

This is a DRAFT summary of evidence supporting the IDDT model. It is one of a series of evidence summaries CIMH is creating.

IMPLEMENTING SAMHSA EVIDENCE-BASED PRACTICE TOOLKITS

Integrated Dual Diagnosis Treatment (IDDT)

Brief description of the practice

Target group:

The IDDT Toolkit is designed to assist persons with both a severe mental illness and a serious substance abuse problem. No materials in the Toolkit focus on older adults or youth or other subpopulations such as those with extensive criminal justice histories or persons who are homeless. The Toolkit is not diagnosis specific, though studies in the evidence-base do focus on particular diagnostic subgroups.

Practice components:

Integrated treatment basically means that both psychiatric and substance abuse treatment are provided at the same time, at the same place, and by the same team. Specific IDDT components are listed in the fidelity scale and include¹:

- 1a. Multidisciplinary Team:** Case managers, psychiatrist, nurses, residential staff, and vocational specialists work collaboratively on mental health treatment team
- 1b. Integrated Substance Abuse Specialist:** Substance abuse specialist works collaboratively with the treatment team, modeling IDDT skills and training other staff in IDDT
- 2. Stage-Wise Interventions:** Treatment consistent with each client's stage of recovery (engagement, motivation, action, relapse prevention)
- 3. Access for IDDT Clients to Comprehensive DD Services:** Includes residential supported employment, illness management and recovery and ACT or ICM.
- 4. Time-Unlimited Services:** Unlike many substance abuse programs, services are intended to be on-going.
- 5. Outreach:** Assistance in the community with housing, medical care, crisis management and legal aid.
- 6. Motivational Interventions:** Clinicians who treat IDDT clients use techniques to increase motivation to change and reduce resistance.
- 7. Substance Abuse Counseling:** Clients who are in the *action* stage or *relapse prevention* stage receive substance abuse counseling that include: Teaching how to manage cues to use and consequences to use; teaching relapse prevention strategies; drug and alcohol refusal skills training; problem-solving skills training to avoid high-risk situations; challenging clients' beliefs about substance abuse; and coping skills and social skills training

8. **Group DD Treatment:** DD clients are offered group treatment specifically designed to address both mental health and substance abuse problems
9. **Family Education and Support on DD:** Clinicians provide family members (or significant others) education, coping skills training, collaboration with the treatment team and support.
10. **Participation in Alcohol & Drug Self-Help Groups:** Clients in the *action* stage or *relapse prevention* stage attend self-help programs in the community
11. **Pharmacological Treatment:** Psychiatrists for IDDT clients prescribe psychiatric medications despite active substance use.
12. **Interventions to Promote Health:** Examples include: Teaching how to avoid infectious diseases; helping clients avoid high-risk situations and victimization; securing safe housing; encouraging clients to pursue work, medical care, diet, and exercise.
13. **Secondary Interventions for Substance Abuse Treatment Non-Responders:** Program has a protocol for identifying substance abuse treatment non-responders and offers individualized secondary interventions, such as clozapine, naltrexone, or disulfiram; long-term residential care; trauma treatment; intensive family intervention; and intensive monitoring.
14. **High intensity services.** Although not in the SAMHSA toolkit, a low client to staff ratio is included by Mueser, Drake et al. in their textbook version of the fidelity scale.²

Evidence for IDDT vs. evidence for integrated psychiatric and substance abuse treatment

What constitutes the evidence-base for Integrated Dual Diagnosis Treatment? In the broad sense, one could say it is all studies which document the effectiveness of an integrated approach to persons with co-occurring psychiatric and substance use disorders. More narrowly it *should be* the studies from which the IDDT fidelity scale was derived—that is, those high quality random controlled trials for which good outcomes correlate with high fidelity ratings. However, there is only one published study of outcomes from a program that included all of the elements in the IDDT Toolkit model (based on a high score on the fidelity scale), and it focuses exclusively on jail recidivists.³ Instead the IDDT fidelity scale (unlike the scales for the ACT, SE, and Family Psychoeducation fidelity scales) is derived from “principles of treatment” rather than specific successful programs. Outside of the study of forensic clients mentioned above, there is not an evidence base at this point for the specific program that is prescribed in the IDDT fidelity scale. Although there are now a number of “high fidelity” programs in existence (in EBP Project states), none of these have reported outcomes. We have, necessarily, used the broad definition of integrated dual diagnosis treatment (lower case) as the focus for finding and assessing literature reviews. More detail on these points is available in the CIMH systematic review of the literature on dual disorders outcomes in the Appendix.

Extent of evidence for integrated psychosocial treatment of dual disorders

A. Systematic Reviews

1. A summary of each literature review of integrated treatment is included in the appendix. The Dartmouth Psychiatric Institute group has published three major (comprehensive) reviews (in 1998, 2004 and 2005) and at least six other less comprehensive reviews using a narrative format. There are also two well-done systematic reviews focusing specifically on randomized controlled trials of integrated treatment (Ley and Donald). There is a poorly done meta-analysis (Dumaine), and limited reviews that cover the sketchy literature on integrated treatment for older adults and for the criminal justice population. Finally, there is a systematic review from 2005 of just motivational interviewing (Bechdolf). All of the reviews except those of Ley, Donald, Bechdolf and Dumaine are narrative rather than systematic and do not facilitate a weighting of design, extent and quality of evidence. For this reason CIMH has also done a comprehensive, systematic review.

2. Summary of review findings

□ New Hampshire group overall summary as of 2004-06 publications:

“...Integrated treatment is merely a rubric for sensible structural arrangements to ensure access, rather than a specific intervention.... The research on integrated treatment still lacks specific manualized interventions, studies of specific interventions, replications of positive studies, and a research consensus on key elements of fidelity....”⁴ Recent research offers evidence that integrated dual disorders treatments can be effective...” [Our 2004 review found] relatively strong evidence for the principle of integrating mental health and substance abuse treatments. Between 1994 and 2003, 26 controlled studies were reported in this area, and most showed evidence for the effectiveness of a more integrated approach over a less integrated approach.⁵ Based on the current state of the evidence [in 2006], what is ethical and evidence-based to include in usual care for patients with co-occurring disorders—clinical case management, cognitive behavioral therapy, referral to self-help, or illness self-management? Unfortunately, the evidence is not yet strong enough for numerous specific dual-disorders interventions to make this decision.... Although [in 2006] more than 40 controlled studies show advantages for specific interventions, there have been few replications. In many cases, the experimental intervention represents a closer integration of mental health and substance-abuse treatments than the control intervention, but there is little consistency across studies in terms of designs, patients, interventions, and outcome measures. Many of the studies are quasi-experimental rather than experimental, different types of patients are included in studies, many of the interventions are complex amalgams, and outcomes and measures vary considerably. Thus, after 20 years of research, there remains a lack of strong and clear evidence regarding effective engagement, treatment, and rehabilitation interventions for people with co-occurring disorders.”⁶

- Ley and Donald summary of randomized controlled trials:

Ley (2000): “There is no clear evidence supporting an advantage of any type of substance misuse programme for those with serious mental illness over the value of standard care. No one programme is clearly superior to another....”

Donald (2005): “Only one of the 10 studies compared integrated with parallel approaches, and none directly compared integrated with sequential approaches.... Notably, the one study that compared integrated with parallel treatment reported no significant differences between the two management approaches for either psychiatric symptomatology or substance use outcomes. In the seven studies based in mental health services, only three reported significantly improved outcome measures for psychiatric symptomatology or reduction in substance use. Therefore, in relation to symptomatology at the very most it can be stated that the evidence is equivocal in regards to the efficacy of integrated treatment within this setting.... A superior benefit of integrated treatment over standard treatment is also not supported by the two studies that investigated the effects of integrated treatment based within drug and alcohol services.” *Note: not all of these studies were of seriously mentally ill persons and some were inpatient programs.*

- Bechdolf et al summary of randomized controlled trials of motivational interviewing.

This excellent review of four RCTs found of the four studies one had positive follow up data while two did not; for follow-up in SA treatment one was positive, one negative. The authors concluded: “...At present [2005] the evidence for supporting MI in DD is not clear. This may be due to the methodological problems mentioned above or it may be that there is, in fact, no effect. Therefore, there is an urgent need for further research of MI in DD.” The 2002 RCT by Hulse is not considered by Bechdolf; since results were positive it would improve the rating given here somewhat.

B. CIMH Review Results (see Appendix for full summary or request full review from CIMH)

Results are presented in relationship to 9 hypotheses:

Hypothesis 1: Receiving both mental health and substance abuse care is more effective than mental health care alone (or substance abuse care alone). Finding: Of 8 randomized controlled studies of integrated outpatient care with SMI clients, two confirmed the hypothesis. In these, follow-up was short or differences had greatly diminished at 18 months.

Hypothesis 2: Integrated or comprehensive integrated services are better than non-integrated (parallel) services. Finding: Few studies have actually compared integrated and parallel services. Of the five that did, none were of high quality. Three supported integrated services, one supported parallel services.

Hypothesis 3: Some forms of integrated dual disorders treatment are better than other forms. Finding: two excellent studies showed that integrated treatment done in ACT teams was not superior to integrated treatment done by intensive case managers.

Hypothesis 4: Integrated or comprehensive integrated services are effective in themselves (no control or comparison group). Findings: since design is paramount, these studies (though some are done very well) can not support causal inference. There are 14 fairly comprehensive studies

with at least two of high quality. Only one did not confirm some positive outcomes in an integrated program. There are also several small pilots with mixed results. There is also one study of services for an offender population that also offered (weak) positive results for parallel treatment.

Hypothesis 6: Special mental health dual disorders treatments that do not include specialized substance abuse treatment are better than standard treatments. Findings: Three mental health programs (including ACT and ICM) for dual disorders that did *not* include substance abuse treatment per se were not more effective than usual care.

Hypothesis 7: Residential and other intensive programs can effectively serve the dually diagnosed. Findings: Of studies done on 14 residential program with some kind of integrated care (primarily therapeutic community but also inpatient) only one failed to show some positive results.⁷

Hypothesis 8: The theoretical components of the IDDT model have empirical support. Findings: Seven studies tested motivational interviewing with dual disorders clients. Of these, two were of high quality and had positive results. One was of high quality with negative results. The others were of low quality. Another program tested a 10 session intervention of motivational interviewing and cognitive behavioral therapy with a negative result. Six studies tested dual diagnosis groups, only one was of high quality; three had positive and two negative results. Three studies tested “dual” 12-step self-help groups; they were of low quality but had positive results.

Hypothesis 9: Taken altogether, the effectiveness of comprehensive IDDT services measured in the SAMHSA fidelity scale is supported by substantial evidence. Findings: Only the Chandler forensics program actually tested a high fidelity program (using the SAMHSA fidelity scale). However, a total of 22 programs (all included in one or more of the hypotheses above) can be seen as addressing several of the elements in the IDDT model. Of these, 10 did and 12 did not confirm effectiveness of the integrated approach being tested. None of the studies combined excellent design and quality with strong findings (either positive or negative).

C. Consensus Panel Recommendations Regarding Integrated Treatment of Co-Occurring Disorders

The SAMHSA SE Toolkit is a result of the consensus panel convened by Robert Wood Johnson.⁸

An ad hoc group of psychiatrists has recently developed a consensus recommendation on treatment of persons with schizophrenia and substance use disorders.⁹ It includes both psychosocial and pharmacological recommendations.

In 2002 Canadian health ministry an “expert panel” on co-occurring disorders.¹⁰ In addition to recommendations regarding the SMI population (which are for integrated treatment) it includes recommendations for anxiety disorders, eating disorders and personality disorders.

The Treatment Improvement Protocol 42 published by CSAT contains consensus recommendations.¹¹ In addition, this TIP contains a very detailed presentation of techniques, competencies, and evidence for integrated approaches, including but not limited to the SMI population. It and the Mueser et al. text on IDDT¹² should be the starting point for administrators considering integrated services for co-occurring disorders.

Ken Minkoff worked with a consensus panel that led to a SAMHSA report, updated in 2001 and available on the web at: <http://www.bhrm.org/guidelines/ddguidelines.htm>

- D. Evidence regarding adaptability to cultural and other subpopulations
1. *Culture.* There are no studies showing outcomes of the IDDT model itself in different cultural settings or different subpopulations. In the California SAMHSA demonstration project one Latino site (Latino staff and clients) achieved high fidelity but some adaptations were necessary.
 2. *Older adults.* There is not an evidence base for integrated treatment (lower case) specific to older adults with SMI. For older adults with anxiety disorders and mood disorders, there is a modest evidence base for both sequential and integrated treatment.
 3. *Forensic clients.* There is inconsistent evidence that integrated treatment positively affects arrests and jail utilization.
 4. *Homeless.* There is inconsistent evidence that integrated treatment is effective in homeless dually disordered persons. There is modest evidence that parallel treatment is effective.
- E. Capsule Summary of Evidence: Effective, Efficacious, Promising, or Emerging, Not Effective, or Harmful

Integrated treatment as a broad approach is “Promising.” The lack of positive randomized controlled trials and the great inconsistency among studies leads to this rating.

Because of studies showing the effectiveness of at least some of the elements of the actual IDDT model, it can be rated as “Emerging” despite a lack of studies of the model itself.

What outcomes can be expected?

Given how broad the integrated treatment literature is and the very mixed results obtained in different studies, it is not possible to describe “typical” results. Instead we briefly describe the results obtained by the IDDT Toolkit developers in rural sites in New Hampshire¹³ and in an urban program in Connecticut¹⁴ for which the developers trained staff and provided extensive consultation. Both were quite comprehensive and included the main elements of IDDT; both studies were well done and have results over at least three years; neither study had a “usual care” or “parallel” control group (they compared ACT to intensive case management but did not find differences). Below are two measures of substance abuse change at the two programs.

1. Remission after three years
 - ❑ New Hampshire: 60% for bipolar; 40% for schizophrenic disorders; stable remission of at least 6 months=22% combined.
 - ❑ Connecticut: 33% (at last measure, not necessarily for 6 months)
2. Abstinence after three years
 - ❑ New Hampshire: 16% (abstinent at least 6 months)
 - ❑ Connecticut: 14% (abstinent at last measure, not necessarily for 6 months)

Information regarding implementation

A. Information about the implementation process and its success

1. The Fidelity Scale

As noted above, the SAMHSA IDDT researchers have taken an unusual approach to “fidelity.” The standard approach is summarized in this quote from a manual on EBP sponsored by the American College of Mental Health Administration¹⁵:

Fidelity is adherence to the key elements of an evidence-based practice, as described in the controlled experimental design, and that are shown to be critical to achieving the positive results found in a controlled trial.

The three steps in developing a fidelity scale then are a) determining a program model or practice is effective (preferably through randomized controlled trials) and b) determining what components of the program are associated with the effective outcomes, and c) measuring the effective elements with a scale that, when scored high, indicates (based on further empirical trials) that the effective outcomes in the randomized research will be replicated in the field.¹⁶

In contrast the SAMHSA approach has been to start with “principles” of IDDT that do not necessarily have an evidence base.¹⁷ This makes the SAMHSA IDDT fidelity scale in essence a test of fidelity to professional guidelines. Robert Drake of the Dartmouth Psychiatric Institute, rather than a consensus panel, is credited with developing the fidelity scale.

The scale as a whole is not yet validated. However, there is evidence that some of the elements in the fidelity scale are associated with improved outcomes. A study by Drake and others of 87 clients that looked at implementation of integrated substance abuse treatment in seven ACT programs attempted to identify program elements associated with more or less success.¹⁸ The components that appeared associated with better outcomes were: staff continuity; multi-disciplinary staff; community locus; assertive engagement; continuous responsibility; dual disorders model. Four to five of these appear to match items in the 14 item IDDT fidelity scale: multi-disciplinary staff, dual disorders model (motivational interventions in stages and individual and group dual diagnosis counseling), and outreach (which might subsume community locus and assertive engagement).

A number of specific items in the fidelity scale do have a separate evidence base (motivational interventions, group dual diagnosis treatment, dual diagnosis self-help groups) but these are not distinguished from or given more weight than others which have minimal evidence. Also some interventions with moderate evidence (therapeutic residential program and contingency management) are not included in the model, reflecting the change in research knowledge since the fidelity scale was put together.

In a study of 11 IDDT programs in a national demonstration, inter-rater reliability was .90.¹⁹ In the California IDDT implementation study, there was high inter-rater reliability but validity has been questionable on some items. That is, California raters agreed which of 5 scores to apply but found that descriptions embedded in the “anchors”

of the fidelity scale items did not always match the range of variability they found in different programs.

2. Implementation of the IDDT model

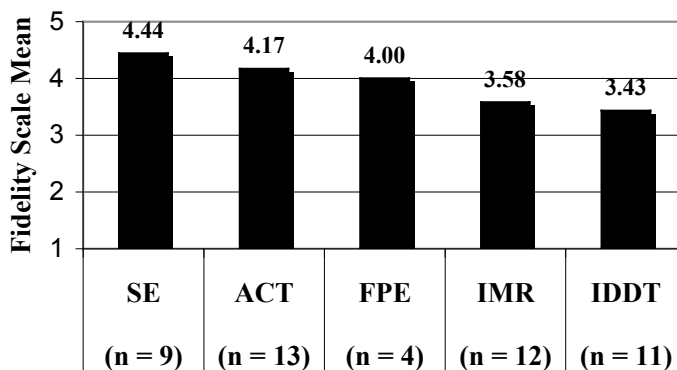
- a. *Extent.* In the first of two rounds of implementation sponsored by SAMHSA, 11 programs (in Indiana, Kansas and Ohio) were slated for implementation of IDDT. In the second round, California is implementing IDDT in 8 programs; other states are Vermont, Hawaii, North Carolina and Louisiana. Not all implementations focus on SMI clients. Ohio has implemented IDDT in over 20 programs over six years. A National Association of Mental Health Program Directors survey in 2004 reports 5 states are implementing IDDT statewide and 25 are implementing it in some places.
- b. *Success of implementation.* Information on implementation after two years is available on 11 programs in Gary Bond’s data base. (Ohio data may be available early in 2007.) The figure below shows “success” of implementation for all the EBPs he studied.

**National EBP Project:
2-Year Rates of
Successful Program Implementation**

	Successful (Fidelity >4)	Unsuccessful	Dropped Out
ACT	10 (77%)	3	
SE	8 (89%)	1	
IDDT	2 (15%)	9	2
IMR	6 (50%)	6	
FPE	3 (50%)	1	2
Total	29 (55%)	20	4

- c. *Difficulty of implementation.* Gary Bond uses the level of achieved fidelity after two years of implementation as a measure of how difficult the EBP model is to implement. IDDT is most difficult.

Fidelity by EBP 2 Years After Startup



Both the success rate and difficulty measure rely on the fidelity scales being equivalent—that a “4” on one scale equals a “4” on all other scales. Based on our experience in California with IDDT, this may not be the case.

d. *Barriers to implementation.* In Indiana researchers studied the implementation of ACT and IDDT.²⁰ They found that difficulties in implementing IDDT at the agency level stemmed from:

- Staff attitudes about addiction at some sites, particularly a belief that abstinence must precede treatment.
- The complex clinical skill set that is required by assessment, motivational interviewing and stage based interventions.
- Staff difficulty understanding the model in concrete terms.
- Failure to appoint and empower appropriate team leaders.
- The lack of detailed standards, such as are available for ACT.
- Lack of funding specifically for IDDT implementation

If you are considering implementing IDDT, please consult with the CIMH team from the SAMHSA grant for help on successful implementation.

4. Costs of implementation

- No report of the costs of high fidelity programs is available.

5. Implementation assistance available

a. Manual or other detailed description by developers: The Dartmouth Psychiatric Institute group has published what is essentially a textbook on IDDT. It is an excellent resource, although not a “manual.”²¹ The SAMHSA TIP 42, cited above under consensus recommendations, is a detailed manual for providing integrated treatment, though not restricted to SMI and not linked closely to the IDDT fidelity scale. The web version is available at:

<http://www.ncbi.nlm.nih.gov/books/bv.fcgi?rid=hstat5.chapter.74073>

A printed version is available free from:

<http://kap.samhsa.gov/products/manuals/tips/index.htm>

b. Developers available to assist: There are opportunities to obtain assistance either from the developers themselves or from experts in Ohio.

- c. The Ohio university-based implementation team has published an excellent guide to implementation:

Implementing IDDT: A step-by-step guide to stages of organizational change, by Ric Kruszynski, Paul M. Kubek, and Patrick E. Boyle (2006). Ohio SAMI CCOE, Case Western Reserve University.

Hyperlink to sample:

www.ohiosamiccoe.case.edu/library/media/ImplementingIDDTsample.pdf

Hyperlink to order form:

www.ohiosamiccoe.case.edu/library/media/ImplementingIDDTorderform.pdf

- d. *The SAMHSA Toolkit*. Like all the toolkits, this one contains descriptions of the practice from a number of perspectives as well as other implementation resources. It is available in Spanish.
- e. Other resources: CIMH consultants who have been involved in the SAMHSA IDDT implementation demonstration project (2004-2007) are available for various forms of consultation and training.

Endnotes

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- ¹ California's SAMHSA IDDT implementation project modified the fidelity scale to some degree, adding access to wet, dry and damp housing, for example. The revised scale is available from CIMH.
- ² Mueser, K. T., Noordsy, D. L., Drake, R. E., & Fox, L. B. (2003). *Integrated Treatment for Dual Disorders: A guide to effective practice*. New York: Guilford Press.
- ³ Chandler, D., & Spicer, G. Integrated treatment for jail recidivists with co-occurring psychiatric and substance use disorders. *Community Mental Health Journal*, 42(4), 405-425.
- ⁴ Drake, R. E., Morrissey, J. P., & Mueser, K. T. (2006). The Challenge of Treating Forensic Dual Diagnosis Clients: Comment on "Integrated Treatment for Jail Recidivists with Co-occurring Psychiatric and Substance Use Disorders". *Community Mental Health Journal*, 42(4), 427-432.
- ⁵ Mueser, K., Drake, R., Sigmon, S. C., & Brunette, M. (2005). Psychosocial interventions for adults with severe mental illnesses and co-occurring substance use disorders: A review of specific interventions. *Journal of Dual Diagnosis*, 1(2), 57-81. The quote refers to: Drake, R. E., Mueser, K. T., Brunette, M. F., & McHugo, G. J. (2004). A review of treatments for people with severe mental illnesses and co-occurring substance use disorders. *Psychiatric Rehabilitation Journal*, 27(4), 360-374.
- ⁶ McHugo, G. J., Drake, R. E., Brunette, M. F., Xie, H., Essock, S. M., & Green, A. I. (2006). Enhancing Validity in Co-occurring Disorders Treatment Research. *Schizophrenia Bulletin*, 32(4), 655-665.
- ⁷ The TIP 42 CSAT consensus publication on dual disorders supports a modified therapeutic community.
- ⁸ Members were Robert Drake, Kim Mueser, Leonora Cola and Fred Osher.
- ⁹ Ziedonis, D. M., Smelson, D., Rosenthal, R. N., Batki, S. L., Green, A. I., Henry, R. J., et al. (2005). Improving the care of individuals with schizophrenia and substance use disorders: consensus recommendations. *J Psychiatr Pract*, 11(5), 315-339.
- ¹⁰ *Best Practices: Concurrent Mental Health and Substance Use Disorders*. (2002.): Health Canada Publications Health Canada Ottawa, Ontario K1A 0K9.
- ¹¹ Treatment, C. f. S. A. (2005). Substance Abuse Treatment for Persons With Co-Occurring Disorders: Treatment Improvement Protocol (TIP) Series 42. Retrieved October 19, 2006, from <http://www.ncbi.nlm.nih.gov/books/bv.fcgi?rid=hstat5.chapter.74073>. A summary can be found at http://www.guideline.gov/summary/summary.aspx?doc_id=6849
- ¹² Mueser, K. T., Noordsy, D. L., Drake, R. E., & Fox, L. B. (2003). *Integrated Treatment for Dual Disorders: A guide to effective practice*. New York: Guilford Press.
- ¹³ There are multiple articles describing this research; see the CIMH literature review for citations and a summary table of measures and effect sizes.
- ¹⁴ Essock, S. M., Mueser, K. T., Drake, R. E., Covell, N. H., McHugo, G. J., Frisman, L. K., et al. (2006). Comparison of ACT and standard case management for delivering integrated treatment for co-occurring disorders. *Psychiatric Services*, 57(2), 185-196. Abstinence rate is from a personal communication with the authors.
- ¹⁵ Hyde, P. S., Falls, K., Morris, J., John A., & Schoenwald, S. K. (2003). *Turning Knowledge into Practice: A Manual for Behavioral Health Administrators and Practitioners About Understanding and Implementing Evidence-Based Practices*. Boston: Technical Assistance Collaborative, Inc., for The American College of Mental Health Administration.
- ¹⁶ Note that the SAMHSA ACT and Supported Employment fidelity scales are in line with the definition above: they are based on random controlled studies that show effectiveness and have at least some relationship to the components of the more successful programs.
- ¹⁷ Presentation by Gary Bond at the American Public Health Association meeting, November 15, 2003.
- ¹⁸ McHugo, G. J., Drake, R. E., Teague, G. B., & Xie, H. (1999). Fidelity to assertive community treatment and client outcomes in the New Hampshire dual disorders study. *Psychiatric Services*, 50(6), 818-824.
- ¹⁹ Presentation by Gary Bond, who is responsible for testing of the SAMHSA EBP fidelity scales, at the National EBP Meeting, Baltimore, MD, November 4, 2003.
- ²⁰ Moser, L. L., Deluca, N. L., Bond, G. R., & Rollins, A. L. (2004). Implementing evidence-based psychosocial practices: lessons learned from statewide implementation of two practices. *CNS Spectr*, 9(12), 926-936, 942.
- ²¹ Mueser, K. T., Noordsy, D. L., Drake, R. E., & Fox, L. B. (2003). *Integrated Treatment for Dual Disorders: A guide to effective practice*. New York: Guilford Press.