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Implementing effective educational interventions in complex mental health systemsGreer Sullivan, MD, MSPH *,^{1,2,3}Dean Blevins, PhD^{1,2,3}Michael R. Kauth, PhD^{1,4,5}

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Abstract

Background: Many examples in the literature demonstrate that successful educational interventions aimed at changing clinical practice utilize a systemic approach involving multiple stakeholders, substantial advance planning, and follow-up sessions or supervision. This report demonstrates how the lessons learned from an unsuccessful educational intervention in mental health clinical practice, combined with principles of implementation research and organizational change, were utilized to more effectively implement a second intervention in one VA healthcare network. **Methods:** Utilizing an implementation research model, we illustrate how the aims of this intervention were realized and sustained over the 12-month follow-up period. **Results:** This report further reinforces what others have noted, namely that educational interventions intended to change clinical practice should employ a multilevel approach if patients are to truly benefit from new skills gained by clinicians. **Conclusions:** The present report attests to the validity of, and contributes to, the emerging literature on implementation research.

Background

There is an ongoing need within healthcare systems to train clinicians to deliver evidence-based care, particularly when clinicians are well past their initial training. Educational programs may be especially challenging to deliver in mental health since adequate training in many non-biological techniques, such as cognitive behavioral therapy or psychosocial rehabilitation skills, is typically time consuming and labor intensive for both the trainer and trainee. When training programs must be conducted during working hours for providers who work in busy health care systems at multiple sites, such as the Veterans Affairs Healthcare System (VA), many logistical and practical considerations come into play at a number of levels within the system of care. Careful planning is needed not only to complete the training but to assure that new skills are actually implemented in everyday practice where they can help patients. [1]

This paper describes two successive training programs conducted by the Department of Veterans Affairs (VA) South Central Mental Illness Research, Education, and Clinical Center (SC-MIRECC) in a large, geographically dispersed network of care. The first program, training in group therapy techniques, did not achieve successful translation into routine care, while the second, training in psychosocial rehabilitation skills, was very successful. Using a modified version of an implementation model suggested by Fixsen, et al. [2], we compare and contrast the two interventions in order to highlight those intervention elements most critical to success. This paper is intended to describe what is needed not only to conduct training programs but to optimize the chance that new clinical skills are actually implemented in practice settings where they can benefit patients.

Setting

The VA consists of 21 regions called Veterans Integrated Service Networks (VISNs). VISN 16, the South Central network, one of the largest, serves approximately two million veterans across an eight-state region from Oklahoma to the Florida panhandle. Mental health services are coordinated by the network Mental Health Product Line (MHPL) manager and the advisory council (MHPLAC), comprising the Directors of Mental Health at ten medical centers. These ten medical centers offer both inpatient and outpatient care, provided by more than 1000 mental health clinicians of various disciplines. [3] There is considerable variation in terms of the organization of the ten mental health services. The SC-MIRECC functions as a “virtual” center within VISN 16 and is charged with developing new knowledge about mental illness and its treatment, and with bringing new knowledge to bear on routine clinical care. The SC-MIRECC works closely with the MHPL and the MHPLAC to identify the primary training needs of clinicians in the network and to implement training programs.

In 2001, faced with increasing demand for mental health services coupled with little expansion in the number of available mental health providers, the MHPLAC asked the SC-MIRECC to provide an educational intervention to train providers in group therapy skills and techniques. A substantial amount of literature attests to the efficacy and effectiveness of group treatment modalities, [4,5] yet an assessment of 136 mental health providers in VISN 16 indicated that only about one-third had any training at all in group therapy methods. Later, in 2003, as the VA began to emphasize a recovery-oriented model of care [14], the MHPLAC also requested a training program in recovery and psychosocial rehabilitation techniques. A survey of the ten mental health services found that while some limited rehabilitation services were offered to

veterans at two of the largest medical centers, none of the ten medical facilities provided a comprehensive psychosocial rehabilitation program. Furthermore, no clinicians had received formal training in psychosocial rehabilitation skills. Below we describe the two interventions in more detail.

Group Therapy Skills Training

Intervention content and design. Key characteristics of ten VISN 16 facilities were examined, including size of facility, number of patients, number of providers, etc., and five “matched” pairs of facilities were created. Within each pair, an “intervention” site and a “control” site were randomly designated. All facilities received a brief didactic training on group therapy consisting of a 2 hour videoconference. In addition, “intervention” sites received an intensive 2 1/2 day face-to-face workshop, and 8 monthly supervision conference calls provided by the trainers. Trainings were based upon a curriculum developed by the American Group Psychotherapy Association (AGPA). Trainers were two certified and experienced group therapists/trainers from the AGPA program.

Trainees. Clinicians who participated in the group therapy training were selected by their local mental health director with no input from MIRECC facilitators. One hundred thirty-six clinicians (136) located across the ten medical centers watched the 2 ½ hour videoconference and 36 clinicians at five sites received the more intensive training. Of the clinicians who received the intensive training, 8.3% (3) were physicians, 13.9% (5) were psychologists, 38.9% (14) were social workers, 30.6% (11) were nurses, and 8.3% (3) were a psychological technician, a physician assistant, and an occupational therapist.

At the conclusion of training, trainees in the intervention sites reported that they were generally satisfied with the training they had received. In addition, measures of self-efficacy increased. Self-efficacy in group therapy was averaged across 10 items each having a 9-point scale (0=not at all confident; 9=completely confident). The items assessed self-confidence in, for example, facilitating a supportive atmosphere, actively listening, giving constructive feedback to members, explaining the ground rules, and encouraging group members to express their feelings. Immediately after the initial training, 56% of those receiving intensive training and 30% of videoconference-only participants stated that they planned to begin new groups in the next six months.

Outcomes. To assess the extent to which the group therapy training was actually translated into practice, we used VA administrative data to examine changes in (a) the percentage of outpatients receiving group treatment at each site and (b) the percentage of outpatient visits that were conducted using a group format at each site. Group treatment was defined as psychoeducational, medication management, process, and psychotherapy groups in general VA outpatient mental health care clinics. PTSD and substance abuse programs were excluded because they typically provide treatment in group formats. Changes in these measures were studied at baseline (the three-month period prior to training) and again at 12 months. We examined these outcome measures in two ways, comparing results in each pair of five facilities and comparing the five control sites to the five intervention sites. We found no significant differences in any of the pairwise comparisons. Only two sites (one control and one intervention site) demonstrated increases in both outcome measures at 12 months; the remaining sites had an unsystematic pattern of

findings. We concluded that the training had not resulted in increased use of group therapy.

To better understand why patterns of care did not change, we conducted key informant interviews with 18 (50%) of the individuals who had participated in the more intensive training program. While most respondents stated that they valued the training, they also expressed a desire for greater structure and guidance in implementation and use of the follow-up consultation calls. Trainees at one site felt that they were forced to participate in the training but were not interested in doing so. They also suggested that the training would have been more helpful had it been targeted to therapists of similar skill levels and to those treating groups of patients with common diagnoses, such as PTSD or depression. Therapists identified several facilitators and barriers to starting a new group during the 12-month follow-up period. Commonly cited facilitators were administrative encouragement and mandates. Barriers included: lack of time to plan and conduct additional group therapy sessions; facility limitations, such as lack of space; patient hesitation to participate in group therapy; and the lack of trained co-therapists to assist with the groups.

Psychosocial Rehabilitation Training

Intervention content and design The SC-MIRECC contracted with the Center for Psychiatric Rehabilitation (CPR) to conduct psychosocial rehabilitation training. The CPR training usually consists of four semester-long courses at the University of Chicago and is a train-the-trainer model, based on 125 well-documented core competencies.[6] To tailor the training to our needs, the CPR shortened the face-to-face experiential portion of the intervention to five days and provided two experienced trainers for on-site training. However, prior to arriving at the training

site, participants were required to read four books and several articles as background. Four months prior to the training, MIRECC facilitators began monthly conference calls to discuss the trainees' progress in the preparatory reading, their understanding of content, and their personal goals for the training. At the completion of training, participants were required to pass a qualifying exam and demonstrate competency via videotaped role-plays. After the face-to-face training, the trainers conducted a six-month booster session via teleconference. SC-MIRECC implementation facilitators required that each trainee and each director of the mental health service where the trainee was located develop implementation plans and goals for the training. To determine the success of the training, we assessed the extent to which these implementation goals were met at each facility.

Trainees. The Mental Health Directors at 6 facilities in VISN 16 and 3 facilities in VISN 17 nominated several potential training candidates, with a few additional candidates nominated by other clinical leaders. An enthusiastic, knowledgeable trainee leader emerged who volunteered to screen each nominee, inquire about motivation and personal goals and describe the pre-training work required and program expectations. From a pool of 22 nominees, this participant leader identified 16 candidates whom she thought would excel in the training program (13 from VISN 16, 3 from VISN 17), representing 9 of 13 facilities. These included 3 psychologists, 6 social workers, 5 nurses, and 2 vocational rehabilitation specialists. Post-training evaluations of the training were uniformly high. All trainees received their certification as trainers in the CPR program.

In addition to the required pre-training reading, trainees were asked to set personal

implementation goals, meet with their Mental Health Directors prior to training to develop an implementation plan for their site and again post-training to set the plan in motion, train at least 5 clinicians in at least one recovery module, and initiate or expand psychosocial rehabilitation services at their site. Trainees submitted an action plan prior to the training. Trainees also agreed to obtain certification as trainers from CPR and to participate fully in the evaluation of the intervention.

The 9 participating Mental Health Directors agreed to commit resources to support the training of clinicians at their facility and to participate fully in the evaluation of the intervention.

Resources included the cost of travel to the training and local support for implementation, such as release time for program development and staff training. Directors met at least twice with their trainees to develop an implementation plan and identify site-specific goals. In addition, a MIRECC administrator joined two monthly Directors' calls for one year to call attention to the intervention, report on trainee activities, and remind Directors of their commitment, such as adding or expanding psychosocial rehabilitation services.

Outcomes. To evaluate the success of this training program, we assessed the extent to which each of the sites met their site-specific initial implementation goals. Data was collected using structured key informant interviews conducted by phone. At 12 months post-intervention, 13 trainees and nine Mental Health Directors completed interviews. (Three trainees were unavailable or lost to staff turn-over.) One facility had not developed formal action plans for achieving their site-specific objectives but the remaining 8 facilities not only met but exceeded their initial goals. Seven of the 13 trainees noted that over time they had actually revised their

initial personal goals to be more ambitious. Using the train the trainer model, more than 300 clinicians in the VISN were trained in at least one component of the CPR program. Seven facilities reported adding new or modified psychosocial rehabilitation services to their mental health programs, including case management, peer support training, supported employment, and living skills assessment. Eleven trainees identified new services that they expected to provide in the subsequent six months, including a consumer council, job coaching, compensated work therapy, supportive housing and counseling for homeless veterans, and peer support.

Participants reported that the development of implementation plans, support from management, and follow-up conference calls with trainers and MIRECC facilitators were all facilitators of implementation efforts. Barriers identified included resource constraints (e.g., provider time, lack of staff/work overloads, small program sizes) and resistance to change among some clinical staff. In fact, nine of the 11 clinicians responding to this question expressed an interest in additional training to address the resistance to change.

Although we did not formally assess the value of the monthly calls facilitated by MIRECC, the calls were well attended and became a venue for sharing information and problem-solving. Attendance on the calls was required only through the 12 month post-intervention evaluation. However, the trainees elected to continue meeting monthly for more than 18 months. The pre-training meetings and intense week-long training format provided a significant opportunity for participants to know each other well. Some trainees have been asked to consult with and provide training for clinical programs in other VA networks. This group has developed a sense of themselves as “experts” and has been asked to serve as advisors and trainers for a VISN 16 committee on implementing a recovery model of care.

Trainees and administrators were involved in planning for the psychosocial recovery implementation and making resources available. Rather than the SC-MIRECC supporting the full cost of training and choosing uniform outcome goals, each site took ownership of their goals for training outcomes. Motivated trainees invested considerable time in preparing for the training. Administrators dedicated travel dollars and other resources to implementation, and both clinicians and administrators collaborated to identify mutual goals and address site-specific barriers.

A different approach needed

After the SC MIRECC implementation team assessed the first training experience we realized that we had made a substantial investment in a training program that did not improve care and in many cases did not even reach patients. Therefore, we made significant adjustments to our approach for the second training effort. SC MIRECC implementation planners recognized that we had been naïve in assuming that new skills learned by clinicians in training sessions could easily and automatically be translated into every day care. We noted that while both the content of, and approach to, the training, were important, we had not anticipated key barriers both in terms of the training itself and the implementation of the training. To achieve translation into practice settings, we realized that we would need the participation of the mental health systems' administrators. Indeed the literature regarding changing provider behaviors supports the notion that successful interventions contain “packages” of intervention components that address multiple levels of, and multiple stakeholders in, the system of care. [1,7,8]

At the conclusion of the first training, we recognized a need for more active facilitation of clinical educational interventions at several levels. We conceptualized the goal of the training itself as the *successful transfer of skills to clinicians* and saw this as separate from the goal of *translating the new skills into the practice setting*. We concluded that both components of the intervention – training or skills transfer and translation into practice—required facilitation in order to achieve the ultimate goal of delivering evidence-based practices to patients.

In addition, we decided that our initial evaluation approach had been too rigid in that we expected all sites to use the training in the same way within their mental health service. For our second approach we involved both clinicians and administrators in initial goal setting and evaluated the success of the program at each site using standards developed at that site. In creating these site-specific goals, we recognized that in many cases implementation of an intervention involves at least some organizational change, and the need to involve multiple stakeholders to achieve such change is well documented in the organizational change literature. [2,7,9,10]

The approach the SC-MIRECC adopted with the second intervention was consistent with Fixsen and colleagues' model of implementation. [2] We have modified this model to emphasize three main components: facilitation of training, facilitation of implementation, and facility-specific program evaluation. We feel this implementation model is especially appropriate for educational interventions since it distinguishes between clinician training (skills transfer) and translation (implementation of the skills in practice settings). Table 1 shows these three main components.

Facilitating Training

Participant Selection. In the group treatment intervention, little attention was paid to the experience, skill-level, or motivation of trainees. For this intervention, Mental Health Directors assigned clinicians to attend the training and some clinicians openly expressed their displeasure and resistance to the goals of the program. Some clinicians perceived that the SC-MIRECC and Mental Health Service Directors were forcing them to change their clinical practice against their will and strongly resented this edict. These trainees' commitment to the intervention was low, and they may have negatively influenced other trainees.

In contrast for the psychosocial rehabilitation training intervention, the SC-MIRECC implementation facilitators devoted significant effort to selection of participants. Although Mental Health Directors nominated psychosocial rehabilitation training participants, the SC-MIRECC implementation facilitators also solicited nominations from other sources and conducted informal interviews with nominees to communicate training expectations and gauge agreement between candidates' goals and those of the intervention. Of 22 nominees, 16 clinicians were strategically selected to be trained, with the expectation that they would ultimately serve as change agents for disseminating skills and implementing psychosocial rehabilitation services at their sites.

Pre- Training facilitation. For the group therapy intervention, no preparation was required of trainees, whose previous experience with and training in group therapy techniques varied widely. Clinicians' previous experience in conducting group treatments was so wide-ranging that this intervention was too simplistic for some and too advanced for others. In contrast, to be eligible

for the psychosocial rehabilitation training, trainees had to be willing to engage in a number of activities to prepare for the training. Although these training candidates had different levels of knowledge and experience with psychosocial rehabilitation, they invested a significant amount of time to reading and discussing four books and several articles as background materials prior to training. These discussion groups were facilitated by the SC-MIRECC implementation facilitators. This helped to ensure that all trainees began the training with similar levels of knowledge.

In addition, for the psychosocial rehabilitation training, the early emergence of a participant leader as a primary point of contact and representative to the organizing committee helped to convey the idea that the trainees and sites were directly responsible for their own training experience and the implementation of their skills. The SC-MIRECC was presented as a collaborative partner, rather than an authority directing the group.

Ongoing facilitation of training. In the group treatment intervention, the trainers led bi-monthly conference calls with trainees to promote new group services and reinforce the application of new skills. However, the rationale for the follow-up conference calls was not adequately explained and attendance, which was voluntary, was consistently low. Several clinicians reported that they did not attend the calls because they had not started a new group.

In the psychosocial rehabilitation intervention, the trainers did not meet formally again with the trainees until the six-month booster session but trainers were available via email to respond to questions. To solidify the trainees' skill base and to provide ongoing consultation, trainees

agreed to meet monthly via conference calls for a period of 12 months (and later extended these calls to 18 months) following the conclusion of training. Post-training participation may have been facilitated by the fact that the group had been meeting for several months prior to the training. One participant noted that over the course of training and follow-up the group developed a sense of shared goals and a group identity. Participants began to view themselves as experts in psychosocial rehabilitation. A SC-MIRECC facilitator frequently joined these monthly calls to share information and reinforce the idea that trainees are psychosocial rehabilitation experts and local change agents.

Facilitating Implementation

Setting expectations and goals. The group therapy training required very little stakeholder involvement in the system of care other than the trainees themselves. Some Mental Health Directors evidenced a misunderstanding of training goals and set unrealistic expectations for training or failed to communicate their expectations to the trainees. They had no formal discussion with their clinician trainees about the local outcomes expected from the training and no identified mechanism for resolving barriers. The trainees reported feeling overwhelmed by the task of planning and conducting new groups while maintaining their current workloads. Further, the Mental Health Directors' verbal support was insufficient to ensure that time and resources were committed to implementation of group treatments. Clinicians had no opportunity to identify their own goals and may have felt little personal motivation to start group treatments at their facility.

In the psychosocial rehabilitation intervention, the SC-MIRECC implementation facilitators

made extensive efforts to communicate the training requirements and goals to both trainees and Mental Health Directors. The Mental Health Directors were viewed as instrumental participants in the intervention. A pre-training assessment helped trainees and Directors create their own site-specific goals and identify potential barriers to implementation, and trainees and Directors were required to meet together to produce an Action Plan prior to training. The trainees noted that agreed-upon changes in their workload maximized their ability to provide staff education and initiate new services and programs.

Facilitating systems-level intervention progress. There was no attempt to monitor progress of the implementation of the group therapy training. In contrast, for the psychosocial rehabilitation training SC-MIRECC implementation facilitators often joined monthly trainee calls and assisted in brainstorming regarding barriers to implementation. In addition, SC-MIRECC facilitators joined a monthly Mental Health Directors call and reported on the progress of the psychosocial training implementation. Facilitation occurred, therefore, for both the trainees' efforts to implement their new skills and for the administrators' oversight of the implementation. In addition, in some cases the Mental Health Directors made clinical workload adjustments to permit the trainees to develop new services and to train other clinicians.

Not only were the Mental Health Directors regularly reminded of progress of the training but their supervisors, the respective facility chiefs of staff, received regular reports about local expansion of psychosocial rehabilitation services from the network Mental Health Product Line manager. These updates served to ensure recognition of a site Mental Health Director's efforts. Thus, personnel from many organizational levels at each site became aware of the psychosocial

rehabilitation intervention and local progress. Finally, at the national level, after the psychosocial training efforts were started in this network, the VA made recovery-oriented services and psychosocial rehabilitation programs a priority in the 2003 VA *Action Agenda* [11]. National attention to psychosocial rehabilitation may have also facilitated local efforts.

Program Evaluation

For the group treatment intervention, key intervention outcomes (increased number of patients receiving group treatment and increased proportion of group treatments to total mental healthcare provided) were designed to be captured by use of VA administrative data. These outcomes were determined in advance and without input of stakeholders. All facilities were evaluated using these same outcome measures. The outcomes did not take into account the site-specific process of implementation and were determined without a sense of potential barriers and available local resources. Further, the extent to which group therapy skills were transferred to clinicians was assessed only by self-report *perceived* gains in knowledge and skills. Skill acquisition was not objectively assessed.

In the psychosocial rehabilitation intervention, a pre-training needs assessment allowed the trainees and Mental Health Directors to evaluate their own site's needs and barriers in order to set realistic goals and develop an individualized, site-specific action plan for implementation. Both trainees and administrators participated in setting goals for each site.

To evaluate the outcomes of the implementation, each site was assessed in terms of the extent to which its specific goals were met. Further, for training outcomes, the Center for Psychiatric

Rehabilitation training program had established competency and performance requirements for certification. Therefore, each trainee met at least minimum performance standards and these were objectively assessed, not simply assessed by self-report.

Discussion

These two educational interventions were similar in that they involved the training of reasonably large numbers of clinicians within the VA. Both training programs used professional trainers, trained clinicians from multiple sites, and offered at least some ongoing supervision or direction from the training teams. The group therapy training effort delivered training to the clinicians but gave little attention to issues of implementation within the system of care. Administrators suggested that group therapy training was needed and chose the trainees but otherwise had little involvement in either the training or the implementation of the training. As such, this effort could be viewed as a failed “top down” approach to translate evidence based practices into routine care. [12]

The psychosocial rehabilitation training also provided high quality training but in addition the SC-MIRECC facilitators provided significant assistance with the training itself and with its implementation. Both administrators and clinicians were required to set facility-specific goals and far more attention was given to implementation issues, Progress reports were provided to administrators at multiple levels. The trainees themselves were chosen carefully based on their interest, motivation, and willingness to participate in pre-training sessions, and they were, in effect, empowered to move forward, apply their new skills, and create new programs. In fact, the trainees on their own sought additional training and developed their own “learning

collaborative,” [9][13] even though this was not part of the original training plan. This implementation effort took a far more “bottom up” approach and clearly involved more stakeholders in both planning and execution. [12]

Conclusions

Achieving effective clinical educational interventions in complex systems of care is challenging, especially when the goal is not only to train clinicians but to have the newly acquired skills benefit patients. The literature is replete with examples of good-intentioned, but ineffective trainings that fail to address the complexity of implementation, as well as the unique needs and barriers at sites. As our examples demonstrate, an effective intervention must consider the needs of participants, the training itself, administrative support, and the plan for implementation. Facilitation for both the training itself and for the implementation effort is needed, and it seems helpful not only to set site-specific goals but to involve multiple stakeholders in setting those goals. In order to achieve successful translation into routine care, and in order to optimally utilize training dollars for the benefit of patients, educational interventions need facilitators who will actively assist with both the training and its implementation.

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Reference List

1. Rosenheck R: **Stages in the implementation of innovative clinical programs in complex organizations.** *J Nerv Ment Dis* 2001, **189(12)**: 812-821.
2. Fixsen DL, Naoom SF, Blase KA, Friendman RM, Wallace F: *Implementation Research: A Synthesis of the Literature.* Tampa, FL: The National Implementation Research Network, Louis de la Parte Florida Mental Health Institute, University of South Florida; 2005.
3. Sullivan G, Jinnett KJ, Mukherjee S, Henderson KL: **How mental health providers spend their time: A survey of 10 Veterans Health Administration mental health services.** *Journal of Mental Health Policy and Economics* 2003, **6(2)**: 89-97.
4. McRoberts C, Burlingame GM, Hoag MJ: **Comparative efficacy of individual and group psychotherapy: A meta-analytic perspective.** *Group Dynamics: Theory, Research, and Practice* 1998, **2(2)**: 101-117.
5. Burlingame GM, Fuhriman A, Mosier J: **The differential effectiveness of group psychotherapy: A meta-analytic perspective.** *Group Dynamics: Theory, Research, and Practice* 2003, **7(1)**: 3-12.
6. Corrigan PW, Rao D, Lam C: **Psychiatric Rehabilitation.** In *Health Care and Disability Case Management.* Edited by Chan F, Leahy MJ. Lake Zurich, IL: Vocational Consultants Press; 1999:527-564.
7. Greenhalgh T, Robert G, Macfarlane F, Bate P, Kyriakidou O: **Diffusion of innovations in service organizations: Systematic review and recommendations.** *The Milbank Quarterly* 2004, **82(4)**: 581-629.
8. Grol R, Grimshaw J: **From best evidence to best practice: Effective implementation of change in patients' care.** *Lancet* 2003, **362(9391)**: 1225-1230.
9. Rosenheck RA: **Organizational process: A missing link between research and practice.** *Psychiatr Serv* 2001, **52(12)**: 1607-1612.
10. Kirchner JE, Cody M, Thrush CR, Sullivan G, Rapp CG: **Identifying factors critical to implementation of integrated mental health services in rural VA community-based outpatient clinics.** *J Behav Health Ser Res* 2004, **31(1)**: 13-25.
11. Department of Veterans Affairs Work Group on the President's New Freedom Commission on Mental Health Report. Achieving the Promise - Transforming Mental Health Care in VA. 12-1-2003.

12. Sullivan G, Duan N, Mukherjee S, Kirchner J, Perry D, Henderson K: **The role of services researchers in facilitating intervention research.** *Psychiatr Serv* 2005, **56(5)**: 537-542.
13. Young PC, Glade GB, Stoddard GJ, Norlin C: **Evaluation of a learning collaborative to improve the delivery of preventive services by pediatric practices.** *Pediatrics* 2006, **117**: 1469-1476.

Table 1. Lessons Learned and Applied

	Group Therapy Intervention	Psychosocial Rehabilitation Intervention	Lessons Learned and Applied
Facilitating Training			
Participant Selection	<ul style="list-style-type: none"> • Trainees identified by MH director, sometimes without determining trainee interest • All trainees nominated by others • Trainers not familiar with VA system 	<ul style="list-style-type: none"> • Trainees nominated, but screened by MIRECC for interest and willingness to participate • Stricter selection and enhanced communication with sites • Trainers very familiar with the VA 	<ul style="list-style-type: none"> • Selection of trainees based on motivation and interest • Commitment to mutually identified performance standards • Trainers familiar with trainees' work environment
Pre Training Facilitation	<ul style="list-style-type: none"> • No pre-service training work required • No trainer-specific or facility-specific goals identified • "Generic" training • Certification not offered 	<ul style="list-style-type: none"> • Extensive pre-service training preparation required • Trainees set individual and facility-specific goals • Certification offered 	<ul style="list-style-type: none"> • Trainees presented with similar levels of baseline knowledge • Individual goals guided post-training activities & increased commitment • Certification became an outcome and marketable skill for trainees
On-going Facilitation of Training.	<ul style="list-style-type: none"> • Many barriers to attendance for monthly conference calls 	<ul style="list-style-type: none"> • 12-months of mandatory conference call participation • Problem-solving assistance specific to identified goals • Progress reports to administrators' supervisors ensured recognition of administrators efforts 	<ul style="list-style-type: none"> • Post-training consultation was targeted and informative to trainees • Regular coaching reemphasized goals and modified them as necessary for success • Personnel from many organization levels recognize progress
Facilitating Implementation			
Setting expectations and goals	<ul style="list-style-type: none"> • Administrative staff not considered part of the intervention • Administrators and clinicians had different expectations 	<ul style="list-style-type: none"> • Administrators create set of goals in collaboration with clinicians • Reminders of goals on conference calls • Administrators included in program evaluation 	<ul style="list-style-type: none"> • Collaboration between administrators and clinicians ensured mutual-identified goals • Administrators agreed to commit the resources necessary to accomplish goals • Each stakeholder could receive recognition for efforts • Active goal monitoring
Facilitating systems-level intervention progress	<ul style="list-style-type: none"> • Only clinicians involved • Trainees were tasked with implementing training alone • Assumed system support 	<ul style="list-style-type: none"> • Multi-level approach with clinicians and 2 levels of administrative leaders • System change expected and supported by administrators • Impact beyond mental 	<ul style="list-style-type: none"> • All stakeholders engaged in program implementation and monitoring • Targeted training to organizational strategic plan

		health departments	• Culture change from broad collaboration
		• Medical directors and top facility leadership updated on progress	
Program Evaluation			
Outcome Measures	<ul style="list-style-type: none"> • Some outcomes assessed across all sites using administrative data • Mixed methods assessments of participants only • No objective assessment of skill acquisition beyond self-perceived gains 	<ul style="list-style-type: none"> • Goals for both clinicians and administrators pre-set ahead of time • Site-specific outcomes assessed based on goals • Mixed methods assessments included both clinicians and administrators • 2 follow-up assessments • Objective assessment of knowledge and skill gain 	<ul style="list-style-type: none"> • Helpful to have clinicians and administrators involved in setting outcome goals • Site-specific outcome goals may be preferable • Multiple follow-up points provided on-going process monitoring • Objective assessments of skills

Based upon the work of Fixsen, et al. (2005)