by positive staff-participant relationships and engagement activities<br>4b. The presence of peer support was an important relationship facilitator of IMR within ACT programs | 93 (39.2% from persons enrolled in services, 60.8% staff)<br>28 (50% from persons enrolled in services, 50% staff) | "I have a lot of health issues, and I have to exercise a lot. She'll [ACT + IMR staff person] come and she will walk with me for so many minutes a day, instead of my [deciding] 'Oh, I don't feel like walking,' [she'll say] 'Come on, I'll walk with you.' She'll grab my hand and she'll walk with me, that's an example of what I am saying about, 'you can do it, come on, I'll do it with you, I'm gonna show you you can do it.'" (Person enrolled in services)<br>"I'm all over the place; she [IMR facilitator] keeps me on the right page [in the IMR manual] and helps me get to the point." (Person enrolled in services)<br>Staff "have good suggestions about what you should do and what you shouldn't do." (Person enrolled in services)<br>"Well, I love them**. . .** We tell our problems and things like that for a minute or two and we check in and how we tell our problems and stuff like that so we try to help them out with their problem." (Person enrolled in services)<br>"A lot of the clients will kind of help each other and answer each other's questions and it's really been a lot easier to get the clients to give each other advice that it has been for the staff to motivate the clients to do certain things." (Staff) |
| Theme 5: Taking a flexible approach, which involved making adaptations to both standard IMR and ACT operations, improved implementation | 5a. Teams made adaptations in the IMR curriculum and delivery to improve its acceptability for persons enrolled in services<br>5b. ACT teams found that being flexible and adjusting some of their own team practices, especially around communication and integration, improved the implementation of IMR | 60 (6.1% from persons enrolled in services, 93.9% staff)<br>98 (1.5% from persons enrolled in services, 98.5% staff) | "I'm glad they shortened it, because two hours is really too long for some of us to sit at one sitting, because you tend to get impatient and a little bit nervous." (Person enrolled in services)<br>"Now we are getting better at integrating it and actually making our IMR goals part of their treatment plan and having other people follow up and do their homework with them." (Staff)<br>"I just developed a new form that we use to keep upon which module and topic the client is on as well as their goals and barriers." (Staff)<br>"One of our practitioners is really good about discussing what's going on with the IMR clients within the context of the daily team meeting. She's been doing a really good job with that. For example, 'this is homework John Smith has for next Wednesday so staff when you guys meet with John Smith please have this conversation with him.' I think that's been good." (Staff) |
| Theme 6: Programs can improve implementation efforts by focusing on greater integration of IMR within ACT, especially in staff training and defining staff roles | 6a. All ACT team staff should be trained in IMR from the outset of implementation<br>6b. IMR can be better integrated within teams by providing greater specificity about the roles of various ACT staff members | 156 (1.7% from persons enrolled in services, 98.3% staff)<br>25 (9.5% from persons enrolled in services, 90.5% staff) | "I think now that more people are involved you can see what a good tool it [ACT + IMR] is. Like before, they weren't going to get involved . . . But if a [staff] person is a part of it, then they buy into it more. And they can see the advantages of it more." (Staff) |

*Note.* ACT = assertive community treatment; IMR = illness management and recovery.
[a] The "Total theme comments" represent the frequency of times the theme appeared in participant (staff and persons served) interviews. The parenthetical numbers note that the relative percentage of the total number of comments for that subtheme from persons enrolled in services and staff, respectively (percentages do not correct for the different sample sizes of 17 persons enrolled in services and 55 staff). Note that the frequency of thematic comments sometimes exceeds the number of study participants, as participants may have voiced the theme more than once in each interview.

depression, mood swings, delusions) and coping with stress and daily problems. Several people with serious mental illness also noted that they had improved their general problem-solving skills, especially for breaking problems and goals into steps, which helped in a number of areas, including finances, health, and legal issues. In addition, IMR helped some improve self-esteem and gain a greater sense of confidence. As one participant stated:

> A year ago, I used to . . . just dive into relationships for fear of being alone and fear of . . . "I can't stand on my own, I can't do this, I can't do that." Now, I am learning that I can be on my own, mentally ill or not. I can be on my own and, possibly, hopefully, soon maybe work my way back into a society where I can work again.

Positive outcomes were noted in a wide range of individual goals, including becoming clean and sober, gaining employment, improving communication and interpersonal relationships (including with family), and feeling happier.

A third and final significant subtheme emerged predominately from staff comments: an advantage to implementing IMR was that ACT staff also benefited from the approach. According to qualitative interviews, staff benefited from the implementation of IMR in two major ways. The first benefit reported by staff included improved clinical skills. Specific comments included staff reporting they learned new techniques, had a better clinical perspective, and were more proficient at goal setting. A second benefit of IMR reported by staff included improved personal job satisfaction.

## Implementation Barriers

**Theme 3: ACT teams encountered significant barriers (though they were not insurmountable) at multiple levels when trying to implement IMR.** This theme is best explicated in terms of three subthemes.

First, symptoms, functioning, and psychosocial needs of those enrolled in services sometimes posed barriers to implementing IMR. In particular, many persons served and staff persons described the mental health symptoms and functioning levels of ACT participants as a challenge to optimal IMR implementation. Individuals with serious mental illness stated experiencing symptoms (including depression, anxiety, disorganization, and agitation) sometimes posed significant impediments to their attending IMR sessions. Service participants and staff persons also reported poor communication skills among some enrollees posed significant difficulties for implementing IMR group sessions.

Staff additionally discussed the challenge of prioritizing competing daily psychosocial needs of enrolled persons versus IMR sessions. As one staff member poignantly noted:

> The thing I struggle with is that she has so many, many problems and they are dire problems . . . like last week she had [only] enough food for two meals. So . . . instead of doing a lot of time focusing on the [IMR] content, it seems that we are having to spend a good portion of our time taking care of real life stuff that she desperately needs help with.

Transportation was another common psychosocial need that often stood as a barrier. Some service participants expressed their most significant challenge involved difficulties with planning for public transportation and making arrangements for an ACT staff person to provide rides to IMR groups. Staff also reported that providing transportation for IMR participants was a challenge, given their already busy daily schedules. Because staff were not always available to provide transportation, this challenge led to lower attendance rates for group sessions.

A second subtheme that resonated from staff interviews indicated multiple staff service responsibilities and a lack of integration of the new practice sometimes made it challenging for ACT team members to fully implement IMR. Many staff described having multiple responsibilities made balancing their existing duties along with IMR duties a job role strain that created time pressures. Some ACT staff noted not having adequate time to learn the IMR curriculum and prepare for delivering IMR services.

Staff reported a significant challenge at the beginning of implementation efforts included a lack of IMR integration into the existing ACT team workflow. However, it was also noted over the course of the project that positive strides were being made to close the gap between the existing ACT workflow and IMR programming. In particular, staff noted enhanced coordination between ACT and IMR by stating:

> I think at first we were not able to integrate it very well. We did IMR and we did ACT, and now we are getting better at integrating . . . making our IMR goals part of [individual enrolled in services] treatment plan and having other people follow up and do their homework with them.

Staff also noted that a lack of communication among team members further contributed to ineffective IMR integration.

The third subtheme revealed the duration and frequency of sessions as originally specified in the IMR protocol created a participation barrier for some individuals enrolled in services. As one staff person commented: "For some, the idea of committing for a full year felt like too much pressure." Additionally, some people with serious mental illness found the length of group sessions were too long.

## Implementation Facilitators

The qualitative data revealed a number of factors that facilitated the implementation of IMR within ACT. In particular, we identified two primary themes (each with subthemes) that facilitated IMR implementation.

**Theme 4: Developing and building upon relationships and engaging people with serious mental illness facilitated the implementation of IMR within ACT.** Two subthemes contributed to this major finding. In part, involvement in IMR was facilitated by positive staff-participant relationships and engagement activities. Individuals with serious mental illness, in particular, commented on positive qualities of the ACT + IMR staff, such as they are "nice" or smart, and many described feelings of affinity and regard for the staff that helped them to become involved and successful in IMR. Further, staff consciously undertook behavioral strategies that helped to develop positive relationships—activities that were also effective for engaging and retaining people with serious mental illness in IMR. For example, staff mentioned providing participants with additional special attention, helping with their personal IMR goals, and conveying a sense of hope. As one staff person stated, "I think just conveying hope, conveying that the consumer can reach these recovery goals continues to engage the person even when they might be looking like they are not really

This document is copyrighted by the American Psychological Association or one of its allied publishers.
This article is intended solely for the personal use of the individual user and is not to be disseminated broadly.

interested right now." In addition, staff mentioned concrete assistant activities (e.g., making reminder calls or leaving notes at a participant's door about upcoming IMR groups) also helped engage people with serious mental illness in IMR.

Individuals enrolled in services also commented they appreciated that staff would help them understand the IMR materials, assist with homework practice, provide encouragement, and brainstorm solutions when needed. Some individuals also noted the importance of staff outreaching them at home, especially when they were unable to attend a group session: "I like the group sessions, but I appreciate the sessions when I am sick and unable to come out that they have the heart and soul to come to me. That means a lot."

The presence of peer support was a second important relationship subtheme. Multiple staff noted that people with serious mental illness enjoyed the social interaction with peers within IMR groups and that participants sometimes responded better to advice from peers than from staff. Individuals enrolled in services frequently commented on the positive peer support in IMR groups. One participant suggested: "It's better to talk in a group about your sickness and what you are going through every day, rather than just keep it and don't say anything to nobody."

**Theme 5: Taking a flexible approach, which involved making adaptations to both standard IMR and ACT operations, improved implementation.** This theme manifested two subthemes. One was that teams made adaptations in the IMR curriculum and delivery to improve its acceptability for persons enrolled in ACT. In particular, several teams shortened the duration of the IMR group to help participants feel more comfortable and to better concentrate on learning new skills and information. Both people with serious mental illness and staff noted that shortening the group was a helpful adaptation. ACT teams also found taking a flexible approach was useful when they rearranged the curriculum order of the IMR modules to match participants' interests and needs. Moreover, staff noted a significant factor was the flexibility within the project to be able to deliver IMR on an individual basis and in the person's home, rather than relying solely on the group modality or an office location.

A second subtheme evident from staff interviews was ACT teams found being flexible and adjusting some of their own team practices, especially around communication and integration, improved IMR implementation. In particular, teams changed some communication processes to focus on IMR. For example, teams adapted the daily ACT team meeting to increase staff-to-staff communication by reviewing the IMR treatment goals, strategies, and progress of persons served. Strategies to increase communication also included methods that were not face-to-face, such as emails, medical record notes, the use of office boards that displayed IMR topics, and the creation of forms. Some teams also sought to achieve better communication and integration of IMR by incorporating IMR goals within the person's overall ACT individualized treatment plan.

In addition to changing methods of communication, teams also adapted staff roles. Teams often assigned some ACT staff new specific roles to assist people enrolled in services with IMR activities, such as helping the person during a home visit to practice a new skill learned in IMR, and assigning some staff to be specialists in providing IMR through group or individual modalities.

## Recommendations

**Theme 6: Programs can improve implementation efforts by focusing on greater integration of IMR within ACT teams, especially in staff training and specifying staff roles.** In general, most comments were positive about the ACT + IMR training, but a significant subtheme emerged from some ACT staff that future training should be improved, especially through greater integration of the training with the ACT team. Specifically, the most frequent recommendation in this area was that the entire ACT team should receive extensive and early team-based training in IMR. The initial expectation by project trainers was that the ACT + IMR specialists and supervisors would conduct extensive follow-up cross-trainings within their team on each IMR module. However, that approach proved to be unrealistic given the busy daily schedules of ACT providers. Staff also recommended that future training be modified to include training on more advanced topics or common implementation problems (e.g., tips for working with people with serious mental illness who were hard to engage in IMR) and creating "cheat sheets" summarizing the voluminous IMR content for easy use in practice.

A second subtheme expressed primarily by staff was that IMR could be better integrated and implemented by providing greater specificity of the roles for ACT team members. Stage 2 was especially helpful for highlighting the need for role clarity and meaningful service responsibilities for all ACT clinical staff, especially those who were not designated as "IMR specialists" for conducting IMR sessions. Defining more responsibilities for all staff (such as following up on IMR session goals, assisting with home practice, and conducting role plays with participants for newly learned skills) proved to be helpful for both staff morale and for IMR implementation. Staff also recommended future implementation efforts define more specific role activities for two specialized positions: the team prescriber and the program assistant.

## Discussion

This qualitative study suggests that it is indeed feasible to implement IMR into ACT teams, though it takes both time and careful implementation attention to overcome challenges. This finding is consistent with other studies that have studied implementing IMR into various other mental health programs (e.g., Egeland et al., 2017). More importantly, these qualitative results suggest that implementing IMR into ACT produces multiple positive benefits for both providers and individuals with serious mental illness—while no disadvantages emerged as a theme (one participant did mention her attending IMR groups created some conflict with her parent who did not want her leaving the house, though this was an idiosyncratic experience). In addition, staff in particular noted many implementation barriers, but these were simply construed as just that—implementation challenges—and not as disadvantages or negative outcomes of IMR.

IMR was found to improve the recovery-orientation of ACT teams—a notable finding as ACT has sometimes been criticized for not being recovery focused (Fisher & Ahern, 2000; Gomory, 2002). As described, IMR helped both ACT staff and persons enrolled in services in their recovery perspectives. Service participants reported becoming more hopeful about their lives and were able to articulate and pursue a wide range of personal recovery goals salient to living a healthy, meaningful life in the community.

This document is copyrighted by the American Psychological Association or one of its allied publishers.
This article is intended solely for the personal use of the individual user and is not to be disseminated broadly.

ACT staff also reported becoming more mindful and focused on recovery in their clinical work.

The most promising finding in this study was that IMR was frequently cited as helping individuals enrolled in services to improve in their outcomes, a result consistent with other qualitative evaluations of IMR (Roe, Hasson-Ohayon, Salyers, & Kravetz, 2009). Both people with serious mental illness and staff in this study reported seeing improvements for participants in an array of domains, including symptom management, coping with stress, getting sober, improving familial and social relationships, getting jobs, and feeling happier. This frequent report of enhanced outcomes augments quantitative results from controlled studies (Salyers et al., 2010, 2011)—including a companion RCT study from this project (Monroe-DeVita et al., 2018)—which have reported more modest improvements for IMR. We suspect that stronger reports of improved outcomes from qualitative studies stemmed from the personalized nature of the IMR goals and improvements that the participants experienced. More specifically, persons with serious mental illness chose and pursued personal goals that ranged widely in outcome domains (e.g., relationships, employment, sobriety, symptom management, and coping with stress). It appeared that participants often made considerable progress in their personal goals, whereas the results on standardized, nomothetic outcome measures were more modest. This finding suggests traditional quantitative approaches of evaluating IMR programs may underestimate the personalized progress of people with serious mental illness and highlight the need to supplement research studies with idiographic (such as goal attainment scaling; Tabak, Link, Holden, & Granholm, 2015) as well as nomothetic outcome measures. In addition, future research examining the effectiveness of integrating IMR into ACT teams should benefit from using mixed-methods designs that incorporate qualitative and quantitative measurement.

Although there were clear benefits to implementing IMR within ACT, the process of learning and providing IMR was found to be challenging as teams faced several significant barriers, some of which have also been reported in other settings (McGuire et al., 2013; Salyers et al., 2009). We found several important facilitators (e.g., engaging participants, increasing staff communication to improve the integration of IMR within standard ACT operations, and taking a flexible approach to delivering IMR) for successfully implementing IMR in this study. Although flexibility can sometimes reduce fidelity in evidence-based practices (EBPs), the changes made in this study were seen as not compromising the overall integrity of IMR by the two developers of IMR who worked on the study but instead were considered as useful adaptations to improve the delivery of IMR within ACT. Staff in this study also provided useful recommendations for the future, including intensive training at the outset to all ACT team members (see also Whitley et al., 2009). Future efforts should take advantage of these helpful facilitative strategies and recommendations for enhancing the success of IMR implementation. Although this study focused on IMR within ACT, we suspect than many of the findings will be relevant to other mental health programs, especially intensive case management. The identification of significant barriers and facilitators also suggests the need for careful attention in future research on IMR and ACT to address implementation strategies, barriers, and facilitators.

This qualitative study produced useful findings which were largely consistent across types of staff interviews (individual and focus groups) and with both staff and service participants (though staff were much more likely to also comment on implementation issues—such as that it takes time to learn IMR, a flexible approach is useful, etc.—and to note that they also personally benefited from IMR). Several study limitations should be noted, however. Interviews with individuals enrolled in services were conducted only in Stage 2 and not in Stages 3 or 4, which relied only on staff interviews. Recorded interviews were not possible in one of the two states due to IRB constraints, though detailed notes of the interviews were made by research staff. Demographic data on the participating ACT staff were not systematically recorded. IMR fidelity was also not systematically assessed due to resource limitations (though an international expert in IMR provided informal assessments of IMR fidelity and regular consultation to each ACT team). However, quantitative data from Stage 3 suggested one of the ACT + IMR teams was less successful in implementing IMR and that dose-response effects and trends were noted, with higher levels of IMR sessions resulting in better outcomes on several quantitative measures (Monroe-DeVita et al., 2018). A further limitation is that this qualitative evaluation focused on the experiences and observations that were apparent to individuals with serious mental illness and the ACT staff, but it did not probe for larger organizational or systemic factors that may have facilitated or challenged implementation. Other research suggests organizational and systemic factors (e.g., agency leadership, an organizational culture that supports innovation) can affect the implementation of IMR (Whitley et al., 2009).

## Conclusion

There is generally a good fit between the IMR model and the needs and strengths of people with severe mental illness who are served by ACT teams. It is feasible to implement IMR, an additional EBP, into ACT teams, even though it takes time for ACT staff to learn and successfully provide IMR in addition to their existing ACT duties. The addition of IMR to ACT programs has several advantages, including improving a recovery focus for individuals with serious mental illness and staff alike. In addition, IMR seems to lead to a number of positive participant outcomes for personal recovery goals. Although there are benefits, implementing IMR into ACT does face certain barriers, including the acuity level of some individuals enrolled in services, competing psychosocial needs, unmet transportation needs for group IMR, and competing job demands for ACT staff. Implementation can be facilitated by actively engaging persons with serious mental illness into IMR, taking a flexible approach to providing IMR (e.g., using an individualized delivery, tailoring the curriculum), and intensive training in the model for the entire ACT team. Future research should emphasize implementation research methods that identify barriers and focus on providing effective facilitators for successful adaptation of IMR. In addition, research will be enhanced by the use of mixed-methods approaches that include qualitative components and by including idiographic measures that capture the positive benefits that people with serious mental illness seek for their individual recovery goals.

This document is copyrighted by the American Psychological Association or one of its allied publishers.
This article is intended solely for the personal use of the individual user and is not to be disseminated broadly.

## References


Allness, D. J., & Knoedler, W. H. (2003). *A manual for ACT start-up: Based on the PACT model of community treatment for persons with severe and persistent mental illnesses*. Arlington, VA: National Alliance for the Mentally Ill.

Bond, G. R., Drake, R. E., Mueser, K. T., & Latimer, E. (2001). Assertive community treatment for people with severe mental illness. *Disease Management & Health Outcomes, 9,* 141–159. http://dx.doi.org/10.2165/00115677-200109030-00003

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3,* 77–101. http://dx.doi.org/10.1191/1478088706qp063oa

Burns, B. J., & Santos, A. B. (1995). Assertive community treatment: An update of randomized trials. *Psychiatric Services, 46,* 669–675. http://dx.doi.org/10.1176/ps.46.7.669

Coldwell, C. M., & Bender, W. S. (2007). The effectiveness of assertive community treatment for homeless populations with severe mental illness: A meta-analysis. *The American Journal of Psychiatry, 164,* 393–399. http://dx.doi.org/10.1176/ajp.2007.164.3.393

Deci, P. A., Santos, A. B., Hiott, D. W., Schoenwald, S., & Dias, J. K. (1995). Dissemination of assertive community treatment programs. *Psychiatric Services, 46,* 676–678. http://dx.doi.org/10.1176/ps.46.7.676

Egeland, K. M., Ruud, T., Ogden, T., Färdig, R., Lindstrøm, J. C., & Heiervang, K. S. (2017). How to implement illness management and recovery (IMR) in mental health service settings: Evaluation of the implementation strategy. *International Journal of Mental Health Systems, 11,* 13. http://dx.doi.org/10.1186/s13033-017-0120-z

Fisher, D. B., & Ahern, L. (2000). Personal assistance in community existence (PACE): An alternative to PACT. *Ethical Human Sciences & Services, 2,* 87–92.

Gingerich, S., Miller, J., Monroe-DeVita, M., Morse, G., Mueser, K., & Hamilton, A. (2013). *Integrating illness management and recovery (IMR) into assertive community treatment (ACT) A manual for ACT teams*. Unpublished manuscript.

Gingerich, S., & Mueser, K. (2012). *Illness management and recovery: Personalized skills and strategies for those with mental health disorders*. Center City, MN: Hazelden.

Gomory, T. (2002). The origins of coercion in assertive community treatment: A review of early publications from the special treatment unit of Mendota State Hospital. *Ethical Human Sciences & Services, 4,* 3–16.

Hasson-Ohayon, I., Roe, D., & Kravetz, S. (2007). A randomized controlled trial of the effectiveness of the illness management and recovery program. *Psychiatric Services, 58,* 1461–1466. http://dx.doi.org/10.1176/ps.2007.58.11.1461

Herdelin, A. C., & Scott, D. L. (1999). Experimental studies of the Program of Assertive Community Treatment (PACT): A meta-analysis. *Journal of Disability Policy Studies, 10,* 53–89.

McGuire, A. B., Kukla, M., Green, A., Gilbride, D., Mueser, K. T., & Salyers, M. P. (2014). Illness management and recovery: A review of the literature. *Psychiatric Services, 65,* 171–179. http://dx.doi.org/10.1176/appi.ps.201200274

McGuire, A. B., White, D. A., White, L. M., & Salyers, M. P. (2013). Implementation of illness management and recovery in the Veterans Administration: An on-line survey. *Psychiatric Rehabilitation Journal, 36,* 264–271. http://dx.doi.org/10.1037/prj0000032

Monroe-DeVita, M., Morse, G., Mueser, K. T., McHugo, G. J., Xie, H., Hallgren, K. A., . . . Stiles, B. (2018). Implementing illness management and recovery within assertive community treatment: A pilot trial of feasibility and effectiveness. *Psychiatric Services, 69,* 562–571. http://dx.doi.org/10.1176/appi.ps.201700124

Morse, G., Glass, A. M., & Monroe-DeVita, M. (2016). ACT and recovery: What we know about their compatibility. *Administration and Policy in Mental Health and Mental Health Services Research, 43,* 219–230. http://dx.doi.org/10.1007/s10488-015-0631-3

Morse, G., & McKasson, M. (2005). Assertive community treatment. In R. E. Drake, M. R. Merrens, & D. W. Lynde (Eds.), *Evidence-based mental health practice: A textbook* (pp. 317–347). New York, NY: Norton.

Roe, D., Hasson-Ohayon, I., Salyers, M. P., & Kravetz, S. (2009). A one year follow-up of illness management and recovery: Participants' accounts of its impact and uniqueness. *Psychiatric Rehabilitation Journal, 32,* 285–291. http://dx.doi.org/10.2975/32.4.2009.285.291

Salyers, M. P., McGuire, A. B., Rollins, A. L., Bond, G. R., Mueser, K. T., & Macy, V. R. (2010). Integrating assertive community treatment and illness management and recovery for consumers with severe mental illness. *Community Mental Health Journal, 46,* 319–329. http://dx.doi.org/10.1007/s10597-009-9284-6

Salyers, M. P., Rollins, A. L., Clendenning, D., McGuire, A. B., & Kim, E. (2011). Impact of illness management and recovery programs on hospital and emergency room use by Medicaid enrollees. *Psychiatric Services, 62,* 509–515. http://dx.doi.org/10.1176/ps.62.5.pss6205_0509

Salyers, M. P., Rollins, A. L., McGuire, A. B., & Gearhart, T. (2009). Barriers and facilitators in implementing illness management and recovery for consumers with severe mental illness: Trainee perspectives. *Administration and Policy in Mental Health and Mental Health Services Research, 36,* 102–111. http://dx.doi.org/10.1007/s10488-008-0200-0

Salyers, M. P., & Tsemberis, S. (2007). ACT and recovery: Integrating evidence-based practice and recovery orientation on assertive community treatment teams. *Community Mental Health Journal, 43,* 619–641. http://dx.doi.org/10.1007/s10597-007-9088-5

Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information, 22,* 63–75. http://dx.doi.org/10.3233/EFI-2004-22201

Tabak, N. T., Link, P. C., Holden, J., & Granholm, E. (2015). Goal attainment scaling: Tracking goal achievement in consumers with serious mental illness. *American Journal of Psychiatric Rehabilitation, 18,* 173–186. http://dx.doi.org/10.1080/15487768.2014.954159

van Langen, W. J., Beentjes, T. A., van Gaal, B. G., Nijhuis-van der Sanden, M. W., & Goossens, P. J. (2016). How the illness management and recovery program enhanced recovery of persons with schizophrenia and other psychotic disorders: A qualitative study. *Archives of Psychiatric Nursing, 30,* 552–557. http://dx.doi.org/10.1016/j.apnu.2016.04.005

Whitley, R., Gingerich, S., Lutz, W. J., & Mueser, K. T. (2009). Implementing the illness management and recovery program in community mental health settings: Facilitators and barriers. *Psychiatric Services, 60,* 202–209. http://dx.doi.org/10.1176/ps.2009.60.2.202


Received January 18, 2019
Revision received July 16, 2019
Accepted July 23, 2019 ■

This document is copyrighted by the American Psychological Association or one of its allied publishers.
This article is intended solely for the personal use of the individual user and is not to be disseminated broadly.