

IMPLEMENTING SAMHSA EVIDENCE-BASED PRACTICE TOOLKITS

The Individual Placement and Support Model of Supported Employment

Brief description of the practice

Target group: Seriously mentally ill individuals who are interested in competitive employment.

*Practice components:*ⁱ

- ❑ Eligibility is based on consumer choice. No one is excluded who wants to participate.
- ❑ Supported employment is integrated with treatment. Full-time employment specialists coordinate plans with the treatment team, e.g., case manager, therapist, psychiatrist, etc.
- ❑ Competitive employment is the goal. The focus is community jobs anyone can apply for that pay at least minimum wage, including part-time and full-time jobs.
- ❑ Job search starts soon after a consumer expresses interest in working. There are no requirements for completing extensive pre-employment assessment and training, or intermediate work experiences (like prevocational work units, transitional employment, or sheltered workshops).
- ❑ Follow-along supports are continuous. Individualized supports to maintain employment continue as long as consumers want the assistance.
- ❑ Consumer preferences are important. Choices and decisions about work and support are individualized based on the person's preferences, strengths, and experiences.

Extent of evidence for supported employment and the IPS model

A. Comprehensive Reviews

Several earlier reviewsⁱⁱ have now been superseded by a 2007 review that analyzes 11 randomized controlled trials.ⁱⁱⁱ Note that all 11 were found to be “high fidelity” implementations.

There were four clear findings regarding obtaining and retaining competitive employment (the primary outcome criterion). Competitive employment is defined as payment of minimum wage or more in integrated settings (not sheltered, or “transitional”). The control groups in the 11 studies are existing vocational programs.

- ❑ The competitive employment rate for the IPS group, averaged across programs, was 62% compared to 25% for the controls. All eleven studies showed a significantly greater employment rate using the IPS model.
- ❑ In the four studies with available data 43% of IPS members worked 20 hours a week or more compared to 14% of controls.

- ❑ Days to the first job was 50% faster, on average, for IPS participants as for controls (145 days vs. 214 days).
- ❑ Attrition rates in the five studies reporting retention were substantially lower for IPS participants than controls. Attrition ranged from 0% to 18% in IPS programs and from 16% to 70% in control groups.
- ❑ Average duration in the longest held competitive job for those who worked one such job ranged from 10 weeks to 37 weeks, depending on the study. Duration employed did not differ substantially for controls.

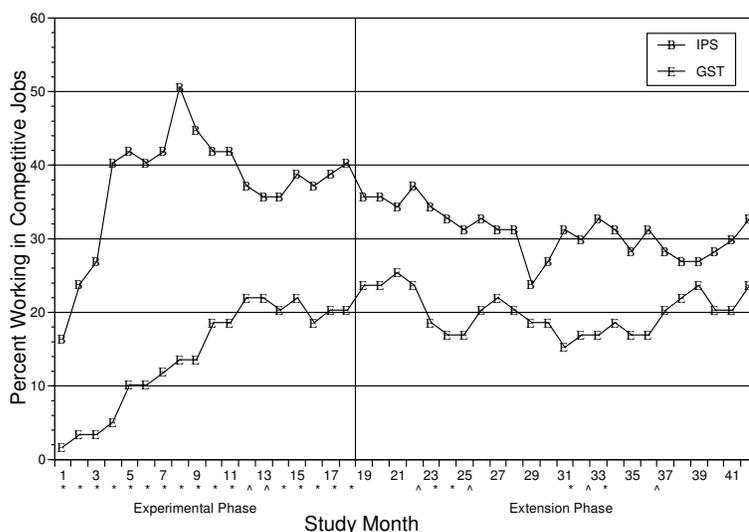
Thus the IPS model appears far more successful than conventional vocational programs in helping clients work competitively and in the speed with which jobs are found.

Support for individual principles. In addition Bond reviews evidence for the “principles” of SE described above (adding benefits counseling as a 7th principle), with these results:

- a. Strong evidence that services focused on competitive employment are effective and more recovery oriented than other kinds of employment.
 - b. Strong evidence that a wide range of consumers benefit with eligibility based only on desire to work.
 - c. Strong evidence that rapid job search for competitive employment rather than extensive preparation is more effective.
 - d. Moderate evidence for integration of SE with mental health treatment (as in the IPS model).
 - e. Moderate correlational evidence that attention to consumer preferences (tailoring the job) is effective.
 - f. Weak evidence that time-unlimited services and follow-along services are important (although this is a central tenet of the IPS model).
 - g. Weak evidence that benefits counseling affects earnings positively.
3. CIMH assessment of more recent evidence and open issues
- ❑ There are several issues regarding the IPS model for which there is a small to moderate amount of evidence.
 - a. Keeping jobs is more difficult than finding them. A majority of jobs held by persons in SE programs terminate unsatisfactorily. This has been investigated in an IPS program and in a Hong Kong replication.^{iv} Although, the EIDP demonstration showed that each job lasted longer (on average) and the time between jobs decreased, Lehman says about his IPS site: “...job retention for the patients in the IPS program was problematic. After initial success in obtaining work [42%], the monthly employment rate for the patients in the IPS program leveled off in the range of 15% to 20%, despite the ongoing job supports.” Consistent with this concern, a national data base of 4000 supported employment cases has documented a low

percentage of consumers working for more than 9 months on a job.^v As noted above, IPS programs do better in this regard than alternatives, but it remains an issue for further development.

- b. The longer-term outcomes of supported employment are not yet clear, since most studies end after 12-24 months. Four studies that a time frame longer than three years.^{vi} i) McHugo, Drake and Becker found competitive employment gains among IPS clients persisted through an entire 42 month period and that continuing services was important for continued outcomes. The figure below shows the percentage of experimental and control participants working over 41 months; the biggest gains are early on.



ii) Salyers et al. interviewed 36 early IPS clients after ten years and found one third had worked at least 5 years during that period, though few made the transition to full-time jobs with health benefits. “Clients reported that employment led to substantial benefits in diverse areas, such as improvements in self-esteem, hope, relationships, and control of substance abuse.” iii) Chandler Levin and Barry reported that a combined SE and psychosocial rehabilitation approach in the Village in Long Beach, California resulted over five years in increasing percentages of the 102 participants trying competitive work in second, third and fourth jobs but not in longer job duration; over the five years only 4% of jobs were 40 hours a week or more; and only one participant tried paid work in the 4th and 5th years who had not tried work earlier. iv) Becker interviewed 38 (49%) of persons taking parting in supported employment 8 to 12 years earlier. All worked in the follow-up and 71% worked more than half the follow-up years, but generally preferred half-time jobs. When re-interviewed, two thirds of those who were working worked competitively—the rest volunteered or were in non-competitive situations. Thus it appears that over the long term substantial gains are retained but employment for few is “normalized,” and continued vocational support is very important.

- c. The status and service needs of persons who do not succeed in finding competitive work are not clear. Leff et al. say: “It is important to point out that although...job development was effective for the acquisition of competitive employment for 57 percent of persons who received the service, 43 percent of EIDP participants (N=318) who received job development services were unable to obtain competitive employment. How these persons should be served is another

important question to be addressed.” Although rates of finding employment are somewhat higher for IPS programs than this, IPS does not have alternatives to offer those who do not find competitive employment.

In theory, psychosocial rehabilitation employment programs that present a range of competitive and non-competitive vocational options do have an alternative—those not wanting to work competitively can work in sheltered, transitional, or other non-competitive situations. However, a 2007 randomized controlled test^{vii} of IPS versus Thresholds, a very high quality psychosocial rehabilitation program in Chicago, showed that the psychosocial model was no more successful at engaging clients in paid employment (the rates were the same), but that for IPS all 75% working at all worked competitively vs. 34% for the psychosocial approach. Thus, it appears that offering participants a diversified “menu” of employment options does not result in enabling more participants to work but does mean that half of those who could work competitively remain in non-competitive situations.

- d. Drake et al. (1999) examine the question of whether there are negative effects of “rapid placement” approaches or of converting day treatment to supported employment, with this result that “...the data clearly demonstrate that there are no negative clinical outcomes or other serious consequences related to participating in IPS, working in competitive jobs, or leaving day treatment settings. That is, there are no measurable negative effects on symptoms, hospitalizations, homelessness, suicide, treatment dropout, self-esteem, or relationships. The only adverse effect that has been attributed to closing day centers is that a small number of clients express loneliness. For this reason drop-in centers, consumer-run programs, and other types of social clubs have been advocated as replacements for day treatment. [References omitted from the quotation.]^{viii}

C. Application of IPS in diverse cultural groups and subpopulations

- There is considerable research that considers the effectiveness of SE, and particularly IPS, on different diagnostic (and other clinical) subgroups. Although there are differences, there is no clinical subgroup that has been shown not to benefit, including schizophrenic spectrum disorders and persons with co-occurring substance use disorders as well as persons receiving SSI or SSDI. However, Bond points out that “The field currently lacks an adequate understanding of the role of societal, cultural, and regulatory factors in facilitating and hindering [IPS] employment outcomes.”^{ix}
- Implementations of IPS have taken place in a variety of geographic and cultural settings, including rural and urban settings in America, in Canada and in Hong Kong.^x

- D. Advice of Consensus Panels (if relevant): The SAMHSA SE Toolkit is a result of the consensus panel convened by Robert Wood Johnson.^{xi}

Capsule Summary of Evidence: Effective, Efficacious, Promising, or Emerging, Not Effective or Harmful

The multiple randomized controlled trials in real-life situations of supported employment and particularly the IPS model make it an *Effective* intervention to help consumers find competitive jobs. Less evidence supports the capacity to maintain employment for significant periods and the long-term effect of the interventions.

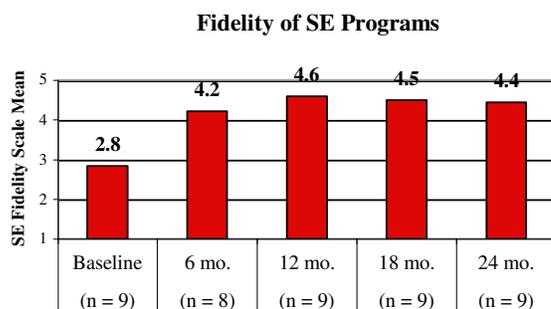
Information regarding implementation

A. Information about the implementation process and its success

1. Fidelity Scales: There are two fidelity scales available for supported employment. One is called the IPS Fidelity Scale^{xiii}, the second is the Quality of Supported Employment Implementation Scale.^{xiii} Gary Bond was a key participant in developing both scales, and they are quite similar. Both SE fidelity scales have the capacity to distinguish high fidelity from low fidelity programs. Both have high inter-rater reliability and known properties. Scores on both scales have been shown to correlate with client success in obtaining competitive employment. The IPS Fidelity Scale is shorter and is easy to implement. Gary Bond reports it was very useful in providing feedback to providers during program implementation. Both scales have been used widely. Overall, and giving considerable weight to the views of Gary Bond,^{xiv} we believe the IPS fidelity scale is probably better for California counties to use.
2. Extent of implementation

A National Association of Mental Health Program Directors survey in 2004 reports 22 states are implementing supported employment statewide and 19 are implementing it in some places.
3. Converting existing programs to IPS supported employment: an approach to implementation
 - ❑ Early IPS studies involved converting day treatment centers to supported employment. Later, IPS researchers helped the state of Rhode Island convert all day treatment centers to supported employment.^{xv} In all, the Bond review cited above reports that six studies show that far higher proportions of clients work after the conversion (taking the sites together 13% worked before conversion and 12% worked in control programs; after the conversion an average of 38% worked competitively, vs 15% in the control sites).
 - ❑ In Canada an ineffective sheltered workshop program was successfully converted to an IPS model of supported employment. Rates of competitive employment went from 5% to 50%.^{xvi}
4. Success of implementation

The figure below from the national EBP study shows that supported employment can be implemented quickly, achieving high fidelity within 6 months; high fidelity can also be maintained over time. Supported employment is one of the least difficult of the EBPs to implement.^{xvii}



5. Barriers to implementation and factors affecting success.

There are now a number of published studies looking at what predicts success or failure of IPS programs, and more broadly, success or failure of evidence-based practices in general.^{xviii} One finding from the National Evidence Based Practices Project, is worth noting. A major barrier was the negative attitudes of persons who already provided vocational services who were asked to change to the IPS model; so much so, that progress on implementation sometimes was delayed until there was staff turnover (Rapp, 2007 “Barriers”). Recent studies have also looked at accessing state-federal vocational rehabilitation funds.^{xix}

6. Costs of implementation and cost-effectiveness

- ❑ Costs per client year: Costs were studied in 7 programs in 7 states. All programs were of high fidelity. Assuming a caseload of 18, cost per full-year-equivalent client averaged \$2,449 per year, ranging from \$2,074 to \$2,756.^{xx}
- ❑ Cost-effectiveness: Two well-done studies have not documented that IPS is more cost effective than alternative approaches to which IPS was compared.^{xxi} Nor has participation in supported employment been found to reduce need for government income support.^{xxii}

B. Assistance available in implementation

1. Manual or other detailed description by developers. A book presenting the IPS model of SE in considerable detail and with many examples is an excellent resource.

A Working Life for People with Severe Mental Illness, by Deborah R. Becker and Robert E. Drake 2003 Oxford University Press

2. *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.
3. Availability of developers to assist with implementation. The IPS SE developers are available and, because it is such a widespread model, experts are available from many states including Oregon but unfortunately not California.

Endnotes

ⁱ Quoted from the Toolkit:

<http://mentalhealth.samhsa.gov/cmhs/communitysupport/toolkits/employment/SEpmhainfo.asp>

ⁱⁱ Crowther, R., M. Marshall, et al. (2001). "Vocational rehabilitation for people with severe mental illness."

Cochrane Database of Systematic Reviews(2): CD003080; Twamley, E. W., Jeste, D. V., & Lehman, A. F. (2003). Vocational rehabilitation in schizophrenia and other psychotic disorders: a literature review and meta-analysis of randomized controlled trials. *Journal of Nervous and Mental Disease*, 191(8), 515-523; Bond, G. R. (2004).

Supported employment: evidence for an evidence-based practice. *Psychiatric Rehabilitation Journal*, 27(4), 345-359.

ⁱⁱⁱ Bond, G. R., Drake, R. E., & Becker, D. R. (2008). An update on randomized controlled trials of evidence-based supported employment. *Psychiatric Rehabilitation Journal*, 31(4), 280-290.

^{iv} Becker, D. R., Drake, R. E., Bond, G. R., Xie, H., Dain, B. J., & Harrison, K. (1998). Job terminations among persons with severe mental illness participating in supported employment. *Community Mental Health Journal*, 34(1), 71-82; Mak, D. C., Tsang, H. W., & Cheung, L. C. (2006). Job termination among individuals with severe mental illness participating in a supported employment program. *Psychiatry*, 69(3), 239-248. Also see the Lehman 2002 study (op cit.).

^v McGrew, J. H. (2005). Performance-based funding of supported employment: A multi-site controlled trial. *Journal of Vocational Rehabilitation*, 23, 81-99. Indiana tried incentives to providers in order to increase the percentage of jobs lasting 9 months or more, which resulted in increasing the rate from 5% to 21%.

^{vi} McHugo, G., Drake, R. E., & Becker, D. R. (1998). The durability of supported employment effects *Psychiatric Rehabilitation Journal*, 22(55), 55-61; Salyers, M. P., Becker, D. R., Drake, R. E., Torrey, W. C., & Wyzik, P. F. (2004). A ten-year follow-up of a supported employment program. *Psychiatric Services*, 55(3), 302-308; Chandler, D., Levin, S., & Barry, P. (1999). The Menu Approach To Employment Services: Philosophy And Five Year Outcomes. *Psychiatric Rehabilitation Journal*, 23(1), 24-33; Becker, D., Whitley, R., Bailey, E. L., & Drake, R. E. (2007). Long-term employment trajectories among participants with severe mental illness in supported employment. *Psychiatric Services*, 58(7), 922-928.

^{vii} Bond, G. R., M. P. Salyers, et al. (2007). A randomized controlled trial comparing two vocational models for persons with severe mental illness. *Journal of Consulting and Clinical Psychology* 75(6): 968-82.

^{viii} A replication of earlier IPS studies in two Rhode Island sites by Becker et al found again that there was no change in hospitalization rates when SE was introduced. Becker, D. R., Bond, G. R., McCarthy, D., Thompson, D., Xie, H., McHugo, G. J., et al. (2001). Converting day treatment centers to supported employment programs in Rhode Island. *Psychiatric Services*, 52(3), 351-357.

^{ix} Razzano, L.A., Cook, J.A., Burke-Miller, J., Mueser, K.T., & Pickett-Schenk, S.A. Clinical factors associated with employment among people with severe mental illness. *The Journal of Nervous and Mental Disease*, 193, 705-713, 2005; Mueser, K.T., Essock, S.M., Haines, M., Wolfe, R., & Xie, H. Posttraumatic stress disorder, supported employment, and outcomes in people with severe mental illness. *CNS Spectrums*, 9, 913-925, 2004; Mueser, K.T., Salyers, M.P., & Mueser, P.R. A prospective analysis of work in schizophrenia. *Schizophrenia Bulletin*, 27(2), 281-296, 2001; Becker, DR, Drake, RE, & Naughton, W. Supported employment for people with co-occurring disorders. *Psychiatric Rehabilitation Journal*, 28(4), 332-338, 2005; Twamley, E. W., Padin, D. S., Bayne, K. S., Narvaez, J. M., Williams, R. E., & Jeste, D. V. (2005). Work rehabilitation for middle-aged and older people with schizophrenia: a comparison of three approaches. *Journal of Nervous and Mental Disease*, 193(9), 596-601 [note the authors state there are no controlled trials for older adults with SMI]; Bond, G. R., Xie, H., & Drake, R. E. (2007). Can SSDI and SSI beneficiaries with mental illness benefit from evidence-based supported employment? *Psychiatric Services*, 58(11), 1412-1420; Bond, G. R., & Drake, R. E. (2008). Predictors of competitive employment among patients with schizophrenia. *Current Opinion in Psychiatry*, 21(4), 362-369.

^x Drake, R.E., Fox, T.S., Leather, P.K., Becker, D.R., Musumeci, J.S., Ingram, W.F., & McHugo, G.J. Regional variation in competitive employment for persons with severe mental illness. *Administration and Policy in Mental Health*, 25(5), 493-504, 1998; Drake, R.E., McHugo, G.J., Bebout, R.R., Becker, D.R., Harris, M., Bond, G.R., & Quimby, E. A randomized clinical trial of supported employment for inner-city patients with severe mental illness. *Archives of General Psychiatry* 56, 627-633, 1999; Gold, P. B., Meisler, N., Santos, A. B., Carnemolla, M. A., Williams, O. H., & Keleher, J. (2006). Randomized trial of supported employment integrated with assertive community treatment for rural adults with severe mental illness. *Schizophrenia Bulletin*, 32(2), 378-395; Alverson, H., & Vincente, E. An ethnographic study of vocational rehabilitation for Puerto Rican Americans with severe mental illness. *Psychiatric Rehabilitation Journal*, 22(1), 69-72, 1998; Latimer, E. A.,

Lecomte, T., Becker, D. R., Drake, R. E., Duclos, I., Piat, M., et al. (2006). Generalisability of the individual placement and support model of supported employment: results of a Canadian randomised controlled trial. *British Journal of Psychiatry*, 189, 65-7; Mak, D. C., Tsang, H. W., & Cheung, L. C. (2006). Job termination among individuals with severe mental illness participating in a supported employment program. *Psychiatry*, 69(3), 239-248; Alverson, H., & Vincente, E. An ethnographic study of vocational rehabilitation for Puerto Rican Americans with severe mental illness. *Psychiatric Rehabilitation Journal*, 22(1), 69-72, 1998.

^{xi} Members were Gary Bond, Deborah Becker, Morris Bell, Charles Rapp, Will Torrey and Earnest Quimby.

^{xii} Bond, G. R., & Becker, D. R. (1997). A fidelity scale for the individual placement and support model of supported employment. *Journal of Rehabilitation Counseling*, 40(4), 240-250. The IPS scale has a .98 degree of inter-rater reliability in the national EBP trials, as reported by Gary Bond in his summary of project findings.

^{xiii} Bond, G. R., Picone, Jeff, Mauer, B., Fishbein, S., & Stout, R. (2000). The Quality of Supported Employment Implementation Scale. *Journal of Vocational Rehabilitation*, 14(3), 201-212.

^{xiv} Personal communication. October 26, 2006.

^{xv} Becker, D. R., Bond, G. R., McCarthy, D., Thompson, D., Xie, H., McHugo, G. J., et al. (2001). Converting day treatment centers to supported employment programs in Rhode Island. *Psychiatric Services*, 52(3), 351-357.

^{xvi} Oldman, J., Thomson, L., Calsaferrri, K., Luke, A., & Bond, G. R. (2005). A case report of the conversion of sheltered employment to evidence-based supported employment in Canada. *Psychiatric Services*, 56(11), 1436-1440.

^{xvii} But see a recent attempt to implement IPS as part of a rural ACT team for a list of problems that can beset implementation of even well-established models. Meisler, N., & Williams, O. (1998). Replicating effective supported employment models for adults with psychiatric disabilities. *Psychiatric Services*, 49(11), 1419-1421.

^{xviii} Gowdy, E. L., Carlson, L. S., & Rapp, C. A. (2003). Practices differentiating high-performing from low-performing supported employment programs. *Psychiatric Rehabilitation Journal*, 26(3), 232-239. The broad papers focused on EBPs, including IPS, include: Bond, G. R., Drake, R. E., McHugo, G. J., Rapp, C. A., & Whitley, R. (2007). *Strategies for Improving Fidelity in the National Evidence-Based Practices Project*. Paper presented at the International Conference on Implementation and Translational Research; Carlson, L., & Rapp, C. A. (2007). Consumer Preference and Individualized Job Search. *American Journal of Psychiatric Rehabilitation*, 10(2), 123 – 130; Isett, K. R., Burnam, M. A., Coleman-Beattie, B., Hyde, P. S., Morrissey, J. P., Magnabosco, J., et al. (2007). The state policy context of implementation issues for evidence-based practices in mental health. *Psychiatric Services*, 58(7), 914-921; Marty, D., Rapp, C., McHugo, G., & Whitley, R. (2007). Factors Influencing Consumer Outcome Monitoring in Implementation of Evidence-Based Practices: Results from the National EBP Implementation Project. *Administration and Policy in Mental Health*, *In press*; McHugo, G. J., Drake, R. E., Whitley, R., Bond, G. R., Campbell, K., Rapp, C. A., et al. (2007). Fidelity outcomes in the national implementing evidence-based practices project. *Psychiatric Services*, 58(10), 1279-1284; Rapp, C., Etzel-Wise, D., Marty, D., Coffman, M., Carlson, L., Asher, D., et al. (2007). Barriers to evidence-based practice implementation: Results of a qualitative study. *In press*; Bond, G. R., McHugo, G. J., Becker, D. R., Rapp, C. A., & Whitley, R. (2008). Fidelity of supported employment: lessons learned from the National Evidence-Based Practice Project. *Psychiatric Rehabilitation Journal*, 31(4), 300-305.

^{xix} Fraser, V., Jones, A., Bond, G., et al., (2008). VR closure rates for two vocational models. *Psychiatric Rehabilitation Journal*, 31(4), 332-339.

^{xx} Latimer, E. A., Bush, P. W., Becker, D. R., Drake, R. E., & Bond, G. R. (2004). The cost of high-fidelity supported employment programs for people with severe mental illness. *Psychiatric Services*, 55(4), 401-406.

^{xxi} Clark, R. E., Xie, H., Becker, D. R., & Drake, R. E. (1998). Benefits and costs of supported employment from three perspectives. *Journal of Behavioral Health Services Research*, 25(1), 22-34; Dixon, L., Hoch, J. S., Clark, R., Bebout, R., Drake, R., McHugo, G., et al. (2002). Cost-effectiveness of two vocational rehabilitation programs for persons with severe mental illness. *Psychiatric Services*, 53(9), 1118-1124.

^{xxii} Clark, R. E., Dain, B. J., Xie, H., Becker, D. R., & Drake, R. E. (1998). The economic benefits of supported employment for persons with mental illness. *Journal of Mental Health Policy and Economics*, 1(2), 63-71.