Supported Employment: Assessing the Evidence

Tina Marshall, Ph.D.
Richard W. Goldberg, Ph.D.
Lisa Braude, Ph.D.
Richard H. Dougherty, Ph.D.
Allen S. Daniels, Ed.D.
Sushmita Shoma Ghose, Ph.D.
Preethy George, Ph.D.
Miriam E. Delphin-Rittmon, Ph.D.

Objective: **Supported employment is a direct service with multiple components designed to help adults with mental disorders or co-occurring mental and substance use disorders choose, acquire, and maintain competitive employment. This article describes supported employment and assesses the evidence base for this service.** ***Methods:*** **Authors reviewed meta-analyses, research reviews, and individual studies from 1995 through 2012. Databases surveyed were PubMed, PsycINFO, Applied Social Sciences Index and Abstracts, Sociological Abstracts, Social Services Abstracts, Published International Literature on Traumatic Stress, the Educational Resources Information Center, and the Cumulative Index to Nursing and Allied Health Literature. Authors chose from three levels of evidence (high, moderate, and low) based on benchmarks for the number of studies and quality of their methodology. They also described the evidence for service effectiveness.** ***Results:*** **The level of research evidence for supported employment was graded as high, based on 12 systematic reviews and 17 randomized controlled trials of the individual placement and support model. Supported employment consistently demonstrated positive outcomes for individuals with mental disorders, including higher rates of competitive employment, fewer days to the first competitive job, more hours and weeks worked, and higher wages. There was also strong evidence supporting the effectiveness of individual elements of the model.** ***Conclusions:*** **Substantial evidence demonstrates the effectiveness of supported employment. Policy makers should consider including it as a covered service. Future research is needed for subgroups such as young adults, older adults, people with primary substance use disorders, and those from various cultural, racial, and ethnic backgrounds. (*Psychiatric Services* 65:16–23, 2014; doi: 10.1176/appi.ps.201300262)**

Dr. Marshall, Dr. Daniels, Dr. Ghose, and Dr. George are with Westat, Rockville, Maryland. Dr. Goldberg is with the Mental Illness Research, Education and Clinical Center, U.S. Department of Veterans Affairs Capitol Health Care Network, Baltimore. Dr. Braude and Dr. Dougherty are with DMA Health Strategies, Lexington, Massachusetts. Dr. Delphin-Rittmon is with the Office of Policy, Planning, and Innovation, Substance Abuse and Mental Health Services Administration (SAMHSA), Rockville. Send correspondence to Dr. George (e-mail: preethygeorge@westat.com). *This article is part of a series of literature reviews that will be published in* Psychiatric Services *over the next several months. The reviews were commissioned by SAMHSA through a contract with Truven Health Analytics and were conducted by experts in each topic area, who wrote the reviews along with authors from Truven Health Analytics, Westat, DMA Health Strategies, and SAMHSA. Each article in the series was peer reviewed by a special panel of* Psychiatric Services *reviewers.*

Supported employment is a well-defined and extensively researched approach to helping individuals with mental disorders obtain and maintain competitive employment. Despite estimates that up to 70% of adults with mental illness would like to work and approximately 60% can be successful at working when using supported employment services (1), one recent survey estimated that only 2% of people with serious mental illness receive any form of supported employment (2).

This article reports the results of a literature review that was undertaken as part of the Assessing the Evidence Base Series (see box on next page). For purposes of this series, the Substance Abuse and Mental Health Services Administration (SAMHSA) describes supported employment as a direct service with multiple components. It aims to help adults with mental disorders or with co-occurring mental and substance use disorders choose, acquire, and maintain competitive employment. An emphasis is placed on consumer preference and rapid job search rather than on prolonged pre-employment preparation. Table 1 presents a definition and description of the service elements.

The objectives of this review were to describe the components of supported employment, rate the level of evidence (methodological quality) of existing studies of supported employment, and provide a concise summary of its overall effectiveness. The review was limited

to adults with mental disorders or with co-occurring mental and substance use disorders. We also examined the effectiveness of specific components of supported employment to assess the strength of the model, as well as the impact of supported employment in various geographic settings and for various populations.

Description of the service

For the purposes of this series, the definition of supported employment is drawn from the individual placement and support (IPS) model—the most well-defined and researched model of supported employment—and from evidence-based resources developed by SAMHSA (1). The primary goal of IPS supported employment is to help participants achieve competitive employment, which is defined as jobs paying at least minimum wage that are located in socially integrated community settings and that are held by consumers directly and not reserved for individuals with disabilities or held by provider agencies (1).

The IPS model includes the following key principles: services focusing on competitive employment; eligibility based on consumer choice (interest or desire) and not on traditional considerations of "work readiness" (for example, diagnosis and symptoms); rapid job search rather than lengthy pre-employment assessment, training, and counseling; integration of rehabilitation and mental health services, so that employment specialists participate regularly in clinical team planning; attention to consumer choice, so that services are based on consumer preferences rather than on provider judgments; time-unlimited and individualized follow-along support; systematic job development; and personalized benefits counseling. The integration of mental health services, the focus on rapid job search for competitive employment, and the provision of supports while on the job differentiates supported employment from traditional vocational or rehabilitative approaches.

Supported employment is also defined by the Supported Employment Fidelity Scale (3), which is often used to provide feedback, guide training, and monitor the extent to which programs are implementing the model as it was designed to be implemented. Research shows consistent, positive associations between the Supported Employment Fidelity Scale and competitive employment outcomes (4,5).

About the AEB Series

The Assessing the Evidence Base (AEB) Series presents literature reviews for 14 commonly used, recovery-focused mental health and substance use services. Authors evaluated research articles and reviews specific to each service that were published from 1995 through 2012 or 2013. Each AEB Series article presents ratings of the strength of the evidence for the service, descriptions of service effectiveness, and recommendations for future implementation and research. The target audience includes state mental health and substance use program directors and their senior staff, Medicaid staff, other purchasers of health care services (for example, managed care organizations and commercial insurance), leaders in community health organizations, providers, consumers and family members, and others interested in the empirical evidence base for these services. The research was sponsored by the Substance Abuse and Mental Health Services Administration to help inform decisions about which services should be covered in public and commercially funded plans. Details about the research methodology and bases for the conclusions are included in the introduction to the AEB Series (6).

Methods

Search strategy

We conducted a literature search of articles published from 1995 through 2012. We searched major databases: PubMed (U.S. National Library of Medicine and National Institutes of Health), PsycINFO (American Psychological Association), Applied Social Sciences Index and Abstracts, Sociological Abstracts, Social Services Abstracts, Published International Literature on Traumatic Stress, the Educational Resources Information Center, and the Cumulative Index to Nursing and Allied Health Literature. We also examined bibliographies of major reviews and meta-analyses. Search terms included supported employment, individual placement and support, IPS, and vocational rehabilitation.

Table 1

Description of supported employment

Feature	Description
Service definition	Supported employment is a direct service with multiple components that provides a person with a mental or substance use disorder, for whom employment is difficult to secure, with specialized assistance in choosing, acquiring, and maintaining competitive employment. Supported employment services may include rapid job search, integration of rehabilitation and mental health services, job development, benefits counseling, and individualized follow-along supports that are necessary to sustain employment.
Service goals	Help participants achieve competitive employment in socially integrated community settings and in jobs held directly by consumers rather than provider agencies
Populations	Adults with mental disorders or co-occurring mental and substance use disorders
Settings of service delivery	Generally, outpatient mental health facilities

Inclusion and exclusion criteria

The following types of articles were included: randomized controlled trials (RCTs), quasi-experimental studies, and single-group time-series design studies; review articles, such as meta-analyses and systematic reviews; U.S. and international studies in English; and studies that focused on supported employment for individuals with mental disorders or co-occurring mental and substance use disorders. Participants were adults age 18 years and older.

We excluded studies that were focused on populations with developmental disabilities or other health conditions and populations of children and adolescents. We also excluded studies focused on linking consumers with sheltered workshops or other employment models that were contrary to supported employment principles.

Strength of the evidence

The methodology used to rate the strength of the evidence is described in detail in the introduction to this series (6). The research designs of the studies that met the inclusion criteria were examined. Three levels of evidence (high, moderate, and low) were used to indicate the overall research quality of the collection of studies. Ratings were based on predefined benchmarks that considered the number of studies and their methodological quality. In rare instances when the ratings were dissimilar, a consensus opinion was reached.

In general, high ratings indicate confidence in the reported outcomes and are based on three or more RCTs with adequate designs or two RCTs plus two quasi-experimental studies with adequate designs. Moderate ratings indicate that there is some adequate research to judge the service, although it is possible that future research could influence reported results. Moderate ratings are based on the following three options: two or more quasi-experimental studies with adequate design; one quasi-experimental study plus one RCT with adequate design; or at least two RCTs with some methodological weaknesses or at least three quasi-experimental studies with some methodological weaknesses. Low ratings indicate that research for this service is not adequate to draw evidence-based conclusions. Low ratings indicate that studies have nonexperimental designs, there are no RCTs, or there is no more than one adequately designed quasi-experimental study.

We accounted for other design factors that could increase or decrease the evidence rating, such as how the service, populations, and interventions were defined; use of statistical methods to account for baseline differences between experimental and comparison groups; identification of moderating or confounding variables with appropriate statistical controls; examination of attrition and follow-up; use of psychometrically sound measures; and indications of potential research bias.

Effectiveness of the service

We described the effectiveness of the service—that is, how well the outcomes of the studies met the goals of supported employment. We compiled the findings for separate outcome measures and study populations, summarized the results, and noted differences across investigations. We considered the quality of the research design in our conclusions about the strength of the evidence and the effectiveness of the service. We also considered whether, based on the evidence, the practice should be recommended as a covered service in public and commercially funded plans.

Results

Level of evidence

Supported employment met rating criteria for the high level of evidence, which was assigned to services with three or more well-designed RCTs. We identified 12 systematic reviews (7–18). The reviews included 17 RCTs (19–35) that compared the IPS model of supported employment to a control condition. Features of the RCTs and their findings are summarized in Table 2. In addition, one review presented findings from four studies that focused on conversion of day treatment programs to supported employment (15).

Studies generally recruited adults who were interested in receiving supported employment in outpatient mental health settings. Supported employment is rarely funded by states for people with substance use disorders alone; most states use existing vocational education and training funds for people with substance use disorders alone. Across studies, participants met each state's (or province's) criteria for serious mental illness, which typically was defined as having a *DSM-IV* axis I diagnosis such as schizophrenia or bipolar disorder. In almost all studies, participants were unemployed at the time of study admission. Many studies required participants to attend an average of two research information meetings, during which the project was explained before they gave consent to participate. Studies were conducted across a wide range of socioeconomic and cultural contexts.

Effectiveness of the service

Supported employment consistently had better outcomes than traditional vocational rehabilitation approaches. The main outcome that was measured in all studies was rate of attainment of competitive employment among participants. A number of studies also examined wages earned, hours worked per week, time to first job, and job tenure. Some studies included nonvocational outcomes, such as drug and alcohol use, psychiatric symptoms, hospitalization, self-esteem, quality of life, social functioning, perception of well-being, self-efficacy, and poverty.

Employment outcomes. Participants receiving supported employment had significantly higher rates of competitive employment (7,9,13). Several systematic reviews that averaged the rates across studies found that the mean competitive employment rate was between 58% and 60% for those receiving supported employment, compared with 23%–24% for control conditions (8,9,13). Multisite studies, such as the Employment Intervention Demonstration Project (EIDP) (36) and the Mental Health Treatment study (24,37), found that supported employment participants were more likely to be competitively employed: 55% of intervention participants versus 34% of participants in control conditions and 52% of intervention versus 33% of control participants, respectively. Other employment outcomes that were significantly improved across RCTs for individuals receiving supported

Table 2

Randomized controlled trials of the individual placement and support (IPS) model of supported employment included in the review[a]

Study	IPS sample	Control sample	Comparison condition	Outcomes measured	Findings
Drake et al., 1996 (22)	73	67	Group skills training	Competitive employment, hours per week, wages, weeks in the longest job, global functioning, quality of life, self-esteem, psychiatric symptoms	IPS participants were more likely to be employed competitively, work more total hours, and earn more total wages.
Drake et al., 1999 (23)	74	76	Enhanced vocational rehabilitation	Type of employment (competitive, sheltered, or other); hours worked; hourly wage; satisfaction with income, job, and vocational services; global functioning; quality of life; self-esteem; psychiatric symptoms	IPS participants were more likely to be employed competitively and work at least 20 hours per week. The comparison group had higher rates of sheltered employment.
Lehman et al., 2002 (30)	113	106	Psychosocial rehabilitation	Competitive employment, hours worked, monthly wage, quality of life, self-esteem, work motivation, attitudes toward medications, general health	IPS participants were more likely to work, be employed competitively, work more cumulative hours, and earn more wages.
Mueser et al., 2004 (32)	68	136	Psychosocial rehabilitation and brokered supported employment	Competitive employment, type of job, hours worked, wages earned, job tenure, job satisfaction, psychiatric symptoms, overall functioning, social functioning, social networks, quality of life, self-esteem	IPS participants were more likely to work competitively or in any paid work.
Gold et al., 2006 (25)	66	77	Sheltered workshop	Type of jobs per worker, earned income, weeks worked, hours worked, weeks per job, weeks for longest job, weeks to first job, hours per week per job, wage rate by job, psychiatric symptoms, quality of life, hospitalizations	Assertive community treatment–IPS participants held more competitive jobs and earned more income.
Latimer et al., 2006 (29)	75	74	Traditional vocational services	Competitive employment, hours worked, salary conditions, type of work, quality of life, social network, self-esteem, psychiatric symptoms, overall functioning	IPS participants were significantly more likely to obtain competitive employment and work more hours.
Bond et al., 2007 (20)	92	95	Diversified placement	Competitive employment, job tenure, job satisfaction, social networks, hospitalizations, independent living, psychiatric symptoms, quality of life	IPS participants had significantly better competitive employment rates over two years. No differences were found for paid employment.
Burns et al., 2007 (19)	156	156	Train-place model	Competitive employment, hours worked, days employed, job tenure, service duration, hospitalization, clinical and social functioning, quality of life	IPS was more effective for every vocational outcome. Individuals in the comparison group were significantly more likely to drop out of services and be readmitted to the hospital.
Killackey et al., 2008 (28)	20	21	Treatment as usual	Competitive employment, number of jobs, number of education courses, hourly wage, hours worked per week, job tenure, symptoms, quality of life	IPS participants had significantly better outcomes on level of employment, hours worked per week, jobs acquired, and longevity of employment.
Kin Wong et al., 2008 (35)	46	46	Sheltered workshops	Competitive employment, time to first job, total days employed, total earnings, psychiatric symptoms, quality of life	IPS participants were more likely to work competitively, hold a greater number of jobs, earn more income, work more days, and sustain longer job tenure.
Twamley et al., 2008 (34)	28	22	Vocational rehabilitation referral	Competitive employment, time to first job, job tenure, wages, quality of life	IPS participants were more likely to work competitively, work more weeks, and earn more wages.
Frey et al., 2011 (24)	1,121	1,117	Usual care	Employment rate, general health status, mental health status, quality of life	Participants in the intervention were more likely to find paid employment and reported better mental health and quality of life.

Continues on next page

Table 2

Continued from previous page

Study	IPS sample	Control sample	Comparison condition	Outcomes measured	Findings
Heslin et al., 2011 (26)	93	95	Usual care	Competitive employment, time to first job, number of jobs, hours worked, wage, type of job, overall costs, service costs, medication costs	IPS participants were significantly more likely to obtain competitive employment.
Michon et al., 2011 (31)	71	80	Traditional vocational services	Competitive employment, days worked, service use	IPS participants were significantly more likely to find competitive or paid work and to work more days in competitive jobs.
Davis et al., 2012 (21)	42	43	Standard Veterans Affairs vocational rehabilitation	Competitive employment; weeks, days, and hours worked; wage	IPS participants were significantly more likely to find competitive work, work more weeks, and earn a higher income.
Hoffman et al., 2012 (27)	46	54	Traditional vocational rehabilitation	Competitive employment, time to first job, job tenure, weeks worked, wage, psychiatric symptoms, global functioning, hospitalizations, coping with stress, quality of life	IPS participants were significantly more likely to find competitive work and work more weeks.
Nuechterlein et al., 2012 (33)	46	23	Brokered vocational rehabilitation	Competitive employment or continued education, type of job, type of continued education	IPS participants who also received skills training in a group setting were significantly more likely to return to work or school than those in the comparison group.

[a] Studies are listed in chronological order.

employment compared with those in control conditions included the number of hours worked, number of weeks worked per year, wages, and number of days to the first competitive job (7,8).

Research on the long-term effects of supported employment suggests that positive outcomes may be sustainable (38–40). For example, one study reported that about half of those who participated continued to work competitively over three to five years (41). Additional findings suggest positive outcomes for up to 12 years; 71% of those who were reinterviewed 12 years after receiving supported employment (N=38) reported working for more than half of the follow-up years (41). These findings are considered preliminary because of the small number of studies, design limitations, and sample sizes (8).

Nonvocational outcomes. Current research has not established a significant relationship between supported employment and nonvocational outcomes. Eleven RCTs of IPS consistently found no effects on nonvocational outcomes (42). Secondary analysis of data from four RCTs of IPS suggested that competitive employment may be associated with greater improvement over time in symptom control, quality of life, self-esteem, and social functioning, compared with no employment (27,29,30,32,34,43–46). Although the Mental Health Treatment Study found that supported employment participants had significantly improved mental health status, better quality of life, and reduced inpatient hospital use and psychiatric crisis visits, the supported employment model for this study was complemented by systematic medication management (24,37). Findings from the EIDP showed that extra income made a difference in quality of life, although earnings were not large enough to reduce poverty (47).

Effectiveness of individual service components. In addition to establishing the overall effectiveness of the supported employment model, some studies have focused on assessing the effectiveness of its individual elements. In his 2004 review, Bond (15) concluded that there is relatively strong evidence for the integration of vocational and mental health services, competitive employment, eligibility based on consumer choice, and rapid job search. For example, in the 2009 Schizophrenia Patient Outcomes Research Team study (7) and the EIDP (48), greater integration of mental health services and vocational services was associated with better outcomes. Other individual elements of supported employment that were associated with improved employment outcomes included job development and time-unlimited job support (47,49,50). However, the evidence suggests that the optimal level of job support fluctuates across time for each client (8).

Recent studies have also found support for the zero-exclusion criterion, which encourages all consumers to participate in supported employment regardless of current substance use, substance use background, or history with the criminal justice system. Findings indicated that substance use background was not associated with significant differences in employment outcomes (51). Although some evidence indicated that individuals with co-occurring mental and substance use disorders receiving supported employment had significantly better competitive work outcomes than those who received comparison vocational programs (52), other findings showed that individuals with co-occurring disorders had lower earnings and were less likely

to work competitively than those without comorbid conditions (53).

Specific populations. In recent years, research has moved beyond establishing overall effectiveness for supported employment and is now focused on exploring effectiveness for distinct populations of service users. Some evidence indicates that supported employment is effective across various geographic settings (25,54) and age groups, including young, middle-aged, and older adults (55,56). The evidence regarding supported employment and other demographic characteristics is mixed. Studies from the EIDP indicated that although supported employment improved employment outcomes for all study participants compared with conventional vocational rehabilitation, characteristics such as work history, age, and race-ethnicity were predictors of employment outcomes. For example, white participants were more likely than participants from minority racial or ethnic groups to obtain competitive employment, whereas participants from minority groups were more likely to work more hours per month (57,58). Young adults were more likely to obtain competitive jobs than older adults, and Hispanic or Latino participants were half as likely as others to obtain competitive jobs (59). Other studies concluded that supported employment produces better competitive employment outcomes than alternative vocational programs, regardless of background demographic characteristics and clinical diagnosis (14,20,23,30,32). Some studies found work history to be the only significant demographic predictor of job acquisition (11,51).

Discussion and conclusions

This review found a high level of evidence for the effectiveness of supported employment (see box on this page). Multiple RCTs of the IPS model of supported employment have consistently demonstrated positive outcomes for individuals with mental disorders. The findings of higher rates of competitive employment, fewer days to the first competitive job, more hours and weeks worked, and higher wages provide strong support for the effectiveness of supported employment. On the basis of the evidence, policy makers should consider including the IPS model of supported employment as a covered service as part of the full spectrum of options that support recovery from mental and substance use disorders.

The gap between the number of individuals with mental disorders who would like to work and those with access to supported employment is significant. Expansion of the funding mechanisms for supported employment can reduce that gap. Policy makers, including payers (for example, state mental health and substance use directors, managed care companies, and county behavioral health administrators), must consider mechanisms that would promote supported employment when determining how best to incorporate it into a full continuum of care.

In addition to strong evidence for the overall effectiveness of supported employment, there is strong evidence supporting the effectiveness of individual elements of the model, such as integration of vocational and mental health services. More research is needed on other components of the model—such as the type and intensity of job support—for different subgroups of participants (for example, people of various cultural, racial, or ethnic backgrounds). Further investigation into how supported employment should be adapted for subgroups is also indicated.

Some studies have examined adaptations to the IPS model of supported employment, such as involving peers as specialists (60–62) or adding other components, such as cognitive remediation (63,64), social skills training (33,65), and cognitive-behavioral therapy (66). There is substantial evidence that employment outcomes are better when there is greater fidelity to the supported employment model being used; however, more research is needed to determine whether adaptations are effective in improving outcomes for specific subgroups.

Supported employment is designed for adults, and this review excluded studies of adolescents. Adapting supported employment for adolescents of working age may yield important findings. Research suggests that adults with co-occurring mental and substance use disorders can use supported employment successfully to meet their goals; however, future work is warranted to tailor specific aspects of supported employment programs to the needs of those with co-occurring disorders. Further research is also needed to explore whether supported employment is effective for other populations, such as people with primary substance use disorders or traumatic brain injury (8).

Evidence for the effectiveness of the individual placement and support model of supported employment: high

Compared with control conditions, supported employment demonstrates consistent evidence for the following outcomes:

- High rates of competitive employment
- More hours worked
- More weeks worked per year
- Higher wages
- Fewer days to the first competitive job

Acknowledgments and disclosures

Development of the Assessing the Evidence Base Series was supported by contracts HHSS283200700029I/HHSS28342002T, HHSS283200700006I/HHSS28342003T, and HHSS2832007000171/HHSS28300001T from 2010 through 2013 from the Substance Abuse and Mental Health Services Administration (SAMHSA). The authors acknowledge the contributions of Risa Fox, M.S., Suzanne Fields, M.S.W., and Kevin Malone, B.A., from SAMHSA; John O'Brien, M.A., from the Centers for Medicare & Medicaid Services; Garrett Moran, Ph.D., from Westat; and John Easterday, Ph.D., Linda Lee, Ph.D., Rosanna Coffey, Ph.D., and Tami Mark, Ph.D., from Truven Health Analytics. The views expressed in this article are those of the authors and do not necessarily represent the views of SAMHSA.

The authors report no competing interests.

References

1. Substance Abuse and Mental Health Services Administration: Supported Employment: Building Your Program. DHHS pub no SMA-08-4364. Rockville, Md, Substance

Abuse and Mental Health Services Administration, Center for Mental Health Services, 2009

2. 2009 CMHS Uniform Reporting System Output Tables. Rockville, Md, Substance Abuse and Mental Health Services Administration, 2009. Available at www.samhsa.gov/dataoutcomes/urs/urs2009.aspx. Accessed Aug 6, 2013

3. Becker DR: Evidence-Based Supported Employment Fidelity Review Manual. Lebanon, NH, Dartmouth Psychiatric Research Center, 2011

4. Bond GR, Becker DR, Drake RE: Measurement of fidelity of implementation of evidence-based practices: case example of the IPS Fidelity Scale. Clinical Psychology: Science and Practice 18:126–141, 2011

5. Bond GR, Peterson AE, Becker DR, et al: Validation of the revised Individual Placement and Support Fidelity Scale (IPS-25). Psychiatric Services 63:758–763, 2012

6. Dougherty RH, Lyman DR, George P, et al: Assessing the evidence base for behavioral health services: introduction to the series. Psychiatric Services, 2013; doi 10.1176/appi.ps.201300214

7. Dixon LB, Dickerson F, Bellack AS, et al: The 2009 schizophrenia PORT psychosocial treatment recommendations and summary statements. Schizophrenia Bulletin 36:48–70, 2010

8. Drake RE, Bond GR, Becker DR: Individual Placement and Support: An Evidence-Based Approach to Supported Employment. New York, Oxford University Press, 2012

9. Bond GR, Drake RE, Becker DR: Generalizability of the Individual Placement and Support (IPS) model of supported employment outside the US. World Psychiatry 11:32–39, 2012

10. Wang C, Sung C, Hiatt E, et al: Effectiveness of Supported Employment on Competitive Employment Outcomes: A Meta-Analysis. Presented at the National Council of Rehabilitation Educators, Los Angeles, April 6–8, 2011

11. Campbell K, Bond GR, Drake RE: Who benefits from supported employment: a meta-analytic study. Schizophrenia Bulletin 37: 370–380, 2011

12. Kinoshita Y, Furukawa TA, Kinoshita K, et al: Supported employment for adults with severe mental illness. Cochrane Database of Systematic Reviews 9:CD008297, 2013

13. Bond GR, Drake RE, Becker DR: An update on randomized controlled trials of evidence-based supported employment. Psychiatric Rehabilitation Journal 31:280–290, 2008

14. Twamley EW, Jeste DV, Lehman AF: Vocational rehabilitation in schizophrenia and other psychotic disorders: a literature review and meta-analysis of randomized controlled trials. Journal of Nervous and Mental Disease 191:515–523, 2003

15. Bond GR: Supported employment: evidence for an evidence-based practice. Psychiatric Rehabilitation Journal 27:345–359, 2004

16. Crowther RE, Marshall M, Bond GR, et al: Helping people with severe mental illness to obtain work: systematic review. British Medical Journal 322:204–208, 2001

17. Bond GR, Becker DR, Drake RE, et al: Implementing supported employment as an evidence-based practice. Psychiatric Services 52:313–322, 2001

18. Bond GR, Drake RE, Mueser KT, et al: An update on supported employment for people with severe mental illness. Psychiatric Services 48:335–346, 1997

19. Burns T, Catty J, Becker T, et al; EQOLISE Group: The effectiveness of supported employment for people with severe mental illness: a randomised controlled trial. Lancet 370:1146–1152, 2007

20. Bond GR, Salyers MP, Dincin J, et al: A randomized controlled trial comparing two vocational models for persons with severe mental illness. Journal of Consulting and Clinical Psychology 75:968–982, 2007

21. Davis LL, Leon AC, Toscano R, et al: A randomized controlled trial of supported employment among veterans with post-traumatic stress disorder. Psychiatric Services 63:464–470, 2012

22. Drake RE, McHugo GJ, Becker DR, et al: The New Hampshire study of supported employment for people with severe mental illness. Journal of Consulting and Clinical Psychology 64:391–399, 1996

23. Drake RE, McHugo GJ, Bebout RR, et al: A randomized clinical trial of supported employment for inner-city patients with severe mental disorders. Archives of General Psychiatry 56:627–633, 1999

24. Frey WD, Drake RE, Bond GR, et al: Mental Health Treatment Study: Final Report to the Social Security Administration. Rockville, Md, Westat, 2011. Available at www.socialsecurity.gov/disabilityresearch/documents/MHTS_Final_Report_508.pdf. Accessed Aug 6, 2013

25. Gold PB, Meisler N, Santos AB, et al: Randomized trial of supported employment integrated with assertive community treatment for rural adults with severe mental illness. Schizophrenia Bulletin 32:378–395, 2006

26. Heslin M, Howard L, Leese M, et al: Randomized controlled trial of supported employment in England: 2 year follow-up of the Supported Work and Needs (SWAN) study. World Psychiatry 10:132–137, 2011

27. Hoffmann H, Jäckel D, Glauser S, et al: A randomised controlled trial of the efficacy of supported employment. Acta Psychiatrica Scandinavica 125:157–167, 2012

28. Killackey E, Jackson HJ, McGorry PD: Vocational intervention in first-episode psychosis: individual placement and support v treatment as usual. British Journal of Psychiatry. Journal of Mental Science 193: 114–120, 2008

29. Latimer EA, Lecomte T, Becker DR, et al: Generalisability of the individual placement and support model of supported employment: results of a Canadian randomised controlled trial. British Journal of Psychiatry 189:65–73, 2006

30. Lehman AF, Goldberg R, Dixon LB, et al: Improving employment outcomes for persons with severe mental illnesses. Archives of General Psychiatry 59:165–172, 2002

31. Michon HW, vanVugh M, van Busschbach J: Effectiveness of Individual Placement and Support: 18–30 Months Follow Up. Presented at the Enmesh Conference, Ulm, Germany, June 23–25, 2011

32. Mueser KT, Clark RE, Haines M, et al: The Hartford study of supported employment for persons with severe mental illness. Journal of Consulting and Clinical Psychology 72:479–490, 2004

33. Nuechterlein KH, Subotnik KL, Turner L, et al: Individual Placement and Support After an Initial Episode of Schizophrenia: Impact on School or Work Recovery, Hospitalization and Utilization of Disability Support. Presented at the 8th International Conference on Early Psychosis: From Neurobiology to Public Policy, San Francisco, Oct 11–13, 2012

34. Twamley EW, Narvaez JM, Becker DR, et al: Supported employment for middle-aged and older people with schizophrenia. American Journal of Psychiatric Rehabilitation 11:76–89, 2008

35. Kin Wong K, Chiu R, Tang B, et al: A randomized controlled trial of a supported employment program for persons with long-term mental illness in Hong Kong. Psychiatric Services 59:84–90, 2008

36. Cook JA, Leff HS, Blyler CR, et al: Results of a multisite randomized trial of supported employment interventions for individuals with severe mental illness. Archives of General Psychiatry 62:505–512, 2005

37. Drake RE, Frey W, Bond GR, et al: Assisting Social Security Disability Insurance beneficiaries with schizophrenia, bipolar disorder, or major depression in returning to work. American Journal of Psychiatry (Epub ahead of print, Aug 9, 2013)

38. Salyers MP, Becker DR, Drake RE, et al: A ten-year follow-up of a supported employment program. Psychiatric Services 55:302–308, 2004

39. McHugo GJ, Drake RE, Becker DR: The durability of supported employment effects. Psychiatric Rehabilitation Journal 22:55–61, 1998

40. Bond GR, Dietzen LL, McGrew JH, et al: Accelerating entry into supported employment for persons with severe psychiatric disabilities. Rehabilitation Psychology 40: 75–94, 1995

41. Becker DR, Whitley R, Bailey EL, et al: Long-term employment trajectories among participants with severe mental illness in supported employment. Psychiatric Services 58:922–928, 2007

42. Kukla M, Bond GR: A randomized controlled trial of evidence-based supported employment: nonvocational outcomes. Journal of Vocational Rehabilitation 38:91–98, 2013

43. Burns T, Catty J, White S, et al: The impact of supported employment and working on clinical and social functioning: results of an international study of individual placement and support. Schizophrenia Bulletin 35:949–958, 2009

44. Bond GR, Resnick SG, Drake RE, et al: Does competitive employment improve nonvocational outcomes for people with severe mental illness? Journal of Consulting and Clinical Psychology 69:489–501, 2001

45. Kukla M, Bond GR, Xie H: A prospective investigation of work and nonvocational outcomes in adults with severe mental illness. Journal of Nervous and Mental Disease 200:214–222, 2012

46. Mueser KT, Becker DR, Torrey WC, et al: Work and nonvocational domains of functioning in persons with severe mental illness: a longitudinal analysis. Journal of Nervous and Mental Disease 185:419–426, 1997

47. Cook JA, Blyler CR, Leff HS, et al: The employment intervention demonstration program: major findings and policy implications. Psychiatric Rehabilitation Journal 31:291–295, 2008

48. Cook JA, Lehman AF, Drake R, et al: Integration of psychiatric and vocational services: a multisite randomized, controlled trial of supported employment. American Journal of Psychiatry 162:1948–1956, 2005

49. Bond GR, Kukla M: Impact of follow-along support on job tenure in the individual placement and support model. Journal of Nervous and Mental Disease 199:150–155, 2011

50. Leff HS, Cook JA, Gold PB, et al: Effects of job development and job support on competitive employment of persons with severe mental illness. Psychiatric Services 56:1237–1244, 2005

51. Campbell K, Bond GR, Drake RE, et al: Client predictors of employment outcomes in high-fidelity supported employment: a regression analysis. Journal of Nervous and Mental Disease 198:556–563, 2010

52. Mueser KT, Campbell K, Drake RE: The effectiveness of supported employment in people with dual disorders. Journal of Dual Diagnosis 7:90–102, 2011

53. Cook JA, Razzano LA, Burke-Miller JK, et al: Effects of co-occurring disorders on employment outcomes in a multisite randomized study of supported employment for people with severe mental illness. Journal of Rehabilitation Research and Development 44:837–849, 2007

54. Haslett WR, Drake RE, Bond GR, et al: Individual placement and support: does rurality matter? American Journal of Psychiatric Rehabilitation 14:237–244, 2011

55. Baksheev GN, Allott K, Jackson HJ, et al: Predictors of vocational recovery among young people with first-episode psychosis: findings from a randomized controlled trial. Psychiatric Rehabilitation Journal 35: 421–427, 2012

56. Twamley EW, Vella L, Burton CZ, et al: The efficacy of supported employment for middle-aged and older people with schizophrenia. Schizophrenia Research 135:100–104, 2012

57. Burke-Miller JK, Cook JA, Grey DD, et al: Demographic characteristics and employment among people with severe mental illness in a multisite study. Community Mental Health Journal 42:143–159, 2006

58. Razzano LA, Cook JA, Burke-Miller JK, et al: Clinical factors associated with employment among people with severe mental illness: findings from the employment intervention demonstration program. Journal of Nervous and Mental Disease 193: 705–713, 2005

59. Burke-Miller J, Razzano LA, Grey DD, et al: Supported employment outcomes for transition age youth and young adults. Psychiatric Rehabilitation Journal 35:171–179, 2012

60. Kaufmann CL: The Self Help Employment Center: some outcomes from the first year. Psychosocial Rehabilitation Journal 18: 145–162, 1995

61. Kern RS, Zarate R, Glynn SM, et al: A demonstration project involving peers as providers of evidence-based, supported employment services. Psychiatric Rehabilitation Journal 36:99–107, 2013

62. Swarbrick M, Bates F, Roberts M: Peer Employment Support (PES): a model created through collaboration between a peer-operated service and university. Occupational Therapy in Mental Health 25:325–334, 2009

63. McGurk SR, Mueser KT, Feldman K, et al: Cognitive training for supported employment: 2–3 year outcomes of a randomized controlled trial. American Journal of Psychiatry 164:437–441, 2007

64. McGurk SR, Mueser KT, Pascaris A: Cognitive training and supported employment for persons with severe mental illness: one-year results from a randomized controlled trial. Schizophrenia Bulletin 31: 898–909, 2005

65. Mueser KT, Aalto S, Becker DR, et al: The effectiveness of skills training for improving outcomes in supported employment. Psychiatric Services 56:1254–1260, 2005

66. Vauth R, Corrigan PW, Clauss M, et al: Cognitive strategies versus self-management skills as adjunct to vocational rehabilitation. Schizophrenia Bulletin 31:55–66, 2005