Vocational Rehabilitation

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Employment as a Clinical Concern

Vocational problems are common in adults with mental illness and can often respond well to clinical interventions designed specifically for adults with mental health treatment needs who are seeking to achieve an employment goal. Vocational problems come in many different forms, including (1) unemployment, (2) underemployed (being employed in day labor, temporary work, or work that requires substantially lower skill levels than prior work successfully engaged in), or (3) being employed at an appropriate level but functioning poorly at work secondary to mental health problems. While unemployment is the most commonly recognized and treated, other needs are important to recognize and to treat. As in the case of Maria, underemployment and poor functioning at work are often a part of the pathway to unemployment and all of its associated problems.

Case Study

Sergeant (Sgt.) Maria Alvarez (pseudonym) served two tours in Iraq as a military police officer in the Army. When she was discharged, there were no openings for police officers in her area, but she had friends going back to school to become emergency medical technicians. She signed up for training, and as soon as she started, she felt convinced that this type of work was a perfect match for her.

She was very successful during the first 5 years working for a private ambulance company. She performed well and was respected by co-workers and supervisors. On at least two occasions, she received awards for excellent work in dangerous situations. In one particularly difficult situation, she was fired upon and almost killed while saving an attempted murder victim.

Surprisingly, Alvarez's work performance declined over the next 12 months, and she left that job unexpectedly. She then took an evening job as an emergency medical technician for a competing firm. Her work for that company did not go as well. She used a lot of sick leave and felt less enthusiastic about her work. She had more conflict from her supervisor and left the job within 6 months. She then left another

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emergency medical technician job only 4 months after starting and was then unemployed for 8 months.

It was during this time that she was referred for specialty mental health care by her primary care doctor for symptoms of posttraumatic stress disorder (PTSD). She was having recurring nightmares related to combat experiences in Iraq, as well as experiences from her first emergency medical technician job. On closer evaluation, it was clear that she was suffering from combat-related PTSD. Her symptoms were initially manageable when she started as an emergency medical technician but became worse over time. Eventually, she would feel anxious whenever she heard a radio call. She was particularly anxious when she had to drive in the neighborhood in which she was nearly shot. While working, she often felt like the prior incidents were just about to happen again. Unfortunately, she did not feel comfortable talking about her anxiety with her supervisor, feeling embarrassed for needing help and worried that she would lose her job. She used sick leave and substance use as a means of coping with her anxiety. Her loss of three jobs left her demoralized and thinking that she was not "smart enough" to do this type of work. She was concerned that she would never go back to work at all and was starting to feel that she had no future.

Employment and Recovery

There are a number of reasons for viewing employment or re-employment as central to mental health treatment and rehabilitation outcomes. Deterioration in functioning in employment is a central element in the definition and measurement of disability (see the World Health Organization's International Classification of Functioning, Disability and Health and VA compensation determination process) and of many of the most common health conditions (see *DSM-V* diagnostic criteria). The notion of recovery and community integration as the ultimate goal of rehabilitation, described in foundational documents such as the President's New Freedom Commission ("President's New Freedom Commission on Mental Health," 2003) and the Americans with Disabilities Act, emphasizes the primacy of helping participants resume valued roles like employment. In this framework, clinical care, and specifically those clinical efforts designed primarily to reduce clinical symptoms, is seen as part of the overall approach to helping adults to move toward or to maintain full integration in their communities.

Similarly, the current philosophical emphasis on client-centered approaches to healthcare (Stewart et al. 2000) emphasizes the need for all clinical services to serve the goals of clients. A growing body of evidence indicates that most adults with disabilities want to be employed in their community (McQuilken et al. 2003). Finally, there is growing support for the long-standing view of many vocational service providers and researchers that "Work is Therapy" (Kukla and Bond 2009; Siu et al. 2010). Participating in employment has important clinical benefits that rival the benefits of many common clinical interventions. These benefits are wide-ranging and, while not achieved by every participant, are generally experienced by most participants across most work settings. They include the benefits of social contact and engagement; learning and cognitive activity; physical activity; enhanced opportunities to play valued social roles, including a valued family role as "provider" and a valued societal role as a "worker"; a broader sense of purpose and meaning; opportunities to use and develop skills; opportunities for distraction from clinical symptoms such as anxiety; as well as the indirect benefits of earning income, such as paid leisure time and employer-supported healthcare benefits (Kukla and Bond 2009; Siu et al. 2010).

Unfortunately, unemployment is all too common among disabled adults and among veterans in particular (Zivin et al. 2011). The employment rate for individuals with disabilities aged 16–64 is only 36% compared to 75% for the non-disabled population ("Annual Disability Statistics

Compendium: 2009" 2009). This employment gap is present across disability types (45% for adults with sensory disabilities, 31% for physical disabilities, and 28% for mental disabilities) with the poorest employment rates found for the largest disability subgroups, particularly those with disabilities secondary to mental illnesses. When disabled adults do acquire employment, on average they earn 33% less than their non-disabled peers. The result is higher rates of poverty, with disabled adults facing a 25% poverty rate compared to 10% for non-disabled adults (22% for adults with sensory disabilities, 26% for physical disabilities, 31% for mental disabilities). Similar patterns are noted for veterans, with higher unemployment rates found among veterans with mental health conditions (Zivin et al. 2011), and particularly elevated risks of unemployment for recently returning female veterans (Kleykamp 2013).

Some form of vocational problems will be part of the experience of most adults and most veterans, but when they are secondary to mental health conditions, they tend to develop in predictable patterns (Penk et al. 2002). In a recent study, examining naturalistic data documenting the pathways-to-care to vocational services, the authors of the present chapter interviewed 155 veterans who were receiving some form of Veterans Health Administration (VHA) mental health care and had a vocational need but were not currently enrolled in vocational services (Drebing 2011; Drebing et al. 2012b). The median length of the participants' vocational need was more than 4.2 years. The vocational problems typically occurred after the mental health problem was present, and showed a clear progression in severity over time, often starting with performance or interpersonal problems at work and eventually resulting in multiple job losses and sustained unemployment. As with most mental health conditions, adults with vocational problems are slow to pursue treatment. Delays associated with recognition, help-seeking, and treatment entry all contribute to the overall delay in entering appropriate care. Factors associated with slower recognition, seeking help, and receiving services included diagnosis, level of disability, type of vocational need, and support from primary providers, family and friends. These results suggest that without proactive efforts by clinical providers to identify vocational problems and to actively refer veterans for vocational services, many will suffer vocational problems for years, with the accompanying difficulties for their family, the employment market, and society as a whole.

Models of Vocational Services

To address vocational problems among veterans and broader populations, governmental agencies, including the US Department of Veterans Affairs (VA), have invested heavily in vocational services. They are administered by a wide variety of organizations, using a range of different intervention models, most of which have resulted in relatively modest success rates (Bond et al. 2008; Resnick et al. 2006). Over the past 25 years, research efforts to systematically evaluate and improve these services have grown steadily both in number and in quality, with a fairly dramatic increase in the number of clinical trials and in overall methodological rigor (Drebing et al. 2012a). These research efforts have been the driving force behind relatively rapid changes in the broader field of vocational services and in vocational services targeted specifically for veterans with mental health concerns. For example, 10 years ago, the Veterans Health Administration vocational services programming consisted primarily of transitional employment, which has been found to have poor competitive employment outcomes (Penk et al. 2010a), and sheltered workshops, which have been found to have undesirable rehabilitation outcomes. Based on research findings inside and outside the VA (Bond 2004; Rosenheck and Mares 2007), Veterans Health Administration now provides Supported Employment (SE) services in each of its medical centers (Resnick et al. 2006). Individual Placement and Support Supported Employment (IPS SE) is an evidence-based model of vocational services for adults with mental health concerns, with significantly better employment outcomes noted in over 15 clinical trials (Bond et al. 2008). The Veterans Health Administration has dramatically reduced sheltered workshop services and has stopped the expansion of transitional employment, shifting funding to the

expansion of Supported Employment capacity. Veterans Health Administration vocational services are now serving more veterans, including veterans with a broader range of disabilities, and using more effective models of care that are resulting in more participants acquiring community-based jobs (Resnick et al. 2009). Common and emerging models of care either within or outside the Veterans Health Administration include the following.

Simple Job Placement Services (JPS)

Job placement is the primary service offered by most state vocational rehabilitation programs to any citizen with a vocational need. Job placement services consist almost exclusively of the provision of job search skills training, coaching, and support, including access to public and agency job listings, computer access to Internet job listings and job search tools, and support and resources for resume creation and interview preparation. The focus is entirely on competitive employment and services are provided only during the process of an active job search. Job placement services are widely available to adults through state offices, which are often funded at least in part by the US Department of Labor. Unlike many vocational services, these services are available regardless of whether applicants have clinical problems and typically involve little or no additional support for adults with clinical needs. This lack of support for clinical population may be the primary reason for the very modest efficacy suggested in the limited outcome data on JPS in mental health populations (Penk et al. 2010b). In general, job placement services participation is very flexible and typically managed by the participant. There is no standard for the number of sessions for job placement services.

Individual Placement and Support Supported Employment (IPS SE)

Supported Employment, as conceptualized and evaluated by Robert Drake and Deborah Becker (Becker and Drake 1993), refers to a service model developed specifically to help adults with psychiatric disabilities find and maintain competitive employment. This approach has been carefully defined and boasts widely used treatment fidelity measures for use with Supported Employment. The key principles of Supported Employment include:

(a) Focus on competitive employment as the primary outcome.
(b) Open access: consumer desire for participation is the only inclusion/exclusion criteria.
(c) Job search activities begin at the earliest possible time, determined by the consumer's willingness to start.
(d) Integration of Supported Employment services with psychiatric care.
(e) Individualization of treatment.
(f) Ongoing support: there is no limit to the duration of support received by the participant; services may continue after job acquisition in order to support ongoing employment.

The Individual Placement and Support Supported Employment (IPS SE) model has been studied in at least 15+ randomized controlled trials using a variety of alternative vocational rehabilitation models as comparison conditions (Becker et al. 1996; Bond et al. 1995; Chandler et al. 1997; Drake et al. 1999; Gervey and Kowal 1994; Gold et al. in submission; Lehman et al. 2002; McFarlane et al. 2000; Mueser et al. 2004). In one review of IPS SE trials, Gary Bond (Bond 2004) notes that, in every case, the SE condition resulted in higher employment rates than the comparison condition. In one review, mean competitive employment rates for Supported Employment participants ranged from 28% to 78%, with an average rate of 56%. The comparison conditions, which included sheltered workshops, rehabilitation programs, and partial Supported Employment services, resulted in employment rates between 6% and 40%, with a mean of 19%. It has been found to be effective in adults from various age groups (Bond et al. 2012; Twamley et al. 2012), different diagnostic groups, and those with disability income (Frey et al. 2011). Within veteran populations, the

efficacy of Supported Employment has been documented in populations of veterans with PTSD (Davis et al. 2012), with co-occurring mental illness and substance use disorders (Mueser et al. 2011), and with spinal cord injury (Ottomanelli et al. 2012). In fact, the authors are not aware of any clinical population in which SE has not been found to be more efficacious than other established models of vocational services.

Customized Employment (CE) Described by some authors as "the natural evolution of Supported Employment" (Griffin et al. 2008), Customized Employment is an emerging intervention that is beginning to develop a base of empirical support. The model emphasizes an extensive job development process to meet individualized job goals that reflect the unique needs of the employment seeker. Small caseloads reflect the effort to spend more time in understanding emerging participant interests and goals as well as a key focus on employment facilitated by additional funding and support resources. The limited data from empirical evaluations show promise (Griffin et al. 2008; Magura et al. 2007).

Diversified Placement Approach (DPA) and Transitional Work Experience With the publication of fidelity guidelines for services (Koop et al. 2004), a group of services commonly provided for adults with mental health and vocational concerns are likely to be increasingly studied. The Diversified Placement Approach (DPA) most closely describes vocational services common in clubhouse settings. They are also similar to Veterans Health Administration "Transitional Work Experience" services, which are also fairly common across the country (Penk et al. 2010a). Existing evidence suggests that these models have been relatively ineffective at helping participants obtain competitive employment. However, they are relatively effective at helping participants engage in "work activity." The value of "work activity" and its role in helping participants return to competitive employment is one aspect that needs further study. With 100 Veterans Health Administration vocational programs, including both DPA-type services alongside IPS SE, there is further need for investigation about how these services can most effectively interface both with other vocational services and with the broader range of clinical care.

A specialized Transitional Work Experience model called the "Veterans Construction Team" has been operating within the Veterans Health Administration vocational services program for approximately 20 years, providing focused rehabilitation for veterans seeking to enter or re-enter the construction trades (Schutt et al. 2003). This innovative enclave model of rehabilitation uses construction dollars from federal construction projects to simultaneously fund transitional work experiences in construction trades for veterans in need of that type of transitional experience.

Interventions to Enhance Employers' Involvement Major interventions to enhance employer's involvement include (1) liaison with employers soon after injury, (2) employer education, and (3) long-term employer support. In one study (Malec et al. 2000), while 80% of participants with brain injury returned to full- or part-time employment or education overall, almost 40% returned to their pre-injury employment, although not necessarily at the same level. Employer education has been identified as critical to vocational re-entry after brain injury (Malec 2005; Malec et al. 2000). Such education includes both general information dispelling employer myths about brain injury and specific information about the client's needs for physical and cognitive accommodations. Ongoing employer support (Malec 2005; Malec et al. 2000) has also been identified as critical. Such support begins with regular follow-up, which becomes increasingly less frequent as confidence in the durability of the placement increases.

Psychological Interventions to Enhance Vocational Outcomes There is preliminary research support for adding psychological interventions to vocational services to address relevant psychological processes that are known predictors of work performance and vocational outcomes. These interventions employ neurocognitive and social cognitive retraining (Bell et al.

2005, 2008; McGurk et al. 2005), cognitive behavior therapy that targets beliefs related to work (Lysaker et al. 2009), detailed work feedback and goal setting (Bell et al. 2003), or work-related social skills training (e.g., Workplace Fundamentals, Liberman 2008). These interventions, alone and in combination, may improve vocational outcomes. A curriculum-based psychoeducational intervention designed to reduce perceptions of disability among participants (Progressive Goal Attainment Program) is associated with higher return-to-work rates among those at risk for long-term disability and has now been piloted with veterans (Hossain et al. 2013).

Interventions to Enhance Individual Placement and Support Supported Employment (IPS SE) There have been a number of efforts to enhance the existing Individual Placement and Support Supported Employment (IPS SE) model in order to either improve outcomes or to adapt it to other populations. Supported Employment has been paired with a range of additional interventions including cognitive rehabilitation (Bell et al. 2008; McGurk et al. 2005), motivational interviewing (Drebing 1999; Drebing et al. 2008b), social skills training (Chan et al. 2009), and supported education (Rudnick and Gover 2009). This trend will hopefully continue in an effort to improve upon the outcomes and broaden the application of this well-established model.

It is important to recognize that the IPS SE model has some important limitations, most notably limited efficacy in terms of job retention outcomes (Drake and Bond 2008). This is a serious limitation, as any benefits of job acquisition are minimized by job tenures of less than 3 months, which are not uncommonly noted in randomized controlled trials of IPS SE. For some participants, job acquisition followed by rapid job loss may have an untoward effect in terms of reduced self-efficacy and eroded motivation to pursue employment. To address this key limitation in the IPS model, the Boston University Center for Psychiatric Rehabilitation undertook the initiative to enhance the employment outcomes of recipients of vocational services through an add-on intervention that fosters participants' capacity to manage their mental illness in the context of work and to improve their work functioning and vocational self-management once they are employed. This promising new intervention, entitled the Vocational Illness Management and Recovery program, is an innovative modification of the original Illness Management and Recovery program, which has been established as the evidence-based practice targeting both capacity to manage one's own mental illness and functional outcomes (Gingerich and Mueser 2005).

Contingency Management Integrated with Vocational Services Contingency management has primarily been used to enhance substance abuse treatments, but there have been at least two randomized controlled trials that document its efficacy at enhancing the outcomes of transitional employment (Drebing et al. 2005, 2008a). Both acquisition and maintenance goals were rewarded, with the result that participants were more active in job search and moved to competitive employment more quickly and at higher rates. The "therapeutic workplace" is a unique variation on this theme, using employment and a structured therapeutic work setting to reinforce abstinence among unemployed adults with substance use disorders (Wong and Silverman 2007). Though substantial empirical data support its efficacy at establishing abstinence, the model has not been applied widely (Silverman et al. 2007; Wong et al. 2004).

Self-Employment Interventions Self-employment and microenterprise development interventions have a number of advantages over interventions that result in placements in traditional jobs for veterans with mental health concerns. Self-employment typically focuses on jobs that more closely reflect the personal interests and skills of the individual. Self-employment also offers a greater degree of autonomy and flexibility. Adults who work for themselves have a greater ability to shift their work activities and schedules to address their other needs, including their needs to attend clinical appointments.

Criminal records can represent a significant barrier to being employed in many companies, and thus some adults seek self-employment as a more viable means of work. Finally, self-employment also offers the potential for higher pay rates for those who are successful in some types of businesses. In these ways, self-employment can be a means of raising the value of being employed for some people and so may lead to enhanced tenure. It does pose some risks as well, including the potential of less job stability and reliable pay, and greater stress, and greater range of skill requirements. Clearly, interventions that promote or support self-employment are not the ideal service for everyone but rather are a valuable option for a significant fraction of VR participants. Supported Self-Employment services are available at some Veterans Health Administration centers and are likely to grow in availability over time.

Resource Facilitation (RF) (Connors 2001) Developed in the field of brain injury rehabilitation, Resource Facilitation (RF) involves a coordinator providing assistance and advocacy to "break down barriers, increase access, and facilitate timely, coordinated management of resources" to return the individual with brain injury to full participation in family and community life (Trexler et al. 2010). Resource Facilitation seeks to increase access to community services and supports. A primary goal of Resource Facilitation is to develop a service support network that not only directly supports return to work (e.g., job search, placement, Supported Employment, transportation to work) but also provides a network of social support for work while giving work meaning. The Resource Facilitation coordinator is an advocate who assists the participant in developing a self-directed plan for community re-entry, identifying needed services and supports, and developing a sustainable network of these services and supports.

Paid Co-workers as Trainers This model involves the selection of a well-established senior lead or journey-level worker to mentor the vocational services participant. Mentorship involves training, observation, self-management concerns, and advocacy. Co-workers are paid on an hourly basis for their training activity (e.g., pre-work, over lunch, on break, end of day) and receive 2–4 h of training to gain access to training tools for both themselves and the participant. The model was developed by Curl and colleagues (Curl and Chisholm 1993; Curl et al. 1996) and has been used with adults with learning and behavioral disorders, developmental disabilities, and traumatic brain injury.

"Work Trials" With or Without Pay Work trials are time-limited job placements to assess the client's ability to succeed at a specific job and in a specific work environment. Work trials may be paid or unpaid and typically include elements of Supported Employment (Curl and Chisholm 1993; Curl et al. 1996). Work trials provide a means of assessing the client's ability to manage many aspects of the employment, such as the specific work skills required by the job, time demands and other expectations for performance, and the interpersonal and physical environment of the workplace. These latter aspects of work that are not directly related to job skills are often the most challenging for individuals with brain injury. Since the early 1990s, it has been recognized that such on-the-job assessments are of greater value in assessing the ability of the client with brain injury to succeed on the job than standardized job skill or interest assessments (Corthell 1990; Thomas and Menz 1993).

Supported Education (SEd) Education is a key activity in career development, and given the number of veterans who use their GI Bill benefits to attend college, interventions that reduce the risk of academic failure are of particular interest for those working with veterans. Supported Education (SEd) shares many of the basic principles and practices of Supported Employment. Among these practices are as follows: goals are achieved in natural community settings (community colleges, adult education programs); support is time unlimited and can ebb and flow according to the needs of the person; clinical and vocational services are integrated; and goals are driven by the person's choice. Supported Employment also uses the place/train philosophy,

emphasizing the importance of placing a person directly into the target setting and providing wrap-around support to facilitate success (Corrigan and McCracken 2005). The place/train model has demonstrated better outcomes within education and employment settings when compared with train/place models of service, such as sheltered workshops, transitional employment, and self-contained classrooms.

Ellison and colleagues (Ellison et al. 2012) conducted focus groups of Operation Iraqi Freedom/Operation Enduring Freedom veterans with self-reported PTSD regarding their needs for education supports. Participants reported barriers to entry or return to school, including meeting academic requirements; lack of information about financial aid and the GI Bill; symptoms of PTSD, depression, and substance abuse; lack of social support; and difficulties with the transition from military to civilian life. Results were consistent with findings from a previous study of the same population (Glover-Graf et al. 2010). In addition to services that would address the barriers they already reported, there were a number of common recommendations across the focus groups: interventions should include peer support, veteran-driven service intensity, integration of vocational and clinical teams, and greater connection between the VA and educational institutions. Ellison and colleagues (Ellison et al. 2012) then created a manual based on the focus group data and participatory action research team consisting of veterans, peer providers, clinicians, college administrators and professors, and community education providers. Another randomized, controlled trial of SEd (Smith-Osborne 2012) found that those randomized to the control group of this intervention showed a decrease in social and personal resilience and an increase in PTSD symptoms during their time in the study when compared to the experimental group.

Supported Volunteerism (SV) Supported Volunteerism is an emerging model of care that, like Supported Education, is modeled after Supported Employment. Using similar principles of care, Supported Volunteerism helps participants find meaningful volunteer opportunities in their communities that match their interests and abilities. While some Supported Employment providers have expressed concern that Supported Volunteerism can be an undesirable alternative that competes with Supported Employment, others have found the Supported Volunteerism can function as a stepping stone to employment for those adults who are initially not interested in returning to employment. After a period of time as a volunteer, many may find that their interest in returning to work, and their confidence that they can successfully maintain a job, has helped them decide to enter Supported Employment or another vocational service. Clearly, Supported Volunteerism needs more study and has to be used cautiously to avoid any negative impact on final vocational outcomes.

Family and Clinical Provider Interventions The growing evidence documenting the key role of stakeholders such as family, friends, and healthcare providers in vocational services outcomes has begun to spawn a range of new interventions designed to influence these stakeholders to support return-to-work efforts. Motivational interviewing interventions designed specifically to enhance support from family and friends for Individual Placement and Support Supported Employment (IPS SE) have been developed (Mueller and Rose 2008) and are being evaluated. Contingency management approaches that reward support for employment outcomes among vocational and non-vocational healthcare providers have been developed (Noone 2005) and may well be found to have a powerful effect on employment outcomes.

Clinical Strategies for Approaching Vocational Problems

In the case example at the beginning of this chapter, Maria found her way to specialty mental health care, but how should her clinicians work to address her vocational problems? Many mental health practitioners have little or no experience referring adults to vocational services. This is unfortunate, given the frequency of vocational problems among adults with mental illness and the availability of a wide range of services. The

following recommendations are made for the broader range of mental health practitioners:

1. Routinely screen adults with mental health conditions for vocational problems. These problems are common and often respond well to vocational services. Without active screening and referral by providers, many adults will wait for years before seeking treatment (Drebing 2011).
2. Talk with clients about the functional impact of their mental illness on their work life. Adults frequently fail to recognize the links between their illness and their work problems and will benefit in a number of ways by seeing how these connect.
3. When exploring vocational problems, help the client examine the potential impacts of mental illness in terms of lost income and benefits, lost social status in their family and community, lost structure of their time, lost participation in valued work, and lost confidence in their ability to work. Explore how their family has reorganized around their vocational problem and any resistances that may have developed to their returning to work. For some, this may involve a "grieving process" for the losses that they have suffered (Drebing 2011). A full recognition of these losses is often critical to establishing solid motivation for change.
4. Become familiar with vocational services available to clients. Vocational services are available from a range of providers and in a range of formats and vary by location. Different clients will prefer different models and some will only tolerate some types of care (Penk 2000). Mental health providers who have relationships with vocational service providers will have the greatest ability to pick the best services for their clients.
5. Do not underestimate the ambivalence most clients will have about returning to work. Most adults are ambivalent about work, but those who have had job failures due to mental health problems are often very anxious about moving back toward employment, fearing that they may fail again (Drebing 2011).
6. Look for resistance among family members, friends, and even other clinical providers. While social support is a key resource for those seeking to return to work, family and friends are often cited as trying to discourage clients from returning to work (Drebing et al. 2012b). They are often concerned about whether returning to work will negatively impact the mental health of their relative, friend, or client.
7. Be aware of the role of disability income on feelings of ambivalence. Programs like Social Security Disability Income and VA disability pensions provide financial income to adults with disabilities. Participation in these programs is associated with poorer vocational outcomes and poorer participation in vocational services over and above the degree of disability (Drew et al. 2001). While most programs provide incentives for returning to work, there are still clear disincentives for some participants in terms of lost benefits. Clients often do not understand the incentives and so are even more concerned about lost benefits than they need to be.
8. Be cautious about referring clients to any services or programs that include significant time or programming "preparing" participants for employment. This may be preparation in the form of lengthy testing, or months of classes about returning to work, or intermediate employment activities before a real job is sought. Behavioral economics shows that the reward value of anything sought is discounted to the degree that one has to wait for it (Drebing et al. 2006). Supported Employment is very successful, in part, because it involves immediate efforts to obtain the job the client wants.
9. Continue to maintain a clinical focus on work after the client obtains employment. Obtaining a job is easier than keeping a job (Bond and Kukla 2011). If a client obtains a valued job that they quickly lose, their confidence in their ability to work may actually be further diminished. The challenges that arise as clients seek to maintain jobs are often cen-

tral to their vocational problems and provide valuable clinical material to work on.

10. Continue to maintain a clinical focus on work after the client establishes stability in employment. Most clients returning to work through vocational services start in jobs that are not their ideal work. Often these are jobs that they can get and so are not central to their occupational interests and do not offer the pay and benefits they want. Working with clients to continue their efforts to eventually reach the job that they truly want should be part of clinical follow-up in many situations in which vocational services have been used (Bond and Kukla 2011).

Implications for the Future

Growing Visibility of Employment as a Key Clinical Outcome Community reintegration is evolving as a key, if not the key, clinical outcome, and employment is central to community reintegration (Resnik et al. 2012). The growing focus on functional decline as part of the definition of clinical disorders, and the national and international focus on addressing "disability," will ensure that clinical care, and in particular mental health care, includes vocational interventions within clinical efforts. The growing focus on "evidence-based practice" and the fact that Supported Employment is one of the most well-established evidence-based practices across any mental health area will further strengthen the role and visibility of vocational services within clinical care.

Further Enhancement of Available Vocational Interventions The next decade is likely to produce research evaluating a number of adaptations of existing models, either for improvements in general outcomes or for improved services for target populations (Drebing et al. 2012a). Individual Placement and Support Supported Employment (IPS SE), which is the most effective model of care in terms of employment outcomes, still results in employment rates between 40% and 60%. Job tenure is a particular area of concern, as most vocational services participants who do obtain competitive jobs, including IPS SE participants, keep those jobs less than 16 weeks. While the evidence base for IPS SE supports its use with some clinical groups, there is a need to determine its efficacy with other common clinical populations.

New interventions and adaptations are being developed and disseminated (Drebing et al. 2012a) and will need to be evaluated for their effectiveness. Some of the most promising directions include (a) enhancements of existing models like IPS SE, Diversified Placement Approach (DPA), and Transitional Work Experience (TWE); (b) evaluation of new and emerging models of care like Supported Self-Employment, Customized Employment (CE), and Resource Facilitation (RF); (c) enhancing existing treatment models by adding psychological interventions like cognitive rehabilitation, cognitive behavior therapy, contingency management, detailed work feedback and goal setting, work-related social skills training, and motivation interventions to vocational services; (d) or developing entirely new types of services such as interventions targeting employers, clinical providers, family members, or co-workers.

Effective models of care are only valuable if they are widely available and utilized. Evidence from Veterans Health Administration vocational services suggests that available services are generally underutilized (Twamley et al. 2013). As VA and other systems of care increasingly include vocational rehabilitation as a central clinical resource, efforts to raise the rates and consistency of referral and utilization will ensure all veterans receive timely help returning to work.

Expansion of Vocational Services Targeting Veterans The Veterans Health Administration is reorganizing and reinvigorating the vocational programming available to veterans. There are new models of care being piloted and evaluated and more research funding available to those studying how to help veterans deal with vocational problems. All of these developments point to a larger trend in the expansion of services targeting veterans and the greater investment by the US Department of Veterans Affairs, by the Department of Labor, by state and local governments, and by the community to ensure that

veterans who are facing employment challenges secondary to mental health concerns have available and effective services to help them meet their goals of returning to productive lives.

Key Concepts

1. Employment is often central to mental health treatment and rehabilitation outcomes and so should be a routine part of clinical evaluation and treatment planning.
2. Among the common models of vocational services available to potential participants, Individual Placement and Support Supported Employment (IPS SE) is one of the most well-researched and supported models of care, with consistent findings from over 15 randomized control trials finding that it results in better employment outcomes than a range of comparison conditions.
3. There are a growing number of interventions that appear to positively enhance employment outcomes, when they are added to interventions like Individual Placement and Support Supported Employment, including motivational interviewing, contingency management, cognitive rehabilitation, social skills training, and Supported Education.
4. Mental health providers should routinely screen for vocational problems and refer appropriate clients to the model of services that is most likely to meet their goals of obtaining employment, stabilizing employment, or improving their vocational situation.

References

Annual Disability Statistics Compendium: 2009 (2009) Retrieved 1 Sept 2010, 2010, from http://neweditions.net/statsrrtc/Compendium2009.pdf

Becker DR, Drake RE (1993) A working life: the individual placement and support (IPS) program. New Hampshire-Dartmouth Psychiatric Research Center, Concord

Becker D, Drake RE, Farabaugh A, Bond GR (1996) Job preferences among people with severe psychiatric disorders in supported employment programs. Psychiatr Serv 47:1223–1226

Bell MD, Bryson G, Greig TC, Fiszdon JM, Wexler BE (2005) Neurocognitive enhancement therapy with work therapy: productivity outcomes at 6-month and 12-month follow-up. J Rehabil Res Dev 42:829–838

Bell M, Lysaker PH, Bryson GA (2003) A behavioral intervention to improve work performance in schizophrenia: work behavior inventory feedback. J Vocat Rehabil 18:43–51

Bell MD, Zito W, Greig TC, Wexler BE (2008) Neurocognitive enhancement therapy with vocational services in schizophrenia: work outcomes at two year follow-up. Schizophr Res 105:18–29

Bond GR (2004) Supported employment: evidence for an evidence-based practice. Psychiatr Rehabil J 27(4):345–359

Bond GR, Dietzen LL, McGrew JH, Miller LD (1995) Accelerating entry into supported employment for persons with severe psychiatric disabilities. Rehabil Psychol 40:91–111

Bond GR, Drake RE, Becker DR (2008) An update on randomized controlled trials of evidence-based supported employment. Psychiatr Rehabil J 31(4):280–290

Bond GR, Drake RE, Becker DR (2012) Generalizability of the individual placement and support (IPS) model of supported employment outside the US. World Psychiatry 11(1):32–39

Bond GR, Kukla M (2011) Is job tenure brief in individual placement and support (IPS) employment programs? Psychiatr Serv 62(8):950–953. https://doi.org/10.1176/appi.ps.62.8.950

Chan AS, Tsang HW, Li SM (2009) Case report of integrated supported employment for a person with severe mental illness. Am J Occup Ther 63(3):238–244

Chandler D, Meisel J, Hu T, McGowen M, Madison K (1997) A capitated model for a cross-section of severely mentally ill clients: employment outcomes. Community Ment Health J 33:501–506

Connors SH (2001) Resource facilitation: a consensus of principles and best practices to guide program development and operation in brain injury. Brain Injury Association of America, McLean

Corrigan P, McCracken S (2005) Place first, then train: an alternative to the medical model of psychiatric rehabilitation. Soc Work 50(1):31–40

Corthell D (ed) (1990) Traumatic brain injury and vocational rehabilitation. University of Wisconsin – Stout, Menomonie

Curl RM, Chisholm LD (1993) Unlocking co-worker potential in competitive employment: keys to a cooperative approach. J Vocat Rehabil 3:72–84

Curl RM, Fraser RT, Cook RG, Clemmons DC (1996) Traumatic brain injury vocational rehabilitation: preliminary findings for the co-worker as trainer project. J Head Trauma Rehabil 11:75–85

Davis LL, Leon AC, Toscano R, Drebing CE, Ward LC, Parker PE, Kashner TM, Drake RE (2012) A randomized controlled trial of supported employment among veterans with posttraumatic stress disorder. Psychiatr Serv 63(5):464–470. https://doi.org/10.1176/appi.ps.201100340

Drake RE, Bond G (2008) The future of supported employment for people with severe mental illness. Psychiatr Rehabil J 31(4):367–376

Drake RE, McHugo GJ, Bebout RR, Becker DR, Harris M, Bond GR, Quimby E (1999) A randomized clinical trial of supported employment for inner-city patients with severe mental illness. Arch Gen Psychiatry 56:627–633

Drebing C (1999) Trends in the content and methodology of Alzheimer's caregiving research. Alzheimer Dis Related Disord *13*(S-1):S93–S100

Drebing C (2011) Pathways to vocational services: addressing barriers to rehabilitation. Paper presented at the mental health services research division meeting. Yale University School of Medicine, New Haven

Drebing CE, Bell M, Campinell EA, Fraser R, Malec J, Penk W, Pruitt-Stephens L (2012a) Vocational services research: recommendations for next stage of work. J Rehabil Res Dev 49(1):101–119

Drebing CE, Mueller L, Van Ormer EA, Duffy P, LePage J, Rosenheck R, Rose GS, King K, Penk W (2012b) Pathways to vocational services: factors affecting entry by veterans enrolled in veterans health administration mental health services. Psychol Serv 9(1):49–63. https://doi.org/10.1037/a0026662

Drebing C, Hebert M, Mueller L, Van Ormer EA, Herz L (2006) Vocational rehabilitation from a behavioral economics perspective. Psychol Serv 3(3):181–194

Drebing CE, Van Ormer EA, Krebs C, Rosenheck R, Rounsaville B, Herz L, Penk W (2005) The impact of enhanced incentives on vocational rehabilitation outcomes for dually diagnosed veterans. J Appl Behav Anal 38(3):359–372. https://doi.org/10.1901/jaba.2005.100-03

Drebing CE, Van Ormer EA, Mueller L, Hebert M, Penk W, Petry N, Rosenheck R, Rounsaville B (2008a) Adding a contingency management intervention to vocational rehabilitation: outcomes for dually diagnosed veterans. J Rehabil Res Dev 44(6):851–866

Drebing CE, Van Ormer EA, Mueller L, Rosenheck R, Drake RE, King K (2008b) Understanding and enhancing entry and completion of rehabilitation and recovery services: A pathways-to-care approach. Paper presented at the veterans administration conference on transforming mental health Care: Promoting Recovery and Integrated Care, Arlington, Virginia

Drew D, Drebing CE, Van Ormer EW, Losardo M, Krebs C, Penk W, Rosenheck.R. (2001) Effects of disability compensation on vocational rehabilitation participant and outcome. Psychiatr Serv 52(11):1479–1484

Ellison ML, Mueller L, Smelson D, Corrigan PW, Torres Stone RA, Bokhour BG, Najavits LM, Vessella JM, Drebing C (2012) Supporting the education goals of post-9/11 veterans with self-reported PTSD symptoms: a needs assessment. Psychiatr Rehabil J 35(3):209–217. https://doi.org/10.2975/35.3.2012.209.217

Frey WD, Drake RE, Bond GR, Lynde DW, Ganju VJ, Goldman HH (2011) Mental health treatment study: final report to social security administration. Westat, Rockville

Gervey R, Kowal H (1994) A description of a model for placing youth and young adults with psychiatric disabilities in competitive employment. Paper presented at the International Association of Psychosocial Rehabilitation Services, Albuquerque

Gingerich S, Mueser KT (2005) Illness management and recovery. Norton, New York

Glover-Graf NM, Miller E, Freeman S (2010) Accommodating veterans with posttraumatic stress Disorder symptoms in the academic setting. Rehabil Educ 24(1):43–56

Gold PB, Meisler N, Santos AB, Willians OH, Kelleher J, Carnemolla MA (n.d.) (in submission). A randomized clinical trial of integrated supported employment and assertive community treatment for rural Southern patients with severe mental illness

Griffin C, Hammis D, Geary T, Sullivan M (2008) Customized employment: where we are; where we're headed. J Vocat Rehabil 28:135–139

Hossain F, Baird P, Pardoe R (2013) Improving employment outcomes and community integration for veterans with disabilities

Kleykamp M (2013) Unemployment, earnings and enrollment among post 9/11 veterans. Soc Sci Res 42(3):836–851. https://doi.org/10.1016/j.ssresearch.2012.12.017

Koop JI, Rollins AL, Bond GR, Salyers MP, Dincin J, Kinley T, Shimon SM, Marcelle K (2004) Development of the DPA fidelity scale: using fidelity to define an existing vocational model. Psychiatr Rehabil J 28(1):16–24

Kukla M, Bond GR (2009) The working alliance and employment outcomes for people with severe mental illness enrolled in vocational programs. Rehabil Psychol 54(2):157–163

Lehman AF, Goldberg RW, Dixon LB, McNary S, Postrado L, Hackman A, McDonnell D (2002) Improving employment outcomes for persons with severe mental illness. Arch Gen Psychiatry 59:165–172

Liberman RP (2008) Recovery from disability. American Psychiatric Association Press, Washington, DC

Lysaker PH, Davis LW, Bryson GJ, Bell MD (2009) Effects of cognitive behavioral therapy on work outcomes in vocational rehabilitation for participants with schizophrenia spectrum disorders. Schizophr Res 107:186–191

Magura S, Blankertz L, Madison EM, Friedman E, Gomez A (2007) An innovative job placement model for unemployed methadone patients: a randomized clinical trial. Subst Use Misuse 42:811–828

Malec J (2005) Vocational rehabilitation. In: High WM, Sander AM, Struchen MA, Hart KA (eds) Rehabilitation for traumatic brain injury. New York. Oxford University Press

Malec JF, Buffington ALH, Moessner AM, Degiorgio L (2000) A medical/vocational case coordination system for persons with brain injury: an evaluation of employment outcomes. Arch Phys Med Rehabil 81:1007–1015

McFarlane WR, Dushay RA, Deakins SM, Stastny P, Lukens EP, Toran J, Link B (2000) Employment outcomes in family-aided assertive community treatment. Am J Orthop 70:203–214

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

McQuilken M, Zahniser JH, Novak J, Starks RD, Olmos A, Bond GR (2003) The work project survey: consumer perspectives on work. J Vocat Rehabil 18(1):59–68

Mueller L, Rose G (2008) Strategies for final success in rehabilitation services. Paper presented at the 117th Annual Meeting of the American Psychological Association, Boston

Mueser KT, Campbell BK, Drake RE (2011) The effectiveness of supported employment in people with dual disorders. J Dual Disord 7:90–102

Mueser KT, Clark RE, Haines M, Drake RE, McHugo GJ, Bond GR, Essock SM, Becker DR, Wolfe R, Swaine K (2004) The Hartford study of supported employment for persons with severe mental illness. J Consult Clin Psychol 72(3):479–490

New Freedom Commission on Mental Health: Achieving the Promise: Transforming Mental Health Care in America. Final Report. DHHS pub no SMA-03—3832. Rockville Md, Department of Health and Human Services, 2003. Available at www.mentalhealthcommission.gov/reports/finalreport/fullreport-02.htm

Noone W (2005) Federal Community Based Employment Services (CBES) program supported employment title VIc federal funding cost-benefit study. Massachusetts State Rehabilitation Commission, Boston

Ottomanelli L, Goetz LL, Suris A, MCGeough C, Sinnott P, Toscano R, Barnett SD, Cipher DJ, Lind LM, Dixon TM, Holmes SA, Kerrigan AJ, Thomas FP (2012) Effectiveness of supported employment for veterans with spinal cord injuries: results from a randomized multisite study. Arch Phys Med Rehabil 93:740–747

Penk W (2000) Designing work experiences for person with serious mental disorders. In: Frese FJ (ed) The role of organized psychology in treatment of the seriously mentally ill. Jossey-Bass, San Francisco, pp 17–26

Penk W, Drebing CE, Rosenheck R, Krebs C, Van Ormer EA, Mueller L (2010a) VHA transitional work experience vs. job placement in veterans with con-morbid substance use and non-psychotic psychiatric disorders. Psychiatr Rehabil J 33(4):392–407

Penk W, Drebing CE, Rosenheck RA, Krebs C, Van Ormer A, Mueller L (2010b) Veterans health administration transitional work experience vs. job placement in veterans with co-morbid substance use and non-psychotic psychiatric disorders. Psychiatr Rehabil J 33(4):297–307. https://doi.org/10.2975/33.4.2010.297.307

Penk W, Drebing C, Schutt R (2002) Posttraumatic stress disorder in the workplace. In: Thomas JC, Hersen M (eds) The handbook of mental health in the workplace. Sage Publications, Thousand Oaks, pp 215–249

Resnick SG, Kaczynski R, Sieffert D, Baldino R, Showalter D, Gray S et al (2009) Twelfth Progress Report on the Compensated Work Therapy (CWT) program: fiscal year 2008. Northeast Program Evaluation Center (NEPEC), West Haven

Resnick SG, Medak S, Baldino R, Corwel L, Rosenheck R (2006) Ninth progress report on the compensated work therapy (CWT)/veterans INdustries (VI) program. Northeast Program Evaluation Center, West Haven

Resnik L, Bradford DW, Glynn SM, Jette AM, Johnson Hernandez C, Wills S (2012) Issues in defining and measuring veteran community reintegration: proceedings of the working group on community reintegration, VA rehabilitation outcomes conference, Miami, Florida. J Rehabil Res Dev 49(1):87–100

Rosenheck R, Mares AS (2007) Implementation of supported employment for homeless veterans with psychiatric or addiction disorders: two-year outcomes. Psychiatr Serv 58(3):325–333

Rudnick A, Gover M (2009) Combining supported education with supported employment. Psychiatr Serv 10(12):1690

Schutt RK, Cournoyer B, Penk WE, Drebing CE, Van Ormer EA, Krebs C, Losardo MO (2003) Building the future: psychosocial rehabilitation with a veterans construction team. Psychiatr Rehabil J 27(2):186–189

Silverman K, Wong CJ, Needham M, Diemer KN, Kneeling T, Crone-Todd D, Fingerhood M, Nuzzo P, Kolodner K (2007) A randomized trial of employment-based reinforcement of cocaine abstinence in injection drug users. J Appl Behav Anal *40*(3):387–410

Siu PS, Tsang HW, Bond GR (2010) Nonvocational outcomes for clients with severe mental illness obtaining employment in Hong Kong. J Vocat Rehabil 32:15–24

Smith-Osborne AM (2012) Supporting resilience in the academic setting for student soldiers and veterans as an aspect of community reintegration: the design of the student veteran project study. Adv Soc Work 13(1):34–50

Stewart M, Brown JB, Doner A, McWhinney IR, Oates J, Weston WW, Jordan J (2000) The impact of patient-centered care on outcomes. J Fam Pract 49(9)

Thomas DF, Menz FE (1993) Development of a model of community-based employment for persons with traumatic brain injury. In: Thomas DF, Menz FE, McAlees DC (eds) Community-based employment following traumatic brain injury. University of Wisconsin-Stout, Menomonie

Trexler LE, Trexler LC, Malec JF, Klyce D, Parrott D (2010). Prospective randomized controlled trial of resource facilitation on community participation and vocational outcome following brain injury. J Head Trauma Rehabil 25(6): pp 440–446. https://doi.org/10.1097/HTR.0b013e3181d41139

Twamley EW, Baker DG, Norman SB, Pittman JO, Lohr JB, Resnick SG (2013) Veterans health administration vocational services for operation Iraqi freedom/operation enduring freedom veterans with mental health conditions. J Rehabil Res Dev 50(5):663–670

Twamley EW, Vella L, Burton CZ, Becker D, Bell MD, Jeste DV (2012) The efficacy of supported employ-

ment for middle-aged and older people with schizophrenia. Schizophr Res 135:100–104

Wong CJ, Dillon EM, Sylvest CE, Silverman K (2004) Contingency management of reliable attendance of chronically unemployed substance abusers in a therapeutic workplace. Exp Clin Psychopharmacol 12(1):39–46

Wong CJ, Silverman K (2007) Establishing and maintaining job skills and professional behaviors in chronically unemployed drug abusers. Subst Use Misuse 42:1127–1140

Zivin K, Bohnert AS, Mezuk B, Ilgen MA, Welsh D, Ratliff S, Miller EM, Valenstein M, Kilbourne AM (2011) Employment status of patients in the VA health system: implications for mental health services. Psychiatr Serv *62*(1):35–38. https://doi.org/10.1176/appi.ps.62.1.35