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on Employment Policy for Persons with Disabilities

Policy Brief

Supported Employment: A Best Practice for People with Psychiatric Disabilities

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The goal of the Rehabilitation Research and Training Center on Employment Policy for People with Disabilities is to provide information to support efforts that will increase the employment and economic self-sufficiency of people with disabilities and improve the quality of their lives. To this end, we are developing a series of monographs that highlight best practices to promote employment—practices that have been shown through rigorous research to increase employment outcomes for people with disabilities. In this, our first Best Practices Policy Brief, we highlight the Employment Intervention Demonstration Program (EIDP), a randomized controlled trial of the effectiveness of supported employment for people with psychiatric disabilities. This study was a multisite collaboration between eight research demonstration sites, a Coordinating Center, and the Center for Mental Health Services of the Substance Abuse and Mental Health Services Administration (Cooperative Agreement number SM51820).

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Introduction

Over the past several decades, research from a variety of fields has presented powerful evidence of the importance of employment to people with psychiatric disabilities. Many of these people want to work and can successfully participate in the labor market in a variety of competitive jobs. Researchers have also shown how employment can alleviate poverty, reduce hospitalization, and improve quality of life. Society also benefits through taxes paid by workers, goods and services they purchase, and reductions in entitlements and the overall cost of care. However, the 1997 National Health Interview Survey (NHIS) reports employment rates for people with a wide range of mental disorders to be 37.1 percent (Harris et al., 2005; New Freedom Commission on Mental Health, 2003). Employment rates for people with schizophrenia and related disorders are 22 percent (Jans, et al., 2004).

Recently, funding agencies and practitioners have begun to move towards evidence-based practice in serving people with psychiatric disabilities. A number of reviews and meta-analyses of single-site, randomized controlled trials of supported employment for this group have found it to be more effective at establishing competitive employment outcomes than prevocational training or non-vocational community care (Crowther et al., 2001; Twamley et al., 2003; Wewiorski & Fabian, 2004). Still in question at the time of this study's funding, however, was the effectiveness of different models of supported employment, operating in a variety of organizational settings, for consumers with diverse demographic characteristics, in different regions of the country. Therefore, the Employment Intervention Demonstration Program (EIDP) was designed as a multi-site randomized controlled trial of the effectiveness of supported employment (SE) for people with psychiatric disabilities in eight locations across the U.S. SE programs use a rapid job search approach to help clients obtain jobs directly (rather than providing lengthy assessment, training, and counseling), and provide them with ongoing support to maintain and improve their earnings after they start work. This policy brief describes the EIDP, presents study findings, and suggests some policy and research implications.

Funded by the Center for Mental Health Services of the Substance Abuse and Mental Health Services Administration, the EIDP was designed to generate knowledge about effective approaches for enhancing employment among adults with severe mental illnesses (Cook, Carey et al., 2002). A Coordinating Center and a consumer consortium assisted with this eight-site randomized controlled trial (RCT) of innovative SE models. The experimental study group received services under different SE service models designed specifically for people with psychiatric disabilities such as the Program on Assertive Community Treatment¹ or Individual Placement and Support², while other experimental sites enhanced their SE model by providing unique features such as an Employer Consortium or social network enhancement services. All of the experimental conditions featured (1) integrated

¹ Assertive community treatment is generally targeted to persons with a history of multiple hospitalizations. It provides a comprehensive array of services in the community through an interdisciplinary team of 10 to 12 professionals, including case managers, a psychiatrist, several nurses and social workers, vocational specialists, substance abuse treatment specialists and peer specialists. It provides 24 hour, 7 days per week coverage, comprehensive treatment planning, staff continuity, and small caseloads.

² The most common form of SE, the Individual Placement and Support (IPS) model calls for the employment specialist to link with all other clinicians in the treatment team to insure that employment is part of the treatment plan for every client who wants to work. The employment specialist emphasizes integration of vocational and clinical services, minimal preliminary assessments, rapid job placement, normal work settings, consumer choice, and ongoing supports.

services delivered by a multidisciplinary team that met 3 or more times per week to plan and coordinate employment interventions with case management and psychiatric treatment; (2) placement into competitive employment, defined as jobs paying at least minimum wage, in regular, socially integrated community settings; (3) development of jobs tailored to personal career preferences; (4) use of a job search process beginning immediately after program entry and moving as quickly as the individual desired; and (5) provision of ongoing vocational supports freely available throughout the entire study period. The control groups received services as usual (i.e., whatever was typically available in participants' local communities), unenhanced versions of the experimental models (e.g., supported employment without the Employer Consortium), or Clubhouse services³. Generally, individuals in the control group received lower amounts of vocational services although they received equivalent amounts of psychiatric services in comparison to experimental group participants (Cook et al., 2005).

Researchers randomly assigned over 1,600 participants to experimental and control groups at the eight EIDP study sites, and followed them for two years. Roughly half were male and half were female, half were members of ethnic and racial minority groups, and half were Caucasian. Participants averaged 38 years of age, most (72%) received Social Security Disability Insurance (SSDI) or Supplemental Security Income (SSI) at enrollment, one-third had not completed high school, and one-third had not held paid employment in the five years prior to the study. Half of all participants had a schizophrenia spectrum diagnosis while another 40% were diagnosed with major depression or bipolar disorder. Over half had a secondary diagnosis of substance abuse. The study documented vocational outcomes, including competitive employment, earnings, employment status, benefit receipt and number of hours worked.

Major Study Findings

- Participants in the EIDP earned over \$3.5 million and worked more than 850,000 hours during their two-year follow-up period.
- Experimental group participants were more likely than the control group participants to achieve competitive employment, work more than 40 hours in a given month, and earn more money. People with severe mental illness who received well-integrated and coordinated vocational and clinical services had significantly better employment outcomes than those who received non-integrated services.⁴
- Integrated employment services resulted in positive employment outcomes regardless of consumers' personal characteristics, diagnoses, work histories, receipt of SSA disability income, and functioning levels.
- The more vocational services participants received, the better the employment outcomes they achieved, especially among those receiving job development services.
- Personal characteristics such as type and intensity of mental disorders and psychiatric symptoms influenced employment outcomes within vocational programs.

³ A Clubhouse is a psycho-social rehabilitation center focusing on employment and independent living. Participants work along side a small staff in the clubhouse, doing clerical work, data input, meal preparation, or janitorial tasks, and then move to transitional employment in the community and eventually mainstream employment. Members also receive help in securing housing, advancing their education, obtaining good psychiatric and medical care and maintaining government benefits.

⁴ Based on random regression analysis of 24 months of longitudinal earnings data.

- Employment outcomes for all study subjects were negatively related to the level of unemployment in the study area. Impacts were largest in the study areas with the lowest unemployment, but were substantial even in areas with high unemployment.

Individuals enrolled in SE programs were more likely to be competitively employed (employed at a job that pays minimum wage or higher, is located in a mainstream, socially integrated setting, is not set aside for people with disabilities, and is not controlled by a service agency) than their counterparts (55% versus 34%) and work 40 or more hours per month (51% versus 39%), despite controlling for demographic characteristics and work history. They also had higher monthly earned income (\$122 versus \$99 per month). The advantage of SE over other programs increased over the 24-month study period, making it apparent that programs offering ongoing support and services that build on career achievements had greater success. Some successful experimental programs made supported educational services available, so that workers could enhance their levels of education and obtain better and higher paying jobs. These findings support the importance of providing on-going SE services with no time limits as a best practice in vocational rehabilitation for people with psychiatric disabilities (Cook, Leff et al., 2005).

SE models that integrated vocational services and clinical psychiatric services, such as medication management and individual therapy, were more effective than models with low levels of service integration. Participants in the experimental group received both types of services from one agency, with staff meetings scheduled daily or at least 3 times per week, to coordinate treatment planning and service delivery. Participants in these models were over twice as likely to be competitively employed and almost one-and-one-half times as likely to work 40 or more hours per month, despite demographic characteristics and work history. Those who received higher amounts of vocational services tended to have better employment outcomes, whereas those who received higher amounts of clinical services tended to have poorer outcomes. These results confirm the importance of communication between service providers, integration of mental health and rehabilitation services, and a strong emphasis on vocational services in meeting employment goals (Cook, Lehman et al., 2005)

The findings of this study also suggest that job development, a host of pre-employment activities that match or tailor jobs to particular clients, is a highly effective service for achieving competitive employment, particularly for those with limited prior work experience. Participants who received job development were almost five times as likely to obtain competitive employment as individuals who did not receive it, after controlling for work history and integration of clinical and vocational services. Individuals with no prior work experience had virtually no chance of acquiring a competitive job without job development services. Participants who received ongoing job support, a set of post placement activities involved in assisting a person to keep their employment, tended to have significantly longer job tenure in their first competitive job. However, job support had no impact on total number of hours worked among those who became employed. This suggests that ongoing support with no time limits may be related to better vocational outcomes (Leff, Cook et al., 2005).

Participants in the experimental SE models achieved superior results, regardless of demographic characteristics. But demographic factors *were related* to employment outcomes. This is not surprising because the findings mirror employment patterns in the general U.S. labor force. People who were younger, those with stronger work

histories, and those with at least a high school education had better outcomes, after controlling for other factors. African Americans were less likely to work in competitive employment, but worked more hours per month. Men and women were equally likely to engage in competitive employment, but males worked more hours. Demographic factors should be considered for what they are: contextual factors that reflect labor market and social context realities, such as personal circumstances, stigma, bias, and social and economic trends (Burke-Miller, Cook et al., 2006). Participants with schizophrenia related diagnoses and other physical health conditions and those with more recent psychiatric hospitalizations and higher levels of psychiatric symptoms had poorer outcomes; they were less likely to work 40 or more hours in a month and to be competitively employed (Razzano, Cook et al., 2005).

Finally, the study found that the local unemployment rate had a significant impact on participant employment outcomes, even controlling for study condition and participant characteristics. Analysis of study condition by high versus low unemployment rate indicated that impacts were larger in strong labor markets; e.g., those in the experimental condition at sites with low unemployment rates had the best outcomes. But even in areas with high local unemployment, results were still significant; e.g. those who received experimental SE had outcomes superior to those in the control condition (Cook, Grey et al., 2006).

Public Policy Considerations

This study has the following important policy implications:

1. Funding and service systems that assist mental health consumers to obtain employment rapidly followed by ongoing support can improve their employment outcomes. Mental health consumers demonstrated noteworthy productivity by earning millions of dollars and working hundreds of thousands of hours during the observation period. The EIDP found that a strong vocational services component to complement the clinical services traditionally offered by most programs is highly effective. Current reliance on Medicaid as a major source of financing for public mental health care has resulted in an emphasis on medical intervention and a relative neglect of vocational services and employment. The straight-forward availability of funding for mental health services other than employment (i.e. clinical support, counseling, day treatment) encourages many providers to continue to emphasize those services over employment whether or not they lead to desired outcomes or meet the needs of consumers (O'Brien et al., 2005).

Over time, greater proportions of people worked, their job tenure increased, and the time between jobs grew shorter, indicating that programs offering ongoing support and services are most likely to be successful. Title I of the Rehabilitation Act, which is often used to fund assessment, job development, and placement for SE clients, requires case closure as soon as job placement has been stabilized and all goals in the Individual Plan of Employment (IPE) have been met. This generally occurs after 90 days. This policy precludes funding for ongoing employment support after placement. The Ticket to Work (TTW) Program was designed to address this problem by providing payments for ongoing support services. But a simulation of the TTW payment system with clients of the EIDP found that actual earnings seldom reached levels that would have triggered payments to providers. When beneficiaries did earn enough for providers to receive payments, the latter would have received about \$184 per person under the milestone-outcome payment system and

\$31 per person under the outcome-only system (Cook, Grey et al., 2006). Disappointingly, the Ticket Program has not provided funding levels commensurate with providers' costs or meaningful levels of funding for SE (Thornton, Fraker et al., 2006). Expansion of SE programs appears to be hampered by lack of a strong and stable source of ongoing funding.

2. Funding and service systems can increase success by integrating health services with employment and other support services. Strong evidence suggests that SE models that integrated vocational and clinical psychiatric services were more effective than models with low levels of service integration, but the fragmentation of supported employment funding has resulted in separation of services. Historically, SE has been offered by vocational rehabilitation providers with limited expertise in psychiatric disabilities or by psycho-social rehabilitation centers separate from the community mental health center where clients receive their mental health services, even though this has been shown to be counter-productive and makes program integration extremely difficult (Cook, 1999). There are a number of pilot programs under the Demonstration to Maintain Independence and Employment funded by CMS that coordinate medical and vocational services. Further development and rigorous evaluation of these programs could enhance growth of such integrated service models.

3. Funding and service systems can increase success by encouraging and supporting continued education and training for clients who are already working. Most supported employment jobs are unskilled, part-time positions; half of all clients leave their supported employment positions within six months (Bond 1997). The EIDP findings imply that educational and training opportunities delivered as part of an SE program may help clients obtain higher quality jobs and more satisfying careers, thereby escaping poverty and reducing reliance on public support.

4. Funding and service systems can achieve success with clients who have the most limited skills by providing basic education and training prior to work entry. Some SE participants need additional support or tailoring of SE models to fit their unique circumstances. Individuals with lower levels of formal education may benefit from remedial learning, especially improvement of functional literacy and math skills. Those with poorer work histories may require additional support and training, especially early in their job tenure. Programs could be tailored to provide help with medical problems, support for dealing with troublesome symptoms, or help finding jobs at which persistent symptoms are less conspicuous. In addition, people with diagnoses of schizophrenia and other schizophrenia-spectrum disorders could benefit from programs that focus on developing appropriate vocational options and employment opportunities to address their unique needs.

5. Many more people with mental illnesses and limited skills could achieve substantial levels of earnings over sustained periods if policy and funding were more supportive of SE. Priority and funding for SE services varies across states; identifying a stable funding source for SE, particularly for ongoing vocational services, continues to be problematic. There are several sources of funding for SE, but each has limitations (Wehman & Revell, 2000). Historically, Title I and Title VI of the Rehabilitation Act have been the primary sources of funding for SE, but the minimal funding allocated has never been sufficient to serve more than a tiny proportion of the population in need (Bond et al., 2001). Some SE providers are using Social Security Administration funds in innovative ways to enable beneficiaries to purchase SE, such as Plans for Achieving Self Support (PASS) or Impairment Related Work

Expenses (IRWEs). A PASS allows beneficiaries to save a portion of their earnings without loss of SSI benefits for items or services that will assist them to return to work or increase their ability to help themselves. IRWEs enable a beneficiary to deduct work expenses, including the cost of SE, from earnings before the reduction in SSI is computed. The systems are extremely complex and subject to the vagaries of SSA rules and regulations, and agency staff and consumers generally lack understanding about how to use these provisions.

Some service providers attempt to use Medicaid funding under the Home and Community Based (HCB) Waiver, modified in 1997 to include SE as an extended habilitation service (West et al., 2002). 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 (Bond et al., 2001). Although vocational training is among the few services statutorily excluded from Medicaid reimbursement, 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. However, most state Medicaid plans include significant limitations on covered services when they involve vocational activities (Bond et al., 2001). Given that the purpose of Medicaid is to pay for medical intervention, it seems unrealistic to expect that Medicaid funding for rehabilitation and employment services will grow, or even remain constant, given state Medicaid budget shortfalls. In fact, the Bush Administration has proposed to further restrict reimbursement for targeted case management and rehabilitation services that can be funded by another entity.⁵

6. Changes in benefit design that would increase the incentive for clients to work might help supported employment programs become even more successful. Although this study found that SE increases employment substantially, consumers who received SE are working very few hours per week at minimal pay; the vast majority are still receiving SSI or SSDI benefits and living at very low income levels. The limited number of hours and low pay may be a reflection of beneficiary fear of losing SSI, SSDI, and medical benefits, the low skill levels of participants, the stage of recovery from psychiatric disability, manifestation of psychiatric symptoms, or a combination of factors. In any case, current work incentives are complex, difficult to navigate, and penalize beneficiaries for their earnings.⁶ Loss of medical benefits continues to be a significant issue, despite implementation of the Medicaid Buy-In (Goodman & Livermore, 2004). This finding suggests that policy changes which would increase work incentives, such as reduced benefit offsets, wage subsidies or tax credits, might be necessary to increase hours worked and earnings. Such incentives offer the promise of a higher standard of living through a combination of earnings and low levels of support, rather than persistent poverty and heavy reliance on public support.

⁵ <http://www.bazelon.org/takeaction/archive/2005/8-18-05medicaid.htm>

⁶ SSI recipients lose \$1 dollar of benefits for every dollar of earnings above a low disregard. SSDI beneficiaries have a higher disregard, SSA's substantial gainful activity earnings level (SGA), but lose 100 percent of their benefits if their earnings exceed SGA for more than 12 months.

Areas for Future Research

This study suggests a number of areas for future research:

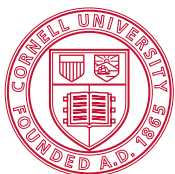
1. Did the earnings impacts for all treatment subjects exceed service costs for all treatment subjects? If not, are there other benefits that warrant the cost of SE, such as better mental and physical health or reduced mental health and hospitalization costs?
2. What is the impact of SE programs on SSI, SSDI, medical benefits, subsidized housing, and food stamps participants receive?
3. What impact do disincentives contained within these public programs have on participant wages? In other words, are participant wages constrained by work disincentives?
4. To what extent might improvements in work incentives increase benefits relative to costs?

References

- Bond, G.R., Becker, D.R., Drake, R.E., Rapp, C.A., Meisler, N. Lehman, A.F., et al. (2001). Implementing supported employment as an evidence-based practice. *Psychiatric Services*, 52, 313-322.
- Bond, G.R. (1998). Principles of the individual placement and support model: Empirical support. *Psychiatric Rehabilitation Journal*, 22(1), 11-23.
- Bond, G.R., Drake, R.E., Mueser, K.T., et al. (1997). An update on supported employment for people with severe mental illness. *Psychiatric Services*, 48, 335-346.
- Burke-Miller, J.K., Cook, J.A., Grey, D.G., Razzano, L.A., Blyler, C.R., Leff, H.S., et al. (2006). Demographic characteristics and employment among people with severe mental illness in a multisite study. *Community Mental Health Journal*. 42(2), 143-159.
- Cook, J.A. (1999). Understanding the failure of vocational rehabilitation: What do we need to know and how can we learn it? *Journal of Disability Policy Studies*, 10(1), 127-132.
- Cook, J.A., Carey, M.A., Razzano, L.A., Burke, J. & Blyler, C. (2002). The Pioneer: The Employment Intervention Demonstration Program. *New Directions for Evaluation*, 94, 31-44.
- Cook, J.A., Leff, H.S., Blyler, C.R., Gold, P.B., Goldberg, R.W., Clark, R.E. (2006). Estimated payments to employment service providers for persons with mental illness in the Ticket to Work Program. *Psychiatric Services*, 57(4), 465-471.
- Cook, J.A., Leff, H.S., Blyler, C.R., Gold, P.B., Goldberg, R.W., Mueser, K.T., et al. (2005). Results of a multisite randomized trial of supported employment interventions for individuals with severe mental illness. *Archives of General Psychiatry*, 62, 505-512.
- Cook, J.A., Lehman, A.F., Drake, R.E., McFarlane, W.R., Gold, P.B., Leff, H.S., et al. (2005). Integration of psychiatric and vocational services: A multi-site randomized, controlled trial of supported employment. *American Journal of Psychiatry*, 162(10), 1948-1956.
- Cook, J.A., Mulkern, G., Grey, D., Burke-Miller, J., Blyler, C., Razzano, L., et al. (In press). Effects of unemployment rate on vocational outcomes in a randomized trial of supported employment for individuals with severe mental illness. *Journal of Vocational Rehabilitation*.
- Crowther RE, Marshall M, Bond GR, et al (2001). Helping people with severe mental illness to obtain work: A systematic review. *British Medical Journal*, 322, 204-208.
- Goodman, N., & Livermore, G. (2004). *The Effectiveness of Medicaid Buy-in Programs in Promoting the Employment of People with Disabilities*. Washington, DC: Ticket to Work and Work Incentives Advisory Panel. Retrieved July 2004, from http://www.ssa.gov/work/panel/panel_documents/pdf_versions/Buyin%20paper%20Goodman_Livermore%20072804r.pdf.
- Harris, B.H., Hendershot, G. and Stapleton, D.C. (2005). *A guide to disability statistics from the National Health Interview*, Ithaca, NY: Cornell University. Rehabilitation

Research and Training Center on Disability Demographics and Statistics. <http://digitalcommons.ilr.cornell.edu/edicollect/186/>

- L. Jans, Stoddard, S. & Kraus, L. (2004) *Chartbook on Mental Health and Disability in the United States; An InfoUse Report*. Washington, DC: U.S. Department of Education, National Institute on Disability and Rehabilitation Research.
- Leff, H.S., Cook, J.A., Gold, P.B., Toprac, M., Blyler, C., Goldberg, et al. (2005). Effects of job development and job support on competitive employment of persons with severe mental illness. *Psychiatric Services*, 56(10), 1237-1244.
- New Freedom Commission on Mental Health. (2003). *Achieving the promise: Transforming mental health care in America*. Final Report, Rockville MD. US Department of Health and Human Services DHHS Publication SMA 03-3832.
- O'Brien, D., Ford, R., & Malloy, J.M. (2005). Person centered funding: Using vouchers and personal budgets to support recovery and employment for people with psychiatric disabilities. *Journal of Vocational Rehabilitation*, 23, 71-79.
- Razzano, L.A., Cook, J.A., Burke-Miller, J.K., Mueser, K.T., Pickett-Schenk, S.A., Grey, D.D., et al. (2005). 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(1), 705-713.
- Thornton, C., Fraker, T., Livermore, G., Stapleton, D., O'Day, B., Silva, T., et al. (2006). Evaluation of the Ticket to Work Program: implementation experience during the second two years of operations (2003-2004). Washington, DC: Mathematica Policy Research, Inc. and Cornell University Institute for Policy Research.
- Twamley, E.W., Jeste, D.V., & Lehman, A.F. (2003). Vocational rehabilitation in schizophrenia and other psychotic disorders: A literature review and meta-analysis of randomized controlled trials. *Journal of Nervous and Mental Disorders*, 191, 515-523.
- West, M., Hill, J.W., Revell, G., Smith, G., Kregel, J., Campbell, L. (2002). Medicaid HCBS waivers and supported employment pre- and post-Balanced Budget Act of 1997. *Mental Retardation*, 40(2), 142-147.
- Wewiorski, N.J. & Fabian, E.S. (2004). Association between demographic and diagnostic factors and employment outcomes for people with psychiatric disabilities: A synthesis of recent research. *Mental Health Services Research*, 6(1), 9-21.



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