The Evidence

Supported Employment

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The Evidence

*The Evidence* introduces all stakeholders to the research literature and other resources on Supported Employment. This booklet includes the following resources:

- A document that reviews the research literature,
- A selected bibliography for further reading,
- References for the citations presented throughout the KIT, and
- Acknowledgements of KIT developers and contributors.
This KIT is part of a series of Evidence-Based Practices KITs created by the Center for Mental Health Services, Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services.

This booklet is part of the Supported Employment KIT that includes a DVD, CD-ROM, and seven booklets:

- How to Use the Evidence-Based Practices KITs
- Getting Started with Evidence-Based Practices
- Building Your Program
- Training Frontline Staff
- Evaluating Your Program
- The Evidence
- Using Multimedia to Introduce Your EBP
What's in *The Evidence*

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A number of research articles summarize the effectiveness of Supported Employment (SE). This KIT includes a full-text copy of one of them:


This article describes the critical components of the evidence-based model and its effectiveness. Barriers to implementation and strategies for overcoming them are also discussed, based on successful experiences in several states.

You may view this article or print it from the CD-ROM in your KIT. For a printed copy, see page 3.
Implementing Supported Employment as an Evidence-Based Practice

Gary R. Bond, Ph.D.
Deborah R. Becker, M.Ed.
Robert E. Drake, M.D., Ph.D.
Charles A. Rapp, Ph.D.
Neil Meisler, M.S.W.
Anthony F. Lehman, M.D., M.S.P.H.
Morris D. Bell, Ph.D.
Crystal R. Blyler, Ph.D.

Supported employment for people with severe mental illness is an evidence-based practice, based on converging findings from eight randomized controlled trials and three quasi-experimental studies. The critical ingredients of supported employment have been well described, and a fidelity scale differentiates supported employment programs from other types of vocational services. The effectiveness of supported employment appears to be generalizable across a broad range of client characteristics and community settings. More research is needed on long-term outcomes and on cost-effectiveness. Access to supported employment programs remains a problem, despite their increasing use throughout the United States. The authors discuss barriers to implementation and strategies for overcoming them based on successful experiences in several states. (Psychiatric Services 52:313–322, 2000)

As a result of more than two decades of research, we know a great deal about improving outcomes and enhancing the recovery process for persons with severe mental illness by providing effective mental health services. Unfortunately, the implementation of interventions that have been shown to be effective by research, termed here evidence-based practices, lags considerably behind the state of knowledge. Individuals with severe mental disorders such as schizophrenia are unlikely to receive treatment with basic evidence-based practices in routine mental health settings (1). Implementation of evidence-based practices must overcome many obstacles, some generic and some specific to a particular evidence-based practice. Nevertheless, the field of mental health services is slowly committing itself to providing research-based services as the foundation of care (2).

In this paper, the first of several on specific evidence-based practices for persons with severe mental illness, we discuss supported employment, a recent approach to vocational rehabilitation that has proved to be consistently more effective than traditional approaches. Our goals are to familiarize clients, families, clinicians, administrators, and mental health policy makers with supported employment; to review the findings and limitations of current research; and to discuss implementation issues, including availability, barriers, and strategies. Because several recent reviews of research on supported employment already exist (3–7), our intent is to provide information that is accessible to stakeholder groups other than researchers.

Supported employment

Supported employment is a well-defined approach to helping people with disabilities participate as much as possible in the competitive labor market, working in jobs they prefer with the level of professional help they need. According to the federal definition, supported employment means “competitive work in integrated work settings . . . consistent with the strengths, resources, priorities, concerns, abilities, capabilities, interests, and informed choice of the individuals, for individuals with the most significant disabilities for whom competitive employment has not traditionally occurred; or for whom competitive employment has been inter-
rupted or intermittent as a result of a significant disability” (8).

Although the federal definition of supported employment includes reference to transitional employment, that is, temporary community job placements, the two are very different, both conceptually and in practice (9). Many agencies offer both, and when they do, practitioners understand them to be different approaches; transitional employment is seen as a step toward supported employment (10). We do not discuss transitional employment in this paper.

Although many supported employment principles have been espoused for decades (11), these ideas crystallized in the 1980s through the efforts of a national network of educators, who concluded that sheltered workshops isolate people with developmental disabilities from mainstream society (12). This network was successful in changing federal regulations on the types of services funded by the federal-state vocational rehabilitation system.

By 1987 supported employment had attracted attention in the psychiatric rehabilitation field (13). As adapted for this population, supported employment programs typically provide individual placements in competitive employment—that is, community jobs paying at least minimum wage that any person can apply for—in accord with client choices and capabilities, without requiring extended prevocational training. Unlike other vocational approaches (4,14), supported employment programs do not screen people for work readiness, but help all who say they want to work; they do not provide intermediate work experiences, such as prevocational work units, transitional employment, or sheltered workshops; they actively facilitate job acquisition, often sending staff to accompany clients on interviews; and they provide ongoing support once the client is employed.

Supported employment programs are found in a wide variety of service contexts, including community mental health centers, community rehabilitation programs, clubhouses, and psychiatric rehabilitation centers (10, 15,16). Although the evidence suggests that supported employment is optimally effective only when clients concurrently receive adequate case management, it is not necessarily limited to specific service model such as assertive community treatment.

The most comprehensively described supported employment approach for people with severe mental illness is the individual placement and support model (17,18). We do not view this approach as a distinct supported employment model. Instead, it is intended as a standardization of supported employment principles in programs for people with severe mental illness, so that supported employment can be clearly described, scientifically studied, and implemented in communities. In fact, a survey of 116 supported employment programs throughout the United States found that these programs generally follow principles of the individual placement and support model (19).

**Effectiveness of supported employment**

To understand the context of the current review, several points from the broader vocational literature are critical. First, interventions that do not target job placement directly have very little impact on employment outcomes (20). Second, many vocational approaches to helping people with severe mental illness gain employment have been developed over the past half century. Few have been evaluated rigorously; those that have been examined in controlled trials have yielded disappointing results (4,14,21,22).

**Quasi-experimental studies.** To date, three quasi-experimental studies have evaluated day treatment programs that converted their rehabilitation services to supported employment. Drake and colleagues (23) studied a rural New Hampshire community mental health center that developed a supported employment program to replace the day treatment services. A natural experiment compared the conversion site with a nearby site, which continued its day treatment along with traditional brokered vocational services. The competitive employment rate increased substantially at the conversion site, whereas the rate was unchanged at the comparison site. Moreover, adverse outcomes such as hospitalization, incarceration, and dropouts did not increase at the conversion site.

Clients, their families, and mental health staff had favorable reactions to the conversion, although a minority mentioned loss of social contact as a drawback (24). Interestingly, many clients who did not find work also reported that they benefited from the change because they discovered satisfying activities outside the community mental health center.

Replacing day treatment with supported employment also led to cost savings (25). Given the success of the initial conversion, the second site subsequently converted to supported employment with similarly favorable results (26). In a second study involving the downsizing of a day treatment program in a small city, clients who transferred to a new supported employment program had better outcomes than those who remained in day treatment (27).

A third study compared two Rhode Island day treatment programs that converted to supported employment with one that did not (28), with similar findings. Others have also reported successful conversions of day treatment to supported employment programs (29). These evaluations demonstrate that supported employment can be implemented in a cost-effective manner in real-world settings with a broad range of clients with severe mental illness, not just a select group who sign up for supported employment.

**Randomized controlled trials.** A 1997 review (3) summarized the findings of six randomized controlled trials comparing supported employment with a variety of traditional vocational services for people with severe mental illness (30–35). All six studies reported significant gains in obtaining and keeping employment for persons enrolled in supported employment. For example, a mean of 58 percent of supported employment clients achieved competitive employment at some time over a 12- to 18-month period, compared with 21 percent of the control group, who received a range of alternative vocational interventions, including skills train-
ing, sheltered work, and vocational counseling as steps toward competitive job placement. Control subjects received what providers in their communities believed to be best practices in vocational rehabilitation.

Other competitive employment outcomes, such as time employed and employment earnings, also favored supported employment clients over those in control groups. A meta-analysis of these studies reached very similar conclusions, noting that the findings were robust (5,6).

Recently, data collection was completed for the Center for Mental Health Services Employment Intervention Demonstration Program (36). Eight sites in this project used randomized controlled trials to evaluate the effectiveness of supported employment. Reports of findings from this multicenter trial are expected over the next year.

Two sites have reported preliminary experimental findings. In Hartford, Connecticut, Mueser and associates (37) compared individual placement and support with two established vocational approaches. One was a psychiatric rehabilitation center using transitional employment, and the other was a brokered approach using a combination of sheltered workshops, government set-aside jobs, and individual placements. Meisler and colleagues (38) compared an individual placement and support program working within an assertive community treatment team with usual vocational services in a rural community in South Carolina. The control group was assigned to a well-respected rehabilitation center with long-term contracts providing numerous government set-aside jobs.

Findings from both studies replicated the previous findings of large differences in competitive employment outcomes favoring supported employment over traditional approaches. Even with protected jobs—transitional employment and set-aside jobs—factored in, supported employment clients in both studies still had better employment outcomes.

Many of these studies have also examined nonvocational outcomes, such as rehospitalization rates, symptoms, quality of life, and self-esteem. Studies rarely have found any experimental differences in nonvocational outcomes favoring clients enrolled in supported employment programs over those in comparison programs. In other words, the group effects for supported employment programs appear to be restricted mainly to competitive employment outcomes, at least for the relatively brief follow-up periods in the studies reviewed. However, neither has any research suggested any adverse effects from participation in supported employment programs. Rehospitalization rates are unaffected by participation in supported employment, contrary to the belief that the stress of work might lead to higher relapse rates.

Although enrollment in a supported employment program itself does not lead to improved nonvocational outcomes, clients who actually engage in competitive work do experience improvements in self-esteem and in control of symptoms, compared with clients who do not work or work minimally (39,40).

Cost considerations are a core issue in decisions to implement psychiatric services. Supported employment services are labor intensive. Annual cost per supported employment participant is around $2,000 to $4,000 (25,41). These figures are similar to those for traditional vocational services (42). Clients enrolled in supported employment programs sometimes use fewer mental health services, notably day treatment, suggesting a cost offset (25,43–45).

Critical components

Reviewers seeking to identify empirically validated principles of supported employment have reached similar conclusions (7,46–49). Certain components are almost always present in successful vocational programs. They are generally found in the supported employment programs evaluated in the eight randomized controlled trials summarized above. The following components are predictive of better employment outcomes:

- The agency providing supported employment services is committed to competitive employment as an attainable goal for its clients with severe mental illness, devoting its resources for rehabilitation services to this endeavor rather than to day treatment or sheltered work. Numerous studies indicate that this element is common in successful programs (23,26–29,33,34,49,50).
- Supported employment programs use a rapid job search approach to help clients obtain jobs directly, rather than providing lengthy preemployment assessment, training, and counseling. The evidence in this area is strong, with two randomized controlled trials focusing specifically on this variable (30,51), plus five randomized controlled trials in which this component was a critical difference between study conditions (32–34,37,38). A randomized controlled trial evaluating a vocational approach involving extended classroom training before job placement yielded employment outcomes similar to those of a control group referred to the state vocational rehabilitation office for vocational services (52).
- Staff and clients find individualized job placements according to client preferences, strengths, and work experiences. Several correlational studies support this conclusion (49,53–56).
- Follow-along supports are maintained indefinitely. Correlational findings from different research groups indicate that this component is an important one (31,57–59).
- The supported employment program is closely integrated with the mental health treatment team. The experimental evidence is consistent with this conclusion even though this variable has not been studied in isolation (31–33,35,37,38,59). This principle is also supported by a strong theoretical rationale (60). However, despite its strong evidence base, it is not universally practiced (19).

Together these principles serve as a foundation for evidence-based guidelines for providing effective supported employment services. In one statewide survey, programs rated high in implementing these principles had better employment outcomes (unpublished data, Becker DR, 2000). A number of specific program elements—for example, reasonable caseload size, diverse employment settings, assertive outreach, and ben-
efts counseling—are found in most supported employment programs (15), but the association between these elements and better employment outcomes has not yet been established. Further research is needed to clarify the critical ingredients of supported employment, which will lead to modifications, refinements, and additions.

Limitations of the evidence

Client factors
The most consistent finding from the supported employment literature has been the absence of specific client factors predicting better employment outcomes. Diagnosis, symptoms, age, gender, disability status, prior hospitalization, and education have been examined, and none have proved to be strong or consistent predictors (30,32,33). Notably, a co-occurring condition of substance use has not been found to predict employment outcomes (61–63).

Although a work history predicts better employment outcomes in supported employment programs, supported employment remains more effective than traditional vocational services for clients with both good and poor work histories (28,32,33). We speculate that the professional assistance provided by supported employment programs at every stage of the employment process compensates for client deficits in a way that less assertive vocational rehabilitation approaches do not. Consequently, the extensive literature on client predictors of work outcomes among people with severe mental illness who either have had little vocational assistance or have been enrolled in traditional vocational programs (48) may be largely irrelevant for supported employment programs.

Randomized controlled trials of supported employment have been conducted in settings with significant numbers of Caucasian (30–32,59), African-American (33,38), and Latino (37) clients. Although more replications are needed, all the evidence to date suggests that the greater effectiveness of supported employment compared with traditional vocational services is generalizable to both the African-American and Latino populations. Within-study comparisons of employment rates for different ethnic groups have been hampered by small sample sizes, so we cannot yet determine whether supported employment is equally effective for all ethnic groups within a specific setting.

We may make our best progress in understanding the role of ethnicity in supported employment programs by combining results across studies using meta-analytic techniques and through qualitative studies (64–66). We know anecdotally that culture and language pose significant barriers to providing supported employment in some populations.

Not all clients benefit from supported employment. For example, in community mental health centers converting day treatment programs to supported employment programs, some clients do not have employment as a current goal; not surprisingly, these clients usually do not work. But even among clients who express an interest in working, a sizable proportion are not working at any given time. We need to develop effective strategies for these clients. Helping clients decide whether supported employment is right for them also is critical. Informational sessions explaining beforehand how supported employment works improve clients’ ability to make informed decisions about participating, thereby potentially reducing dropout rates (67,68).

Community and economic factors
Supported employment has been implemented successfully in many different types of communities. Programs in rural areas are no less successful than those in urban areas (49,50). One counterintuitive finding is that economic conditions apparently do not have a potent influence on employment rates for a supported employment program (50,69–71). Catalano and colleagues (69) have speculated that an economic theory of labor markets applies here. The primary labor market, comprising professional and semiprofessional jobs, shrinks during economic recessions. The secondary labor market, which includes entry-level jobs in the service industry, is more elastic and less vulnerable to economic downturns. Supported employment programs find jobs mostly in this secondary labor market, where jobs are usually available. However, the aforementioned studies examined a relatively restricted range of unemployment. The findings may not be generalizable to communities where the unemployment rate is very high (35).

Job opportunities available to clients with severe mental illness are often restricted because of the clients’ limited work experience, education, and training, and consequently most supported employment jobs are unskilled (3,72). Half of all clients leave their supported employment positions within six months (3), although nondisabled workers in these occupations also have high turnover rates (73). Moreover, most supported employment positions are part-time. Clients often limit work hours to avoid jeopardizing Social Security and Medicaid benefits (48,74). A continuing challenge for supported employment programs is helping clients capitalize on educational and training opportunities so that they may qualify for skilled jobs and develop satisfying careers (72).

Program factors
Specific details about the best ways to provide supported employment services have not been adequately researched. Issues include the role of disclosure of mental illness in finding and keeping jobs, the range, location, timing, and intensity of supports provided to clients (57,75), and the nature of coworker and supervisor supports (76). The relationship between supported employment services and medication issues has not been well studied despite its assumed importance (77).

Long-term outcomes of supported employment also have not been widely studied. Programs that remain engaged with their clients over time, respond to clients’ expressed wishes, and sustain an approach that integrates clinical and rehabilitation services are those we believe have the best outcomes over time. However, with few exceptions (30,58,59), most randomized controlled trials do not have follow-up information beyond two years. Much longer follow-up periods are needed to determine
whether sustained commitment can yield favorable outcomes for more clients.

Implementation barriers
Access to supported employment
Sixty to 70 percent of people with severe mental illness would like to work in competitive employment (78,79), yet 85 percent or more of those in public mental health systems are not doing so (78–82). Most prefer competitive employment to sheltered workshops (83) and day treatment (30,84). However, most clients lack access to employment services of any kind. Less than 25 percent of clients with severe mental illness receive any form of vocational assistance (1,85, 86), and only a fraction of these clients have access to supported employment (87). In some states, supported employment programs are now commonly found in community mental health centers, but their capacity falls far short of the need (19, 50). A further question concerns the quality of available programs. Not surprisingly, it is mixed (15,49).

Barriers to implementation of high-quality programs exist at many levels—within federal, state, and local governments and program or clinic administrations, among clinicians and supervisors, and in the collaboration with clients or families. The remainder of this paper is devoted to discussing the barriers to implementing high-quality supported employment programs and offering suggestions based on experience for overcoming them.

Government barriers
Historically, the federal-state vocational rehabilitation system has been the primary funding source for employment services. However, federal funding for vocational rehabilitation has never been sufficient to serve more than a tiny proportion of the population in need (88). Moreover, many observers have expressed doubts about whether this funding has been used wisely. Vocational rehabilitation expenditures apparently have been disproportionately devoted to administration and to assessment and other preemployment activities (89). Compounding the problem is the fact that persons with severe mental illness fail to complete the vocational rehabilitation eligibility process twice as often as people with physical disabilities (90). Nevertheless, vocational rehabilitation agencies continue to allocate minimal funding for supported employment services (91).

Public funding for mental health is a second source for financing supported employment services. Unfortunately, community mental health centers historically have allocated only a tiny proportion of their budgets to vocational services (85). Since the 1980s, most states have amended their Medicaid state plans to cover community mental health services under the optional rehabilitative services provision, which permits a broad interpretation of the range of reimbursable interventions.

Vocational training is among the few services statutorily excluded from Medicaid reimbursement. However, evidence-based components of supported employment, such as ongoing supportive counseling in home and community-based settings, team meetings, psychiatrist involvement in rehabilitation planning, and assisting clients in developing job opportunities, are all Medicaid-reimbursed rehabilitative services that states may cover. Yet most state Medicaid plans include unnecessary limitations on covered services when they involve vocational activities. Given the increasing proportion of total funding of community mental health services that Medicaid expenditures represent, misinterpretation of federal Medicaid policy results in a major barrier to supported employment service access.

Fee-for-service systems of reimbursement for units of service, regardless of outcomes, have created incentives to perpetuate services that are not evidence based, such as day treatment (92). Some commentators have concluded that financing of supported employment programs within managed care systems will not be any easier (93).

The fragmentation of supported employment funding has also resulted in separation of services. Historically, supported employment services have been brokered—that is, offered at an agency separate from the community mental health center (16)—even though we now know that this approach is counterproductive (47, 60). Even supported employment programs that are located in community mental health centers often are not closely integrated with mental health treatment teams (19), despite strong evidence that such integration is vital for success. In Indiana, a separate role for follow-along specialists created by separate funding sources has contributed to discontinuity of services (94).

Directors of state mental health departments can have a critical leadership role in promoting supported employment services. In the 1980s, Ohio’s decision to pursue case management and housing as top priorities led to critical improvements, but this decision sacrificed the development of employment services by relegating it to a secondary goal (82). Some states have adopted a “range of vocational options” (95), leading to a proliferation of diverse—and untested—models, whereas other states have invested major resources in specific models that are not evidence based. Still other states have taken the stance that supported employment is not the business of the state mental health agency. Moreover, most states do not systematically monitor client outcomes, precluding the development of objective methods for rewarding successful employment programs.

Program administrators
From an administrator’s perspective, common barriers include finding money to finance start-up and ongoing program costs, managing organizational change, and coping with political ramifications of change in the community. Administrators often do not provide the leadership for the adoption of innovations, even when they are evidence based. Administrators who do not have information about evidence-based practices may not value their outcomes or believe that they are possible (49). Administrators, especially those who received training and professional experience in an earlier era, may hold negative attitudes about the feasibility of...
work—for example, “Schizophrenia is a chronic disease with little hope of recovery . . . work is a source of unnecessary stress.”

If administrators are unwilling to consider change, it is unlikely that practitioners will. Poor management practices constitute another obvious barrier to implementation of evidence-based practices (96). Agencies that are driven by crises and chaos often have leaders and supervisors who have not established a system of careful treatment planning that is related to clients’ desires and needs.

Clinicians and supervisors
Like administrators, clinicians often view clients as too unmotivated to work (97) and often underestimate the need for vocational services (98,99). Many practitioners lack adequate information and skills to staff supported employment programs (100–102).

Resistance to change is a barrier in any organization. In the mental health field, professional identities are defined by what practitioners do—methods employed, program name, and the like—or by their discipline, not by the outcomes sought. Program changes sometimes are introduced as externally imposed ideas rather than resulting from a process that includes the participation of the clinicians and supervisors, who are ultimately responsible for implementing the desired change (103). In such circumstances, practitioners perceive change efforts as a criticism and devaluing of their work.

Another common barrier concerns inadequate resources. Staff members cannot implement supported employment programs effectively if they do not have enough time to carry out their duties or if supervisors give them conflicting messages about the scope of their responsibilities. For example, when employment specialists are assigned additional job duties that are not vocational, they are distracted from the employment effort.

Clients and families
Clients and family members often do not have accurate information about supported employment. Sometimes clients are discouraged from considering employment by well-meaning clinicians and family members who believe that the stress associated with work outweighs the benefits. Instead, they are directed to day programs. Clients often believe that returning to work automatically compromises their eligibility for Social Security and Medicaid benefits. Families may not be given information on how to support a family member’s work efforts, or they may not be considered part of the team or support network.

Strategies for implementation
Although we have more systematic information about barriers to evidence-based practices than we do about strategies to overcome them, some approaches for implementing evidence-based practices have been identified (104,105).

Government efforts
At the state level, a first step is to set clear outcome priorities. Next, systematic assessment of employment outcomes is absolutely essential. State mental health authorities must remove organizational and financial barriers to the development of supported employment programs, as has been done in New Hampshire (50), Vermont (unpublished data, Dalmasse D, 1998), Rhode Island (106), and Kansas (49). In both New Hampshire and Rhode Island, state mental health and Medicaid agencies joined to request that the Health Care Financing Administration allow reimbursement for supported employment services aside from direct interventions to teach job skills. Their requests were approved, thereby enabling Medicaid financing to greatly increase clients’ access to supported employment services.

Recent federal legislation—the Medicaid buy-in program authorized by the Balanced Budget Act of 1997 and the Ticket to Work and Work Incentives Improvement Act of 1999—has permitted state governments more flexibility in establishing Medicaid eligibility, with the intent of reducing barriers to employment posed by the potential loss of Medicaid benefits (107). Some states—Oregon and Minnesota, for example—have implemented new policies expanding Medicaid coverage to allow more liberal income and resource thresholds for people with disabilities who work.

State mental health authorities have had success in providing direct incentives to local systems for meeting employment goals. In Ohio, participating systems doubled their employment rate when incentives were instituted (82). In New Hampshire, the competitive employment rate for community mental health center clients with severe mental illness has increased from 7 percent to 37 percent since 1990, when the state began emphasizing competitive employment in contracting (50). State vocational rehabilitation agencies in Alabama, Oklahoma, and Pennsylvania have initiated “results-based funding” for supported employment, which similarly rewards agencies for performance (108,109). Some caution is necessary, because unless designed carefully, such incentive systems may encourage enrolling clients with the fewest needs.

Incentives are not enough, however. The state agencies should also take the leadership in providing technical assistance by forming partnerships with leading research and training centers with appropriate expertise, as have those of New Hampshire (110), Rhode Island (106), and other states. Kansas, Indiana, New Jersey, and New York City have established supported employment technical assistance centers to help local programs implement and monitor supported employment services.

Building consensus among stakeholders is another element in the adoption of evidence-based practices. The National Association of State Mental Health Program Directors has issued a position statement on employment and rehabilitation for persons with severe psychiatric disabilities that identifies state mental health agencies as having a responsibility to influence vocational rehabilitation and other state employment agencies to collaborate to improve access by persons with severe mental illness to competitive employment (111). Accepting this mandate, Rhode Island’s state mental health agency has involved the state’s Medicaid and vocational rehabilitation agencies in funding supported employment.
Funding for consensus-building activities related to exemplary practices is available through the Community Action Grant Program of the Center for Mental Health Services.

**Efforts of program administrators**

High-achieving organizations concentrate energy and resources on specific outcomes and reduce distractions to those outcomes (112). Important elements of leadership include articulating desired outcomes and practices for achieving them, building an organizational structure and culture that will facilitate implementing evidence-based practices, designing systems to monitor evidence-based practices and client outcomes, hiring staff with appropriate attitudes and skills, establishing group supervision or other methods of collaboration, creating employee evaluation procedures that emphasize evidence-based practices and employment outcomes, and providing rewards for high performance in those areas (49,113).

Supported employment programs are most successful in agencies that make a total commitment to competitive employment without diluting their focus and resources with traditional forms of vocational programming (49,50). A similar pattern is found in the developmental disability field, where supported employment has failed to develop its full potential because many agencies have viewed supported employment as an “add-on” service while maintaining large sheltered workshops (114).

As noted above, community mental health centers have been successful in converting day treatment programs completely to supported employment. Because this redeployment of resources has the advantage of cost savings in addition to acceptance by important stakeholders, it is a very appealing strategy. Consumer-run services can play a role in meeting the social needs of unemployed clients after conversion from day treatment to supported employment (115).

Monitoring the fidelity of program implementation is critical for implementing evidence-based practices (116). Accordingly, researchers, state planners, program directors, clients, and family members are increasingly emphasizing fidelity. The Individual Placement and Support Fidelity Scale (117), a 15-item instrument that assesses the implementation of critical ingredients of supported employment, is one such tool in the public domain. Although it was designed for use by assessors who are familiar with the critical ingredients of the model, its simplicity permits its use by nonresearchers.

Adequate reliability has been found in a field test using site visits by pairs of assessors who interviewed staff, studied charts, and observed program activities (117). The Individual Placement and Support Fidelity Scale clearly differentiates supported employment programs from other vocational approaches, suggesting that it can be used to determine whether a program actually is implementing supported employment (19). More comprehensive scales measuring supported employment implementation also have been field-tested (15,94).

**Efforts of clinicians and supervisors**

Agencies that successfully adopt supported employment appear to share a set of common elements (49,113,118). Successful programs give staff the resources they need to do their job well. This also means that the agency itself must be well managed in other areas and must provide high-quality case management services. Supervisors need to provide clear vision, organize services into a multidisciplinary team structure, and focus on outcomes rather than service units and paperwork (119).

Community mental health centers successfully adopting an innovation usually have at least one key change agent who champions the innovation (120). The change agent must have sufficient authority to implement change. When introducing supported employment, the change agent identifies respected frontline practitioners who can help lead the implementation effort. They in turn recruit other staff to join in the planning and development of the new program so that all staff will feel ownership of the program.

Adequate training and ongoing supervision are critical to give staff the skills to implement the practice (118). Guidelines, training manuals, and videotapes are important tools for ongoing monitoring and transmission of the culture of the supported employment program (118). Another critical element is expert consultation through site visits and telephone conference calls. Implementation is facilitated by having staff—not just employment specialists but also administrators, clinicians, and supervisors—visit exemplary supported employment programs.

**Efforts of clients and families**

Clients and families are well aware of the need for vocational services (89,98,121) but need to know what good services look like and how to advocate effectively in legislation and funding decisions. They can have influence over setting standards and ensuring adherence to those standards at the state, program, and client levels. Clients and family members should seek membership on advisory boards at all levels. They can collaborate with state officials to fund supported employment programs and to establish standards based on evidence-based practices and have them incorporated in licensing standards, requests for proposals for grant funds, and so on. At the program level, they can demand that entrance criteria for supported employment be based on a client’s desire to work and not on symptoms or work history. They can also participate in designing supported employment programs. On an individual client level, they can argue for client choice and services that match evidence-based practices.

**Conclusions**

The emerging evidence base on supported employment is clear and consistent, with improved employment outcomes across many different types of settings and populations. In addition, most supported employment approaches described in the literature converge on a set of critical components.

One key remaining task is to overcome implementation barriers to make supported employment services available on a widespread basis. No other vocational rehabilitation approach for people with severe mental
illness has attained the status of evidence-based practice despite a half century of program innovation and informal experimentation by many psychiatric rehabilitation programs. Proponents of other vocational approaches either have failed to empirically investigate their methods or have failed to find strong evidence. It is also true that many vocational program approaches that are not effective continue to be widely practiced.

Beyond implementing supported employment, we must continue to refine and improve our model to reach a wider spectrum of the population and to help clients not only find and keep paid community jobs but also to develop long-term careers.

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References

24. Torrey WC, Becker DR, Drake RE: Rehabilitation day treatment versus supported employment: II. consumer, family, and staff reactions to a program change. Psychosocial Rehabilitation Journal 18(3):67–75, 1995
82. Hogan MF: Supported Employment: How Can Mental Health Leaders Make a Difference? Columbus, Ohio, Department of Mental Health, 1999.
Evidence from the Employment Intervention Demonstration Program

Employment Intervention Demonstration Program (EIDP) was a 5-year, eight-site, randomized study sponsored by the SAMHSA's Center for Mental Health Services to better understand the most effective ways to help consumers find and keep jobs. With more than 1,400 participants, it was the largest, most comprehensive study of vocational services for people with serious mental illnesses at the time of printing. The following articles published in professional journals represent the most high-quality, recent information available resulting from this landmark study.


**Additional effectiveness research**


Presents the research evidence for the SE model and a compelling rationale for using a recovery-oriented approach.


Suggests that competitive employment for a sustained period of time is associated with improved symptoms and higher self-esteem compared to unemployment.


Summarizes the literature on Individual Placement and Support.


Addresses some misconceptions about SE.


Suggests a positive correlation between working and both quality of life and self-esteem.

**Critical ingredients**


Summarizes the research supporting six principles of SE.


Summarizes the key principles of SE.


Lists the principles of SE based on a large, multisite demonstration project.


Historical context for supported employment


Argues for extending SE for people with developmental disabilities to people with mental illnesses.


Comprehensively reviews controlled studies of vocational approaches for consumers with serious mental illnesses.


Reviews the vocational literature.


Reviews the vocational literature.


Uses a well-known Vermont study to articulate the principles of rehabilitation.


Provides a practical guide to various vocational alternatives.


Probably the first published paper to articulate the place-train approach to SE. Published nearly two decades before its widespread adoption.


Provides a scathing analysis of the vocational rehabilitation system and the barriers to employment faced by families helping consumers with mental illnesses.


Presents a conceptual overview of the PACT model of employment, which has had critical influence on the evolution of the SE model.


Demonstrates how to implement SE for a range of disability groups.
**First-person perspectives**


A powerful first-person account of the employment process.


**Practice issues**

**Consumer choice**


Compares preferences for competitive and sheltered employment.


Examines the impact of finding jobs that match the occupational choices of consumers on job retention rates.

**Engaging consumers in Supported Employment**


Discusses helpful strategies for engaging consumers who do not have vocational goals.

**Vocational assessment**


Describes practical vocational assessment methods.

**Job development**


A highly engaging, comprehensive, practical guide to strategies for developing jobs.


Describes the job development experiences of one SE program.


**Reasonable accommodations and disclosure of disability**


Presents research that demonstrates that employers discriminate against job applicants who have psychiatric disorders.


Provides a conceptual overview of disclosure issues in the workplace and describes commonly used accommodations for consumers with mental illnesses.


Analyzes reasonable accommodations for consumers with serious mental illnesses.

**Job retention and career development**


Reports the findings of a qualitative study of career aspirations of consumers with serious mental illnesses.


Describes reasons for job terminations among consumers with serious mental illnesses.


Reports on a study that suggests a modest association between early job satisfaction and job retention.

**Implementation and administrative issues**

**State mental health perspective**

Hogan, M. F. (1999). *Supported employment: How can mental health leaders make a difference?* Columbus, OH: Ohio Department of Mental Health.

Analyzes the role of state mental health administrators in promoting employment.
Financing and cost effectiveness of Supported Employment


Comprehensively reviews the literature on the costs and benefits of SE.


Issues for program leaders


Presents an excellent model for partnering with local businesses regarding employing consumers with serious mental illnesses.


Reviews the issues facing program leaders who seek to promote SE.


A down-to-earth, common-sense approach to SE.

Converting day treatment to Supported Employment


Provides a state mental health administrator’s perspective on the issues in promoting the conversion of day treatment services to SE.


Reports on one in a series of studies examining the impact on consumers and family members of converting day treatment to SE.


Examines strategies for overcoming social isolation among consumers with serious mental illnesses who obtain employment.

State vocational rehabilitation agency


Discusses strategies for maximizing assistance from the vocational rehabilitation system.

Suggests that the rate of achieving vocational rehabilitation eligibility is twice as high for people with physical disabilities as it is for people with serious mental illnesses.


Descriptors disincentives to employment inherent in the Social Security system.

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**Barriers to employment**


Suggests that most clinicians view consumers with serious mental illnesses as being unmotivated.


Suggests that access to vocational services in the usual system of care is very low. Less than 25 percent of consumers in the study had any vocational goal in their treatment plan.


Summarizes the diverse barriers to employment for consumers with serious mental illnesses.


Documents the pervasiveness of stigma of mental illnesses.

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**Special populations**


Describes the experiences of Puerto Rican Americans with serious mental illnesses who receive SE services.


Suggests that case management and outreach services alone to homeless people with mental illnesses do not increase employment rates. Targeted job placement services do appear to make a difference.


Describes the unique issues facing women with mental illnesses who seek employment.

Presents a qualitative analysis of the unique issues facing consumers with co-occurring disorders of mental illness and substance use problems.

Supported Education


Suggests that advancement is often associated with education and, therefore, Supported Education should always be a part of Supported Employment.


Describes Supported Education for consumers with serious mental illnesses.

Implementing evidence-based practices


An excellent, readable primer for the Evidence-Based Practices (EBP) KITs. Introduces the concepts and approaches of EBP for treating serious mental illnesses and describes the importance of research in intervention science and the evolution of EBPs. A chapter for each of five EBPs provides historical background, practice principles, and an introduction to implementation. Vignettes highlight the experiences of staff and consumers.


Defines the differences between evidence-based practices and related concepts, such as guidelines and algorithms. Discusses common concerns about using EBPs, such as whether ethical values have a role in shaping such practices and how to deal with clinical situations for which no scientific evidence exists.


Describes the policy and administrative issues related to implementing evidence-based practices, particularly in public-sector settings.


Summarizes perspectives on how best to change and sustain effective practice. Includes a sample plan for implementing EBPs.

### Additional readings for program leaders and public mental health authorities


References

The following list includes the references for all citations in the KIT.


The materials included in the Supported Employment KIT were
developed through the National Implementing Evidence-Based
Practices Project. The Project’s Coordinating Center—the New
Hampshire-Dartmouth Psychiatric Research Center—in partnership with
many other collaborators, including clinicians, researchers, consumers,
group members, and administrators, and operating under the direction
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Center for Mental Health Services, developed, evaluated, and revised
these materials.

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aspects of this project. In particular, we wish to acknowledge the
contributors and consultants on the next few pages.
SAMHSA Center for Mental Health Services, Oversight Committee

Michael English  
Division of Service and Systems Improvement  
Rockville, Maryland

Neal B. Brown  
Community Support Programs Branch  
Division of Service and Systems Improvement  
Rockville, Maryland

Sandra Black  
Community Support Programs Branch  
Division of Service and Systems Improvement  
Rockville, Maryland

Crystal R. Blyler  
Community Support Programs Branch  
Division of Service and Systems Improvement  
Rockville, Maryland

Pamela Fischer  
Homeless Programs Branch  
Division of Service and Systems Improvement  
Rockville, Maryland

Sushmita Shoma Ghose  
Community Support Programs Branch  
Division of Service and Systems Improvement  
Rockville, Maryland

Patricia Gratton  
Division of Service and Systems Improvement  
Rockville, Maryland

Betsy McDonel Herr  
Community Support Programs Branch  
Division of Service and Systems Improvement  
Rockville, Maryland

Larry D. Rickards  
Homeless Programs Branch  
Division of Service and Systems Improvement  
Rockville, Maryland

Co-Leaders

Deborah Becker  
Dartmouth Psychiatric Research Center  
Lebanon, New Hampshire

Gary R. Bond  
Indiana University–Purdue University  
Indianapolis, Indiana
Contributors

Charity Appell  
Ascutney, Vermont

Morris D. Bell  
Veteran’s Administration  
West Haven, Connecticut

Crystal R. Blyler  
Community Support Programs Branch  
Division of Service and Systems Improvement  
Rockville, Maryland

Randee Chafkin  
U.S. Department of Labor  
Washington, D.C.

Michael J. Cohen  
National Alliance on Mental Illness (NAMI)  
Concord, New Hampshire

Efrain Diaz  
Newington, Connecticut

Cathy Donahue  
Calais, Vermont

Kana Enomoto  
Substance Abuse and Mental Health Services Administration  
Rockville, Maryland

Erik Johannessen  
Odyssey  
Hampton, New Hampshire

Jeffrey Krolick  
Options for Southern Oregon  
Grants Pass, Oregon

David W. Lynde  
Dartmouth Psychiatric Research Center  
Concord, New Hampshire

Doug Marty  
The University of Kansas  
Lawrence, Kansas

Gregory J. McHugo  
Dartmouth Psychiatric Research Center  
Lebanon, New Hampshire

Alan C. McNabb  
Ascutney, Vermont

Matthew Merrens  
Dartmouth Psychiatric Research Center  
Lebanon, New Hampshire

Bill Naughton  
Southeastern Mental Health Authority  
Norich, Connecticut

Ernest Quimby  
Howard University  
Washington, D.C.

Charles A. Rapp  
The University of Kansas  
Lawrence, Kansas

Dennis Ross  
Marshfield, Vermont

Gary Shaheen  
Advocates for Human Potential, Inc.  
Albany, New York

Karim Swain  
Dartmouth Psychiatric Research Center  
Lebanon, New Hampshire

Boyd J. Tracy  
Dartmouth Psychiatric Research Center  
Rutland, Vermont

William Torrey  
Dartmouth Medical School  
Hanover, New Hampshire
<table>
<thead>
<tr>
<th>Consultants to the National Implementing Evidence-Based Practices Project</th>
</tr>
</thead>
</table>
| **Dan Adams**  
St. Johnsbury, Vermont |
| **Janice Braithwaite**  
Snow Hill, Maryland |
| **Diane C. Alden**  
New York State Office of Mental Health  
New York, New York |
| **Michael Brody**  
Southwest Connecticut Mental Health Center  
Bridgeport, Connecticut |
| **Lindy Fox Amadio**  
Dartmouth Psychiatric Research Center  
Concord, New Hampshire |
| **Mary Brunette**  
Dartmouth Psychiatric Research Center  
Concord, New Hampshire |
| **Diane Asher**  
University of Kansas  
Lawrence, Kansas |
| **Sharon Bryson**  
Ashland, Oregon |
| **Stephen R. Baker**  
University of Maryland School of Medicine  
Baltimore, Maryland |
| **Barbara J. Burns**  
Duke University School of Medicine  
Durham, North Carolina |
| **Stephen T. Baron**  
Department of Mental Health  
Washington, D.C. |
| **Jennifer Callaghan**  
University of Kansas  
School of Social Welfare  
Lawrence, Kansas |
| **Deborah R. Becker**  
Dartmouth Psychiatric Research Center  
Lebanon, New Hampshire |
| **Kikuko Campbell**  
Indiana University–Purdue University  
Indianapolis, Indiana |
| **Nancy L. Bolton**  
Cambridge, Massachusetts |
| **Linda Carlson**  
University of Kansas  
Lawrence, Kansas |
| **Patrick E. Boyle**  
Case Western Reserve University  
Cleveland, Ohio |
| **Diana Chambers**  
Department of Health Services  
Burlington, Vermont |
| **Mike Brady**  
Adult & Child Mental Health Center  
Indianapolis, Indiana |
| **Alice Claggett**  
University of Toledo College of Medicine  
Toledo, Ohio |
| **Ken Braiterman**  
National Alliance on Mental Illness (NAMI)  
Concord, New Hampshire |
| **Marilyn Cloud**  
Department of Health and Human Services  
Concord, New Hampshire |
Melinda Coffman
University of Kansas
Lawrence, Kansas

Jon Collins
Office of Mental Health and Addiction Services
Salem, Oregon

Laurie Coots
Dartmouth Psychiatric Research Center
Lebanon, New Hampshire

Judy Cox
New York State Office of Mental Health
New York, New York

Harry Cunningham
Dartmouth Psychiatric Research Center
Concord, New Hampshire

Gene Deegan
University of Kansas
Lawrence, Kansas

Natalie DeLuca
Indiana University – Purdue University
Indianapolis, Indiana

Robert E. Drake
Dartmouth Psychiatric Research Center
Lebanon, New Hampshire

Molly Finnerty
New York State Office of Mental Health
New York, New York

Laura Flint
Dartmouth Evidence Based Practices Center
Burlington, Vermont

Vijay Ganju
National Association of State Mental Health Program Directors Research Institute
Alexandria, Virginia

Susan Gingerich
Narberth, Pennsylvania

Phillip Glasgow
Wichita, Kansas

Howard H. Goldman
University of Maryland School of Medicine
Baltimore, Maryland

Paul G. Gorman
Dartmouth Psychiatric Research Center
Lebanon, New Hampshire

Gretchen Grappone
Concord, New Hampshire

Eileen B. Hansen
University of Maryland School of Medicine
University of Maryland, Baltimore

Kathy Hardy
Strafford, Vermont

Joyce Hedstrom
Courtland, Kansas

Lon Herman
Department of Mental Health
Columbus, Ohio

Lia Hicks
Adult & Child Mental Health Center
Indianapolis, Indiana

Debra Hrouda
Case Western Reserve University
Cleveland, Ohio

Bruce Jensen
Indiana University–Purdue University
Indianapolis, Indiana
Clark Johnson
Salem, New Hampshire

Amanda M. Jones
Indiana University – Purdue University
Indianapolis, Indiana

Joyce Jorgensen
Department of Health and Human Services
Concord, New Hampshire

Hea-Won Kim
Indiana University – Purdue University
Indianapolis, Indiana

David A. Kime
Transcendent Visions and Crazed Nation Zines
Fairless Hills, Pennsylvania

Dale Klatzker
The Providence Center
Providence, Rhode Island

Kristine Knoll
Dartmouth Psychiatric Research Center
Lebanon, New Hampshire

Bill Krenek
Department of Mental Health
Columbus, Ohio

Rick Kruszynski
Case Western Reserve University
Cleveland, Ohio

H. Stephen Leff
The Evaluation Center at the Human Services Research Institute
Cambridge, Massachusetts

Treva E. Lichti
National Association on Mental Illness (NAMI)
Wichita, Kansas

Wilma J. Lutz
Ohio Department of Mental Health
Columbus, Ohio

Anthony D. Mancini
New York State Office of Mental Health
New York, New York

Paul Margolies
Hudson River Psychiatric Center
Poughkeepsie, New York

Tina Marshall
University of Maryland School of Medicine
Baltimore, Maryland

Ann McBride (deceased)
Oklahoma City, Oklahoma

William R. McFarlane
Maine Medical Center
Portland, Maine

Mike McKasson
Adult & Child Mental Health Center
Indianapolis, Indiana

Alan C. McNabb
Ascutney, Vermont

Meka McNeal
University of Maryland School of Medicine
Baltimore, Maryland

Ken Minkoff
ZiaLogic
Albuquerque, New Mexico

Michael W. Moore
Office of Mental Health and Addiction Services
Salem, Oregon

Roger Morin
The Center for Health Care Services
San Antonio, Texas
Lorna Moser  
Indiana University–Purdue University  
Indianapolis, Indiana

Kim T. Mueser  
Dartmouth Psychiatric Research Center  
Concord, New Hampshire

Britt J. Myrhol  
New York State Office of Mental Health  
New York, New York

Bill Naughton  
Southeastern Mental Health Authority  
Norwich, Connecticut

Nick Nichols  
Department of Health  
Burlington, Vermont

Bernard F. Norman  
Northeast Kingdom Human Services  
Newport, Vermont

Linda O’Malia  
Oregon Health and Science University  
Portland, Oregon

Ruth O. Ralph  
University of Southern Maine  
Portland, Maine

Angela L. Rollins  
Indian University–Purdue University  
Indianapolis, Indiana

Tony Salerno  
New York State Office of Mental Health  
New York, New York

Diana C. Seybolt  
University of Maryland School of Medicine  
Baltimore, Maryland

Patricia W. Singer  
Santa Fe, New Mexico

Mary Kay Smith  
University of Toledo  
Toledo, Ohio

Diane Sterenbucht  
Bethesda, Maryland

Bette Stewart  
University of Maryland School of Medicine  
Baltimore, Maryland

Steve Stone  
Mental Health and Recovery Board  
Ashland, Ohio

Maureen Sullivan  
Department of Health and Human Services  
Concord, New Hampshire

Beth Tanzman  
Vermont Department of Health  
Burlington, Vermont

Greg Teague  
University of Southern Florida  
Tampa, Florida

Boyd J. Tracy  
Dartmouth Psychiatric Research Center  
Lebanon, New Hampshire

Laura Van Tosh  
Olympia, Washington

Joseph A. Vero  
National Association on Mental Illness (NAMI)  
Aurora, Ohio

Barbara L. Wieder  
Case Western Reserve University  
Cleveland, Ohio

Mary Woods  
Westbridge Community Services  
Manchester, New Hampshire
Special thanks to

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Production, editorial, and graphics support

Carolyn Boccella Bagin
Center for Clear Communication, Inc.
Rockville, Maryland

Sushmita Shoma Ghose
Westat
Rockville, Maryland

Chandria Jones
Westat
Rockville, Maryland

Tina Marshall
Gaithersburg, Maryland

Mary Anne Myers
Westat
Rockville, Maryland

Robin Ritter
Westat
Rockville, Maryland