Workplace Supports and Job Retention

Promoting an Employer Driven Approach to Employment of People with Disabilities

Edited by: Paul Wehman
John Kregel
Valerie Brooke

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Virginia Commonwealth University
Rehabilitation Research & Training Center
on Workplace Supports &
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Introduction

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Workplace supports are the crucial thread which holds the performance of most workers in business and industry together. This is true for all workers, not just those with disabilities, injuries or illness. We tend to take for granted the necessity of supports in the workplace and how they influence worker productivity, worker morale, worker absenteeism, worker health, worker creativity and worker job retention. For individuals with disabilities or those individuals who are "at risk' of reduced work performance, workplace supports looms larger than ever as an essential part of the business environment.

It is, therefore, the purpose of this research monograph to describe the research that the VCU-RRTC on Workplace Supports and Job Retention has developed and implemented over the past 4 years. We look at workplace supports and job retention broadly, we do not limit our study to only one disability or one illness or type of injury; furthermore, we do not only look at workplace supports in the context of job retention but also access to the work force and job procurement. We know, in fact, that if workplace supports are not available, or not going to be available, that many jobs, if not most, are going to be not likely for persons with disabilities.

Who is this Monograph for?

So who specifically might workplace supports be designed for and in what way? Well, let's initially turn to the different populations of persons who we foresee that this research monograph might hold value. Individuals with psychiatric impairment, intellectual disabilities, traumatic brain injuries, musculoskeletal injuries, spinal cord injuries and sensory disabilities will all need tailored or customized workplace supports based on what the employer is asking them to do at work and their respective strengths and weaknesses. This group will include young people with special needs coming out of school looking for employment, individuals exiting from sheltered workshops for the first time, veterans returning to the workplace from the combat zone, and older Americans who may be recovering from physical disabilities or illnesses. The actual workplace supports for each person cannot be identified by any single established algorithm -- a careful analysis of the work environment, and ecological assessment will be necessary for every individual.

Think for a moment of the different populations described above and then think further how each one has different characteristics arranged across a level of severity. Now interact these characteristics with the ecological requirement of a given workplace which includes customers, coworkers, and supervisors in varying physical environments.....clearly, this can be a most challenging exercise. On the other hand this is the way to liberate persons who have been viewed heretofore as unemployable or 'too disabled" or who are underemployed and open the door for them into paid meaningful work, that is real work for real pay.

What do we know about Workplace Supports?

We have learned over the past eight years that the supports can be categorized as government mediated, business mediated, community agency mediated and consumer or client mediated. There are literally hundreds of workplace supports which can influence job access and retention as well as job satisfaction. We also have learned that these supports can grow almost exponentially with new information technolo-

gies, rehabilitation engineering technologies, varying types of jobs, different work settings, i.e., telework or self employment, and government rules, policies and regulations. The questions however are: Which of these supports is most important and in what settings and with what persons? If we cannot answer these questions, then we cannot empower those individuals with disabilities to be able to work competitively; furthermore, if we cannot answer these questions then we cannot help business maximize the productivity potential of each worker on the payroll. This is a critical issue for American business because of competition abroad for jobs and trade--the more productivity achieved, the higher the profitability of a company and lower government inflation.

We know that the concept of "reasonable accommodation" is something that many employers have learned is "good business"--the more one can make accommodations within cost limitations, the less turnover of employees, higher worker morale, and greater productivity. We need to look at workplace supports on a spectrum from being intensive to less intensive, from being time limited to permanent, and being delivered by management or coworkers to job coaches to no one other than the client redirecting him or herself.

Perhaps the most important thing we have learned about workplace supports over the past eight years is the extraordinary level of empowerment they can provide for persons with disabilities. If one looks at a set of job qualifications and expects all aspects of job to be completed with no variation or support, then the number of people who can apply will be limited. If one looks at the same qualifications with the understanding different and varying levels of supports may be necessary, it is not hard to see where nonverbal persons with autism may find jobs in a Walgreen's distribution center in South Carolina, or persons with schizophrenia may be able to run their own cleaning business with help from a supportive case manager, or a veteran with severe traumatic brain injury may be able to be reemployed at the State Department of Motor Vehicles with initial redesign of the job and support. The literature is replete with examples of how workplace supports can be effective. But what is the most efficient way to design and deliver these supports? This is the question that we can partially answer from our research monograph findings and clearly much more research is required.

An Overview of the Studies in the Research Monograph

Let's now take a look at the different types of studies that we conducted in order to study workplace supports and job retention. Each of these study categories has a relevant background of literature which we explain in this section.

Public-Private Sector Partnerships

There is very limited research on public-private sector partnerships and their long-term impact on job tenure and employment outcomes, despite the fact that there have been episodic efforts over the years to examine collaboration between business and rehabilitation service providers (Buys & Rennie, 2001; Egan, 2001). For example, the Projects with Industry (PWI) program sponsored by RSA has been a stalwart service program for over 20 years in which rehabilitation programs partner up with different businesses and trade associations for job placement. Individuals served by the PWI projects do not differ significantly from those served by the general VR program (Tashjian, 2003). Many PWI projects had established a relationship with one or more Business Leadership Networks, however, the extent of the private sector involvement varies considerably. Since the program's mandate to emphasize career advancement is difficult to measure, efforts to track and report employment retention is not formalized at this time (Tashjian, 2003).

None of these efforts, however, have experimentally evaluated outcomes using a randomized clinical trial approach in which individuals with significant disabilities are assigned to a public-private sector collaboration group versus only public sector and then tracked for extended periods of time. The use of methods that permit direct investigation of the question is a critical aspect of valid scientific inquiry (Shavelson & Towne, 2002, p. 62). The link between research question and method must be clearly explicated and justified. We conducted a direct investigation of this question through a controlled, longitudinal demonstration which is presented in Chapter 1 of the monograph.

This study is partially based on findings from a pilot demonstration that was conducted in Richmond, VA with Manpower, Inc. and local community rehabilitation programs with support from the Virginia Board for Persons with Disabilities in 2002-2003. The results of the preliminary pilot justify the proposed national study to empirically validate this public-private sector collaboration (Wehman, Hewitt, Tipton, Brooke, & Green, 2008). In the pilot demonstration, individuals with developmental disabilities were placed into companies such as Nationwide Insurance and SunTrust, utilizing Manpower, Inc.'s training and placement funnel.

Organizational Factors and Job Retention

The fourth section of the monograph presents research related to the organizational factors which influence job retention. Research has indicated that the barriers and facilitators of work retention indicate the importance both of human interactions and organizational structures at different levels (Freisen et al, 2001). Their model includes addressing factors at the micro-system level of the worker; the meso-system level of the

workplace, insurer and health care systems; and macro-system level of economic and regulatory environment. Using qualitative methods in their study of return-to-work, Freisen et al (2001) included the perspectives of stakeholders from each of these levels. Barriers to RTW cited were delays of all types and ineffective communications among stakeholders. We utilized the Freisen, et al. (2001) methodology to implement this study which helps us understand how businesses develop job retention models for employees with disabilities.

There is growing interest in quantitative measurement of organizational culture in order to determine its relationship with performance (Shortell, et al., 2000; Shortell, et al, 2001) and a number of tools have been developed and applied in industrial, educational, and health care settings. For example, every year Fortune magazine publishes "100 Best Companies to Work For" in America. Companies are selected on the basis of the responses to the Trust Index and Culture Audit (Great Place to Work Institute, 2004). According to the Great Place to Work Institute (Lyman, 2003), who conducts this survey, trust is what distinguishes good workplaces and trust involves three elements; credibility, respect, and fairness. Credibility is what employees think about the management, whether they find them believable and that their actions are consistent with their words, and whether they are open and accessible. Respect is what employees think that management thinks about them, whether they feel that management supports their professional development, whether they feel management respect their ideas enough to collaborate with them in decision-making, and whether they show respect for them enough as an individual with lives outside the workplace to make provisions for their private lives. Fairness is whether employees sense that they will be treated fairly regardless of their race, gender, or sexual orientation.

Akabas (1994) argued that more attention should be devoted to identifying and building on the characteristics of work places that have been successful in retaining people with significant disabilities (e.g., severe mental illness) in employment. This knowledge could be used to create work environments that can meet the unique needs of employees leading to job retention, rather than the modest gains that have been made by focusing on services for individual enhancement. She points out that the hallmark of efficient and productive workplaces is their success in gaining commitment of their employees, which yields positive outcomes on any measure used to judge performance. The qualities identified in business literature as critical to productive and successful work organizations – paying attention to the needs of employees, providing training and development, valuing diversity and teamwork, empowering employees and reinforcing performance -- have also been identified as characteristics of firms that successfully respond to disability.

Proactive employers are beginning to realize that the value of retaining productive workers extends to employees with health conditions and work limitations. They are recognizing that providing accommodations for workers with disabilities often brings significant benefits to organizations. The ability to provide support to employees when they are injured on the job or need some type of additional assistance in order to maintain employment results in increased productivity and savings in workers' compensation and other insurance costs (Watson Wyatt Worldwide, 2000). For example, the cost of an employee's health related absence is estimated to be 150 percent of that employee's daily compensation, plus any type of wage replacement benefit such as salary continuance and disability payments (Watson Wyatt Worldwide, 2001).

Workplace Disability Management

Little attention has been paid to policies and strategies that organizations can use to minimize the scale of job loss from thousands of workers each year who leave their employment due to illness and injury (James, Cunningham, & Dibben, 2002). In Section 3 of the monograph, we present results of indepth interviews we conducted at several large companies and across different agencies of levels on job retention.

Improving job retention and career advancement for people with disabilities requires meeting the expectations of both consumers and employers, and hence each must be involved in a collaborative process to do so. Worksite barriers experienced by employees with disabilities require proactive interventions that remove or reduce barriers to improve job retention (Rumrill & Roessler, 1999).

As the cost of health care and demands for increased productivity continue to escalate, leading employers moved toward integrated disability management (IDM), or absence management. This broadened the focus of their programs to include occupational and non occupational causes of paid and unpaid time off, short- and long-term disability policies, and the relevant suppliers for all these programs (Wolff, 2003). The need to integrate data from multiple sources and to coordinate the goals and actions of multiple benefits programs and external partners has been very challenging in IDM. But doing so has allowed these employers to see and understand their problems more fully. This systems perspective has led to a focus on organizational health (Wolff, 2003) which is defined as a company's ability to manage their employees, leadership and suppliers toward optimizing the goals of: well-managed benefit costs, high productivity, high levels of employee engagement, optimal levels of employed health and workforce effectiveness.

The results presented in Chapter 5 lead directly into the next section on Organizational Factors in the monograph and briefly discussed next.

Benefits Planning as a Workplace Support

This project examined the relationship between the receipt of benefits planning and assistance services and the change in total income (earned plus unearned) over time of 3,000 SSA beneficiaries who participated in ten SSA funded State Partnership Initiative (SPI) demonstration projects. Benefits planning and assistance is an innovative type of employment support that has emerged in the past several years as a new federal initiative to provide individuals with disabilities complete and accurate information on the effect of work on their cash benefits and health care, as a way of increasing consumer choice and control over their lives and careers (Kregel & Head, 2004). The results of this interesting project are found in Chapter 6 of the monograph.

Benefits planning and assistance as an employment support service has expanded rapidly in the past several years. Beginning in 2000, SSA created a national network of Benefits Planning, Assistance, and Outreach (BPAO) authorized under the Ticket to Work and Work Incentives Improvement Act of 1999 (PL 106-170). These 116 projects are presently serving over 4,000 beneficiaries each month (VCU National BPAO Data System, June 30, 2004). In addition, the US Department of Labor has recognized the value of benefits planning and assistance and has included it as a component of both the Work Incentive Grant and the Customized Employment Grant Initiatives. The Center for Medicare and Medicaid Services (CMS) also encourages states to develop benefits planning and assistance services as a part of the Medicaid Infrastructure Grants awarded to state Medicaid agencies. Finally, State VR systems and Developmental Disability Planning Councils are increasingly recognizing Benefits Counseling as a needed service and are developing funding mechanisms for its purchase. While the program is expanding rapidly, little research has been done to examine the effect of these services on the employment decisions made by individuals with disabilities.

The fear of benefit loss and the lack of accurate information on the effect of employment on public benefits is a major barrier to employment (Golden, O'Mara, Ferrell, & Sheldon, 2000). Unfortunately, many Americans with disabilities tend to live on very low incomes and rely heavily upon public income supports and publicly funded health insurance for their day-to-day existence. It is reasonable to expect that uncertainty about the effects of earned income on these income supports is of paramount importance. It may well be that this insecurity is a primary employment determinant since it affects the very decision that a beneficiary makes to even consider work as a career choice. Since benefits planning and assistance may affect this initial employment decision, it could conceivably be the essential first step to enhancing employment outcomes for persons with disabilities. If this is the case, benefits planning and assistance is in fact a critical work support that affects not only the initial employment decision, but also influences subsequent employment decisions such as number of hours to be worked, employment duration, career advancement, and amount of earnings.

What we are learning from this project is the degree to which a large group of beneficiaries receiving benefits planning and assistance through SSA-funded demonstration projects experienced changes in their employment and benefits status over time. Current incentive programs such as SSA's Ticket-to-Work are based on the concept that the goal of public policy should be the full termination of cash benefits as the individual becomes entirely self-sufficient (Kregel, 2002). However, there is no evidence to show that this all or nothing approach is the way beneficiaries actually make employment decisions. Employment and disability benefits are not mutually exclusive, but often co-occur at varying levels and degrees.

Job Retention and Job Tenure

A growing body of knowledge exists regarding the use of ongoing supports with specific populations of individuals with a disability. For example, there are a variety of employment interventions that have been demonstrated to be effective in assisting persons with severe mental illness achieve a successful employment outcome (Cook & Razzano, 2000; Drake et al, 1999; Ford, 1995; McHugo et al, 1998; Bond, 2004; Salyers et al, 2004, Musser et al, 2004). In a recent report, Ridgway and Rapp (1998) provided a synthesis of research on effective employment interventions for individuals with severe mental illness. In Chapter 9 of the monograph is a study by Bond and his colleagues which tracks the job retention supports required for persons with psychiatric impact. This is an especially challenging population to help maintain employment.

For individuals with cognitive disabilities, ongoing supports focused on job retention are provided in a variety of ways. A job coach/employment specialist can provide supports directly to the employee with a disability, or the job coach can take a more indirect role that involves advocacy and facilitation of supports, including training of coworkers to be the primary source of the support (Mank et al, 2000; Mank et al, 1999; Parent et al, 1994). Unger, Parent and their associates (1998), in researching the role of the on-site employment specialist in the provision of ongoing supports, found that employment interventions are drawn from a variety of sources. Although the rehabilitation professional is a frequent source for identifying and arranging supports, the person with a disability, family members, and others in the community can be very active in developing supports.

In a recent study, employers identified a variety of ongoing supports and job accommodations found to be effective with employees with cognitive disabilities (Olson et al, 2001). These accommodations include: providing extra attention to the employee by a supervisor or coworker; utilizing a job coach

at the work site; providing flexible hours of employment; addressing issues around the physical accessibility of the job site; restructuring job tasks; and providing longer periods of training.

What is important to recognize, however, is that virtually all of these different supports have been reported only over a relatively short-term period of 3-6 months, the period during which we know job stabilization is still occurring. The study in Chapter 9 by Bond and his colleagues gives us additional information about how supports are affecting long-term retention.

Job terminations and changes continue to be common experiences for many persons with significant disabilities even in programs with specially designed supports, (e.g., Moran, McDermott, & Butkus, 2002). Unfortunately, many individuals who are separated from their first supported employment positions remain out of the workforce or return to segregated work settings (Moran et al., 2002; Murphy, Rogan, Handley, Kincaid, & Royce-Davis, 2002). Strategies for promoting long-term job maintenance and smooth job transitions are critical for persons with disabilities (Mank et al., 1998) which is why this research on the relationship of ongoing supports to job retention is essential.

College Mentors as a Workplace Support

Our second section looks at the role of business mentors for college students with disabilities. Greater numbers of individuals with disabilities are seeking advanced degrees in order to compete for desirable positions in their chosen careers (Getzel, Briel, & Kregel, 2000; Getzel & Wehman, 2005). However, for many students with disabilities, a college degree does not always lead to a rewarding career in their chosen profession. Individuals with disabilities, as with other traditionally underrepresented groups, face labor market liability, which often places them in the position of being last-hired and the first, fired (Trupin, Sebesta, Yelin, & LaPlante, 1997). Indeed, persons with disabilities are negatively and disproportionally affected by changes in general employment trends.

A number of programs and strategies have been used in post-secondary settings to assist students with disabilities obtain the needed skills to transition into employment (Getzel, Briel, & Kregel, 2000; Hagner, McGahle, & Cloutier, 2001; Michaels & Barr, 2002; Norton & Field, 1998). These programs have used a variety of activities including job clubs, employability workshops, work experience programs including internships, job shadowing, informational interviews, mentors (both employer and peer), and career counseling.

A number of the studies have focused on the use of business mentors, for example, mentors and students establishing relationships through face-to-face meetings, by email or telephone contact (Burgstahler & Cronheim, 2001; Whelley, Radtke, Burgstahler, & Christ, 2003). Only a few studies have, however, examined the use of employers as mentors for college students with disabilities as they prepare to exit from college (Burgstahler & Cronheim, 2001; Norton & Field, 1998; Whelley, et.al, 2003). **There were no studies in the literature that systematically followed college students with disabilities and their mentors into the employment setting post graduation, so the papers which follow in Chapter 10 will fill this gap.**

EEOC as a Government Support

This project has yielded the studies that reflect part of a multi-year investigation of employment discrimination - a major impediment to job retention and career development for Americans with disabilities. Using data obtained from the Equal Employment Opportunity Commission (EEOC) through an Interagency Personnel Agreement and a Confidentiality Agreement involving the EEOC and Dr. Brian McMahon, the lead investigator for this study examined six "adverse action" variables related to job retention (discharge, constructive discharge, recall, reinstatement, layoff, and involuntary retirement) and five "adverse action" variables related to career advancement (training, promotion, demotion, work assignment, job classification).

Our unique relationship with EEOC allows us to access the entire EEOC Charge Data System (CDS) used to store detailed information on over 2 million records of employment discrimination for all protected classes. Patterns of job discrimination will be described in terms of four characteristics related to the individual employee (disability, age, sex, ethnicity) and three characteristics related to the employer (industry, employer size, and location [region]). The relationship of each variable to outcome (merit/lack of merit of the allegation) will be examined, as will the pair-wise interaction of all variables. Using a three phase approach, we have:

1. delineated the nature and scope of employment discrimination for Americans with disabilities with respect to job retention and career advancement;
2. learn the specific types of employment discrimination that are most prevalent in particular industries and locations; and
3. identify the correlates of successful merit resolutions of allegations.

Each month, the EEOC receives about 17,000 charges of employment discrimination under ADA. These numbers illustrate that people with disabilities continue to experience a significant degree of employment discrimination, and that such discrimination is a serious impediment to career advancement and job retention. Over the past ten years, we have conducted

preliminary research at the level of complaints only (not resolutions; e.g., McMahon & Shrey, 1992; McMahon, Shaw & Jaet, 1995; McMahon, Dancer, S. & Jaet, 1993; McMahon, Nosek & Jaet, 1993; McMahon & Rumrill, 2000; McMahon, 1995;). The utility of conducting in-depth analyses of EEOC administrative data is illustrated in these studies, which yielded some findings with significant implications for practitioners and policymakers, are presented below.

- Individuals with conspicuous disabilities (e.g., dwarfism, disfigurement, amputation) experience a very high proportion of complaints involving hiring, followed by persons with hearing impairment. Yet hiring represents only 5% of total complaints, which has significant implications for government officials and educators planning anti-discrimination training programs for employers.
- Persons with chemical dependency problems experience are (by far) the most significant proportion of discharge complaints, over three times larger than persons with disabilities as a group (Bell, 1993).
- The overwhelming majority of complaints (86%) derive from currently employed persons, far higher than from other protected classes (60%) (McMahon & Shaw, 1992).
- Injured worker issues loomed larger than anyone expected in the early years of ADA implementation (Bell, 1993; McMahon & Shrey, 1992).

In summary, these studies have yielded some powerful findings. However, no one has ever studied data at this level of detail involving resolved complaints, which permit an accurate description of actual (not perceived) discrimination which can be now found in Chapter 13 of the monograph.

Community Reintegration Programs and Veterans

We have learned that successful return-to-work programs or community reintegration programs serving veterans with disabilities must include intensive consideration to how employment will impact disability benefits provided by the various branches of the Armed Forces within the US Department of Defense (DoD) and the US Department of Veterans Affairs (VA). If veterans with disabilities perceive that a job might adversely impact a disability government benefit he or she may be less inclined to aggressively peruse returning to the labor market. Veterans are required to sift through a complex array of medical services, cash benefits, and other specialized programs are available to serve and support veterans. Adding to this complexity, many of these newly separated veterans with disabilities may have had significant past involvement in the civilian workforce and are also eligible for a whole separate system of government disability benefits provided by the Social Security Administration (SSA) and the Centers for Medicare and Medicaid Services (CMS).

Chapter 14 describes the nature of the problem associated with the design of veterans' disability benefits for veterans with traumatic brain injury that may affect successful community reintegration, in terms of promoting or discouraging full participation in the civilian workforce after separation from the armed services. Several major policy and practice areas within the DoD and VA disability benefit programs are identified and analyzed in terms of how they affect civilian return to work efforts of veterans. These areas are: the manner in which the military determines that service members are unfit for duty and subsequently separated or retired from the service; the manner in which disability ratings are determined and how disability ratings affect benefits; the designation of total disability ratings for veterans who are deemed to be "Individually Unemployable"; and the manner in which earned income is treated by the VA Disability. The authors present a strong case that the DoD and VA disability benefit systems currently contain serious structural flaws that serve to discourage veterans from re-entering the civilian workforce after separation from the military. Most significantly, these systems are based on the outdated premise that the presence of a disability automatically and indefinitely precludes an individual from engaging in substantial employment. As the GAO found in a 2005 study: "VA's and SSA's disability programs remain mired in concepts from the past—particularly the concept that impairment equates to an inability to work—and as such, we found that these programs are poorly positioned to provide meaningful and timely support for Americans with disabilities." (GAO-05-662T, May 2005). There is an urgent need for Congress, DoD, and the VA to carefully consider a series of legislative, policy, and regulatory actions to reconceptualize the notion of disability as it relates to employment within both the DoD and VA systems. This modernization is essential if we expect veterans of the armed forces to successfully renter the civilian world and thrive as productive citizens and workers.

The studies referenced in this monograph have shown workplace supports and job retention strategies are needed in order to enhance and increase the employment of people with disabilities. All of the papers presented in this monograph has shown unique examples of workplace supports with various populations of people with disabilities as well as highlighted the need for additional research. Businesses are experiencing many changes in their cultures, hiring, and retaining good workers so there is a need for flexible and easy adaptable workplace supports available to assist them. These workplace supports will have a direct impact on the retention of workers and the business bottom line.

In summary, there are still a great deal to learn in the area of workplace supports, in particular our returning veterans with disabilities, the increasing population of college students

with disabilities, and services and supports to individuals with the most significant disabilities. Businesses are looking for ways to compete in a more global workplace and the research presented in each chapter will generate topics for discussion and hopefully facilitate new initiatives and policies from both the public and private sector.

This monograph brings together a wealth of information for the reader and we are proud to present the findings of our research over the past five years. We appreciate the many individuals and businesses who have contributed their time and energy to assist with the research and the monograph. To those businesses and individuals we say THANK YOU!!!!

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Public-Private Partnerships and Employment of People with Disabilities: Preliminary Evidence from a Pilot Project

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Abstract

While many people with disabilities and employment service organizations struggle to find jobs and develop strong relationships with businesses, supplemental staffing companies are becoming an important resource for linking qualified applicants with disabilities to competitive employment careers. Yet, there exists a huge disconnect between supplemental staffing companies recruiting qualified applicants to fill client-employer work orders, people with disabilities who are seeking employment, and professionals with state rehabilitation agencies and community rehabilitation programs (CRP's) who assist them with their job searches. This article reports on two public-private demonstration projects in Virginia, primarily serving individuals with developmental disabilities. One demonstration project was conducted in an urban setting working exclusively with MANPOWER with the second demonstration site occurring in a rural area with Kelly Services and MANPOWER. The two demonstrations give promise for a public/private collaboration that could increase the employment of people with disabilities.

I. Introduction

For years thousands of rehabilitation agencies, service providers, and educational organizations across the country have supported people with disabilities to secure competitive employment by representing one job applicant at a time and contacting one employer regarding a single job vacancy. While this approach demonstrated a great deal of promise early on, the unemployment rate of persons with disabilities in 1986 was approximately 65% and is reported to have remained virtually unchanged in the following 18 years (NOD/Harris Interactive, 2004). Clearly these data call for a new approach and over the past decade there has been an increased awareness that if we are to ever truly assist large numbers of people with disabilities enter the workforce then the one-to-one approach used by employment support organizations and agencies needs to be broadened to include a clear focus on building long term relationships and partnerships with the businesses community. These long term business partnerships will ultimately be vital to support the millions of people in the United States with mental, physical, sensory and health related disabilities who are interested in accessing the labor force (Green & Brooke, 2001).

When President George H. W. Bush signed the Americans with Disabilities Act (ADA) into law in 1990 there were high hopes for great improvements in the civil rights for individuals with disabilities (Bruyère, 2000). Many Americans with disabilities dreamed that one of the major benefits of the ADA was the promise of competitive employment yet; this major benefit has not come to fruition. One major reason limiting ADA benefits is due to a lack of knowledge on the part of local/state organizations and businesses about the work skill and capacity of people with disabilities and people with disabilities are becoming extremely vocal about their frustration with the lack of full implementation of the ADA (Coalition for Citizens with Disabilities, June 2006).

Despite the fact that there has not been a major advancement of people with disabilities into the labor force it is important to determine if other environmental factors are changing. For example, is the business community making a concentrated effort to create open and welcoming environments for people with disabilities? Is there an increased

understanding that people with disabilities represent a huge untapped pool of talent for companies interested in growing their business or to meet their regular labor demands? Are employers interested in developing public-private partnerships designed to increase the employment rate of people with disabilities? While we do not have the answers to all of these questions we do know that increasingly CEO's and other business leaders are speaking out on the subject of hiring people with disabilities. In the spring of 2003, the U.S. Chamber of Commerce, Center for Workforce Preparation, hosted a business summit entitled: Creating a 21st Century Workforce for Business. Wes Jurey, President and CEO of the Arlington Texas Chamber of Commerce signaled that a sea of change may have already occurred when he reported to his audience that he had more "ships" than anyone in the room and his "ships" were bigger and better than most people's when he was referencing his many business relationships and partnerships (Jurey, 2003). He directed the audience to go back to their communities and begin building partnerships and strong relationships for recruiting people with disabilities as a labor force and ultimately address the large unemployment rate of people with disabilities in America.

Further evidence of increasing employer support for hiring workers with disabilities is found in a 1998 survey of human resource professionals at 35 companies, conducted jointly by the UNUM/Provident Insurance Company and the Washington Business Group on Health. The vast majority of the survey respondents (78) reported that their efforts to accommodate workers with disabilities were greater than in the past. The survey also found a 5% increase in written return to work policies for workers with disabilities since the previous year's survey. This is significant because return to work policies and other disability-related policies have been linked to better work environments for workers with disabilities (Habeck, Leahy, Hunt, Chan, & Welch, 1991).

In another survey Unger (2002) had similar findings when she conducted a major investigation regarding the attitudes of 255 supervisors, within 43 large businesses toward people with disabilities. The participating businesses were diverse in terms of types of industry. The supervisors were asked to rate the employee with a disability on a scale from 1 (extremely dissatisfied) to 5 (extremely satisfied) on items such as, timeliness of arrival and departure, punctuality, attendance, task consistency, and work speed. The 255 supervisors indicated they were satisfied with the work performance of the worker with a disability in the areas of timeliness of arrival and departure, punctuality, attendance, and consistency in task (Unger, 2002). The supervisors then ranked the employee work performance in relation to their nondisabled co-worker. Unger (2002) found in the areas of punctuality, attendance, work quality, task consistency, and overall proficiency, supervisors rated the work performance of employees with disabilities the same or better than coworkers. This research is significant because it helps to dispel the myths and misconceptions many employers have regarding hiring individuals with disabilities.

The growing body of evidence that supports a change in employer attitudes and an increase openness to viewing people with disabilities as viable job candidates may be coming just in time, as the private sector develops new business strategies for addressing the projected labor shortage of an estimated 10 million employees in 2010 (Herman & Gioia, 2000). Clearly people with disabilities and employment support programs need to position themselves to support business as they attempt to address the huge demand for labor.

II. Promoting Public-Private Partnerships

One of the leading organizations promoting private-public partnerships is the US Business Leadership Networks (USBLN), which consist of employers, corporate representatives, state and federal agencies, and community rehabilitation providers (Lieshout, 2001). Currently there are 43 BLN chapters in 32 states including the District of Columbia, with a growing interest within the business community for developing new chapters (K. McCary, personal communication, 2007). The primary focus of a BLN is to promote the best practices in hiring, retaining, and marketing of people with disabilities. BLNs view people with disabilities as the largest source of untapped talent and they are confident that they can help businesses effectively access this talent pool through introduction and education.

There are existing public-private partnerships, dedicated to promoting the employment of people with disabilities, in different stages of development across the country. Rehabilitation professionals are strengthening their business relationships which in turn are increasing the number of competitive job opportunities for individuals with disabilities. The national network for public Vocational Rehabilitation (VR) programs recognizes the importance of business as a customer and has recently created a national VR business network to expand their partnerships through the support of the Council of State Administrators of Vocational Rehabilitation (West-Evans, 2006). Key to this public-private partnership is developing a coordinated approach to serving business customers through a national VR team that specializes in employer development, business consulting, and corporate relations.

Supplemental staffing companies are another leading force in the development of public-private partnerships. Staffing companies provide excellent job opportunities for their applicants because they fill 80% of all information technology positions and 50% of all other positions (Egan, 2001). Egan (2001), states that a quality service requires establishing a relationship between a supplemental staffing company and agencies

that specialize in returning people to work. The people and agencies that specialize in helping individuals with disabilities find employment also brings a key component of awareness training to the client-employers of the staffing company.

On the surface the challenge for developing new or expanding existing pubic-private partnerships looks easy, but it is important to realize these relationships are not created over night or through a single contact (Green and Brooke, 2001). There are strong held myths and fears regarding a job candidate with a disability as well as how a supplemental staffing organization operates. Table 1 below addresses many of the myths with direct communication that are critical for the development of partnerships.

Table 1: Communication to Strengthen Public-Private Partnerships

Addressing Employment Related Myths	
Facts on Supplemental Staffing Companies	**Facts on Hiring People with Disabilities**
Myth: It is difficult to find a staffing company in most communities across the country. **Fact**: American Staffing Association (2006) recognizes 6,000 companies with approximately 20,000 offices across the country.	**Myth**: Persons with disabilities are unable to meet industry performance standards. **Fact**: Unger (2002) found employees with disabilities as capable and productive in terms of timeliness, punctuality, task consistency and speed as employees without disabilities.
Myth: Staffing companies will charge a fee to the job candidate when they find an employment position. **Fact**: There is no fee charged to the job candidate who obtains employment. Staffing companies generally have a contract with a company to fill a certain number of positions.	**Myth**: Accommodations to workers with disabilities is tremendously expensive. **Fact**: Most employees require little or no accommodation with Job Accommodation Network (JAN) reporting 15% cost nothing, 51% cost $1 to $500, 12% cost between $501 and $1,000 and 22% over $1,000.
Myth: Staffing companies typically address day labor positions not positions that can grow and advance into careers. **Fact**: Staffing companies cover the full range of employment opportunities from day labor to CEO positions and everything in between.	**Myth**: Roughly 40% of all employers report that it is difficult to provide accommodations. **Fact**: The vast majority of employers (73%) have not made any accommodation, with $500 representing the average cost among those who have made required accommodations.
Myth: Staffing companies only find temporary employment and once the job comes to an end the individual is out of work. **Fact**: Staffing companies offer a wide range of employment services to include temporary and contract staffing, recruitment and permanent placement, outsourcing, outplacement, training and human resource consulting, recruitment and permanent staffing.	**Myth**: Employees with disabilities will have more accidents and cause company insurance rates to go up. **Fact**: Unger (2002) report that employees with disabilities do not have accidents at a different rate than workers without disabilities. Additionally, workers compensation rates do not increase based upon a single worker; rather, they are set by the total number of accidents across a particular industry.
Myth: Staffing companies do not pay benefits. **Fact**: Most staffing companies offer highly competitive wages, often including health insurance, vacations and holiday pay and retirement.	**Myth**: Employees with disabilities use more sick time and won't be productive. **Fact**: Employees with disabilities have the same absentee and sick rates as employees without disabilities.

A strong and successful association is created by developing open and honest communication where both parties feel at ease to ask sensitive questions. Further, recognizing a common need or purpose and together developing strategies that will transform ideas into an organized approach and ultimately success for both parties is a great basis for growing a partnership. Over time these positive fundamental alliances are turning into strong trusting relationships and partnerships that hold great promise for increasing the employment rate and advancement of people with disabilities.

III. Development of a Public-Private Sector Model for Employment in an Urban Community

In July 2002, Virginia Commonwealth University (VCU) in Richmond, Virginia received funding to facilitate the development of public-private collaboration model for placement of persons with developmental disabilities into the workforce. VCU chose to partner with a supplemental staffing company because people with disabilities and employment service organizations struggle with how to find jobs and the flexibility that is necessary for developing strong relationships with businesses. Although staffing companies are growing because of their strong business relationship with companies in search of a qualified workforce. High quality staffing companies have a proven track record of linking qualified people to a variety of employment options to include: temporary jobs, temporary-to-permanent employment, and/or direct hires. Yet, the full power of supplemental staffing organizations has not been realized. There exists a huge disconnect between staffing companies recruiting qualified applicants to fill client-employer work orders, people with disabilities who are seeking employment, and employment service organizations (ESOs) who assist people with disabilities with their job searches.

The VCU Public-Private Partnership model was designed to address this disconnect by creating a strong business relationship among supplemental staffing professionals, Virginian's with disabilities, and Virginia ESO's. While Virginia has several supplemental staffing companies, MANPOWER, Inc. was selected because they are the world's largest employer. MANPOWER International has 400,000 customers worldwide which includes 99% of the Fortune 100 U.S companies and 95% of the Fortune 500 companies. More than 400,000 businesses look to MANPOWER for their workforce solutions and approximately 800,000 people work for MANPOWER in North America. Roughly 40% of their employees are hired by their customers who are employers. On a local level, MANPOWER is the largest employer in the Richmond area. Each week MANPOWER places over 2,500 individuals into jobs. The Richmond MANPOWER office brings a powerful resource to the table both in terms of the volume of their business as well as their philosophy which directs team members to focus on what people can do and not what they can't do. Both nationally and locally, MANPOWER has demonstrated that they are able to move people with disabilities from temporary to permanent positions at approximately the same rate as people without disabilities.

MANPOWER, Inc. board member, Terry Hueneke stated that "temporary work can help people with disabilities assess opportunities and help potential employers make work places accessible" (referenced). MANPOWER has taken a national leadership role in showing how the staffing industry can facilitate placements of people with disabilities in the nation's labor force. In 2003 MANPOWER, Inc was recognized by the U.S. Secretary of Labor's New Freedom Initiative Awards as an exemplary public-private partnership dedicated to increasing the employment opportunities for youth and adults with disabilities.

The second essential part of this collaborative model was the community rehabilitation programs (CRPs). The CRPs consist of a variety of community organizations that assist individuals with disabilities in obtaining and maintaining competitive employment. For a CRP to accomplish this mission they must be well integrated into their community. While many CRPs, across Virginia, have started to develop these business relationships, they have excluded staffing companies as a viable business partner. Generally, many staffing companies are known to community members as "temporary employment" agencies. While MANPOWER does offer temporary employment as an option, it only represents a single option across a full range of services. A major goal of this demonstration project was to support CRPs in gaining accurate information on the business model of supplemental staffing organizations; specifically how to identify high quality staffing companies, what to do when making a referral, and how to fulfill responsibilities when working with a staffing company.

A staffing specialist was hired to oversee the development of the project. In the initial month of the grant a letter was sent to all CRPs in the greater Richmond area to introduce the new project, request their participation in a pre-assessment survey, and inform them of training opportunities that would be customized to them and this project. Once the pre-assessment survey was developed it was posted online for easy access. The function of the pre-assessment survey was to test the knowledge of CRP's regarding the operation of a supplemental staffing company. It consisted of questions such as; how familiar are you with staffing companies, do staffing companies mainly offer temporary work, do staffing companies regularly place people with disabilities, and can an employment specialist still provide job site training for people with disabilities who have been placed by a staffing company? The results of the survey were used primarily to develop training for CRPs that would dispel their misconceptions of the supplemental staffing business.

A second survey was developed and administered to the Richmond MANPOWER offices. Eleven staff members from MANPOWER participated in this survey. The participants included managers, senior staffing specialist, and staffing specialists who had been with MANPOWER between one and sixteen years. The function of the survey was to assess their knowledge of ESOs as well as job seekers with disabilities. The survey consisted of questions such as; are you aware of the functions of a CRP, have you ever worked with a CRP, are you familiar with assistive technology devices, are you familiar with job coaches, and what can job coaches offer to staffing companies. The results of this survey were also used to develop a training curriculum and materials for the MANPOWER employees.

Method

The primary objective for this model was to design a referral process to assist a minimum of 25 adults with developmental disabilities to secure employment, with a minimum of 15 individuals maintaining employment for at least 180 days. While the primary objective increased competitive employment opportunities for individuals with disabilities it could not be achieved without an ongoing educational component. Consequently, another objective of the model was to educate the respective sectors on the benefits of collaboration.

Planning. The university staffing specialist collaborated with MANPOWER to develop a referral form, which would help them track and ultimately successfully place individuals with disabilities in competitive employment. The referral form required information pertaining to an individual's disability, but more importantly focused on that individual's skills and abilities. Once the referral form and process had been developed a database was created for reporting purposes.

Procedure for Implementation. In order to implement a project of this nature, meetings were held with local ESOs to share details on the grant and the referral process. Prior to the meetings a fact sheet was developed that highlighted the grant and demonstrated the benefits of working with MANPOWER, Inc. Individual meetings were conducted with all of the area CRPs. At each meeting the staff members were given a packet which included a MANPOWER information sheet identifying all the area locations, the referral form, MANPOWER's pre-registration form, and the project brochure. A key agenda item during these project kick-off meetings was facilitating a group discussion regarding CRPs past experiences with staffing companies. A small number of people reported that they had tried to access employment for their clients through a variety of local staffing companies and while there were some positive results, the overwhelming experience by participants had been negative. One major problem reported by group members was that the staffing company had not been receptive to working with a job coach. The CRPs were assured that the project would address this concern through a series of training programs directed to all of the local MANPOWER staffing specialists and mangers. These trainings would be designed to improve their understanding about the role of the job coach and strategies for how to sell the job coach to their business-customer.

A second issue for CRPs was when and how to disclose an individual's disability to MANPOWER staff. Most members believed that it was against the organizations rules of confidentiality and therefore felt that they did not have the authority to disclose a disability. Each CRP dealt with this issue internally and ultimately developed internal assurances that their customers with disabilities gave them permission to disclose their disability to MANPOWER staff. The CRPs quickly began to realize that in order for MANPOWER to be a partner in supporting a good job match, they needed to have some background information and functional information about a person's disability and include their strengths and interests. The final concern about confidentiality related to how MANPOWER handled disability-specific information after they received it. MANPOWER assured all project participants that this information would only be used for the purposes of job matching and would not be disclosed to a business-customer.

Throughout the course of the project CRP staff members and MANPOWER supplemental staffing specialists would receive regular disability awareness training. These events would address such topics as sensitivity training, information on specific disabilities, job accommodations, and the role of a job coach. Often these trainings ended up addressing questions and misconceptions that MANPOWER staff had regarding the abilities of people with disabilities. Partners in these training events included the Virginia Departments for the Blind and Visually Impaired (DBVI) and the Deaf and Hard of Hearing (DDHH) who shared resources and information on these two specific disabilities and common accommodations.

Source of Referral. Once the local MANPOWER offices started to receive referrals from the ESOs the project office received multiple complaints that the applications were incomplete. Information concerning an individual's disability and accommodations were vague and reported to be inadequate. Further, discussions with CRP staff members and their customers' revealed that they did not trust MANPOWER and ultimately felt that they would discriminate against their customers. An additional trust issue was revealed to the project staff when MANPOWER started to report that job coaches were attending the application and interview meetings with their consumers, even when their assistance was not necessary. To address these issues, face-to-face meetings were scheduled between MANPOWER and CRP managers. One of the strongest contributions to these meetings was MANPOWER's area sales manager sharing her personal experiences working with people with disabilities. These stories built confidence and new excitement regarding the potential impact of the project.

Results of Urban Demonstration

Interpersonal relationships and communication clearly proved to be the key elements to making the three components of this collaborative partnership work effectively over the 24 months of this project. During this project period a total of 140 individuals with disabilities were referred to MANPOWER with 85% of those individuals representing individuals with developmental disabilities. Ultimately 39 individuals secured competitive employment, 21 individuals with developmental disabilities and 18 individuals with acquired disabilities. The following two tables provide a description of project participants who secured employment through this model demonstration project. Table 2 on the follow pageprovides a description of those participants who maintained availability to work and completed the

MANPOWER requirements to successfully secure employment included such personal data as age, disability, activity prior to referral, and employment goal. Table 3 on page 7 reviews the same individuals and shares the title of employment position that was secured, wage, hours worked, a determination of the position matching the stated career goal at referral, and total number of months worked.

Table 2: Characteristics of Successful Urban Participants Prior to Securing Employment

Applicant Name	Age	Primary Disability	Activity Prior to Referral	Career Goal
Giac	31	Sensory	employed	Clerk
Neverett	45	Brain Injury	volunteering	Clerical
Linda	44	Psychiatric	volunteering	Office/clerk
Hilmer	50	Mobility	training	Clerical
Donna	55	Psychiatric	volunteering	Customer Service
Larry	43	Mobility	school	Office Clerk
Tabitha	24	Cognitive	training	Customer Service
Charles	37	Sensory	unemployed	Clerk
Adrienne	55	Health	unemployed	Data entry
Michelle	29	Mobility	employed (PT)	Date Entry
Joel	37	Psychiatric	employed (PT)	Bookkeeping
Daisy	54	Psychiatric	unemployed	Customer Service
Sophia	21	Health	employed	Data Entry
Jamal	28	Cognitive	unemployed	Industrial
Sediqua	25	Health	training	Customer Service
Kristen	24	Psychiatric	employed	Data Entry
Margaret	49	Sensory	employed	Data Entry
Teresa	38	Sensory	school	Warehouse
James	38	Psychiatric	employed	Warehouse
Thaxton	31	Sensory	employed	Production
Adelle	48	Health	employed	Factory
Clarence	44	Health	unemployed	Clerical
Martha	49	Mobility	unemployed	Clerical
Pauline	57	Health	unemployed	Customer service
Latrice	25	Sensory	unemployed	Clerical
Ann	24	Cognitive	unemployed	Clerical
Richard	38	Epilepsy	unemployed	Clerical
Stacy	20	Cognitive	unemployed	Clerical
Linda	50	Psychiatric	unemployed	Service worker
Rebecca	37	Psychiatric	unemployed	Production
Pamela	34	Psychiatric	unemployed	Administrative
Mark	41	Psychiatric	unemployed	Industrial
Jeanne	38	Psychiatric	unemployed	Warehouse
Byron	22	Psychiatric	unemployed	Industrial
Roberta	32	Mobility	unemployed	Clerical
Andrew	42	Sensory	unemployed	Data Entry
Jennifer	26	Psychiatric	training	Administrative
Howard	23	Sensory	unemployed	Data Entry
Julie	36	Mobility	unemployed	Clerical

Of the 39 individuals who obtained employment in the urban demonstration project 56% or 23 individuals were female and 46% or 16 individuals were males. These individuals ranged in age from 18 to 57 years of age and crossed a variety of occupations to include such careers as file clerk, production worker, inventory clerk, administrative assistant, loan operator, and mail clerk. All participants received above minimum wage with an hourly pay ranging from $7.50 an hour up to $22.00 an hour, achieving a mean hourly rate of $9.06 per hour. Full-time employment, which is considered by MANPOWER as > = to 30 hours per week, was secured by 44% or 17 individuals with the remaining 56% or 22 individuals working < 30 but a minimum of 20 hours. Months worked data were tracked on all participants by MANPOWER and at the end of 24 months

of project funding, participants had employment records that ranged from 22 months to 1 month. Of the 39 individuals with disabilities who achieved employment, 59% or 23 individuals achieved continuous employment for >180 days. It is significant to report that MANPOWER was able to match 87% of all successful participants with positions that corresponded to their stated career goals. All individuals who were active with MANPOWER at the close of the grant will remain active clients for as long as they are interested.

Table 3: Employment Record for Successful Urban Partnership Participants

Applicant Name	Position	Wage and Hours	Position Match Career Goal	Months Worked
Giac	Title Clerk	$9.09 -- full-time	Yes	22
Neverett	File Clerk	$9.34 -- full-time	Yes	11
Linda	Production Worker	$7.50 -- full-time	No	3
Hilmer	Office Clerical	$8.00 -- full-time	Yes	8
Donna	Receptionist	$8.00 -- part-time	Yes	2
Larry	Imaging	$9.35 -- part-time	Yes	11
Tabitha	Admin. Assistance	$9.34 -- full-time	Yes	14
Charles	Clerical Receptionist	$8.55 -- full-time	Yes	6
Adrienne	Clerical	$9.00 -- part-time	Yes	7
Michelle	Clerical	$8.55 -- full-time	Yes	5
Joel	Loan Specialist	$10.15 --full-time	Yes	5
Daisy	Imaging	$10.15 -- part-time	Yes	5
Sophia	Loan Specialist	$7.49 -- part-time	Yes	1
Jamal	Inventory Specialist	$9.50 – part-time	Yes	1
Sediqua	Clerk	$8.00 – part-time	No	13
Kristen	File Clerk	$8.00 – part-time	Yes	1
Margaret	Data Entry	$9.50 – part-time	Yes	1
Teresa	Loan Specialist	$10.15 - part-time	Yes	8
James	Forklift Operator	$9.00- part-time	No	8
Thaxton	Production Worker	$8.00 - full-time	Yes	9
Adelle	Production	$7.75 - Full-time	Yes	5
Clarence	Production	$7.50 - full-time	Yes	3
Martha	Admin Assistant	$10.51 - full-time	No	4
Pauline	Sales	$10.00 -- full-time	Yes	3
Latrice	Imaging	$10.15 – full-time	Yes	2
Ann	Clerk	$8.78 – part-time	Yes	1
Richard	Clerical	$9.00 -- part-time	Yes	6
Stacy	Inventory Specialist	$9.50 – part-time	Yes	3
Linda	Data Entry	$9.50 - full-time	Yes	3
Rebecca	Production	$7.50 - full-time	No	3
Pamela	Sales/Clerk	$10.15 – part-time	Yes	3
Mark	Forklift Operator	$9.00- part-time	Yes	3
Jeanne	Inventory Specialist	$9.50 – part-time	Yes	3
Byron	Forklift Operator	$9.00- part-time	Yes	3
Roberta	Admin. Assistant	$10.51 - full-time	Yes	3
Andrew	Data Entry	$10.15 – part-time	Yes	3
Jennifer	Clerical	$9.00 -- part-time	Yes	2
Howard	Data Entry	$9.50 – part-time	Yes	2
Julie	Clerical	$9.50 -- part-time	Yes	2

IV. Replicating the Public-Private Sector Model for Employment in a Rural Area

Based upon the lessons learned from the MANPOWER demonstration project, it was the expressed interest of the Board for the Rights of Virginians with Disabilities to replicate the project in a rural setting. Roanoke, Virginia located in the heart of the Blue Ridge Mountains was selected as the replication site for two reasons; its close proximity to the original site thereby simplifying management issues, and Roanoke presented an entirely different economic market when con-

trasted with the urban community of Richmond, Virginia. Although Roanoke is part of the South both geographically and culturally, its economy developed around the railroad and heavy manufacturing industries. Roanoke's economy has more in common with cities in the northern "Rust Belt" than the "Sun Belt" of Richmond. The communites surrounding Roanoke are dependent on textiles and furniture manufacturing, which have lost a great many jobs to foreign competition and technological change. Some parts of this southwestern Virginia area are reliant on coal mining which has also suffered a reduction in jobs because the mines are employing fewer workers than in the past. The immediate Roanoke area has a low employment rate with underemployemnt often cited as an explanation.

During the original demonstration project with MANPOWER a formal relationship was developed with the American Staffing Association (ASA), MANPOWER International, and Kelly Services. Because MANPOWER and Kelly Services are both well represented in the Roanoke area the project developed a formal relationship with both companies. Like MANPOWER, Kelly Services is internationally recognized for providing successful staffing and HR solutions to multinational companies. Kelly Services provides successful staffing solutions to businesses around the world including 95% of Fortune 500 companies. The company is headquartered in Troy, Michigan, offering staffing solutions that include temporary services, staff leasing, outsourcing, vendor on-site and full-time placement. Kelly Services serves 200,000 customers through 2,500 company-owned and operated offices in 26 countries. They provide employment for nearly 700,000 employees annually, with skills including office services, accounting, engineering, information technology, law, science, marketing, light industrial, education, health care and home care. Corporate revenue in 2003 exceeded $4.3 billion. Additionally, they are known as the premier promoter of the national Workforce Development Program and through that program they have developed strong alliance with business partners at the U.S. Chamber of Commerce Center for Workforce Preparation.

The project was implemented using the same process that was developed from the Richmond project. The Roanoke regional mangers with Kelly Services and MANPOWER reviewed the referral process established during the initial project and decided not to make any significant changes to the design. Meetings were conducted with the staff of MANPOWER and Kelly Services and the local CRPs to kick off the project and review how local programs could take advantage of this new resource. A new staffing specialist was assigned to the project, taking responsibility for ensuring that referrals were being made and that relationships were being built between the staffing company professionals, the CRP staff, and people with disabilities seeking employment.

Results of Rural Demonstration

Like the original demonstration project, the rural replication project was funded for an 18 month period. However, with project start-up issues the project did not begin to accept program referrals for the first four months, resulting in 14 months of active placements. Over the course of the grant a total of 75 individuals with disabilities referred to both Kelly Services and MANPOWER supplemental staffing companies with 90% of those individuals representing persons with developmental disabilities. Ultimately 20 individuals secured competitive employment through the project. Tables 4 and 5 on the following pages share employment report data to include: age, disability, activity prior to referral, career goal, employment position, wage, hours worked, match to career goal, and total number of months worked.

As seen in Table 4 below, of the twenty indiuvals who achieved employment half were females and half were males. These participants ranged in age from 20 to 57 years of age and crossed a variety of occupations to include such careers as file clerk, production worker, inventory clerk, administrative assistant, loan operator, and mail clerk. All participants received above minimum wage with an hourly pay ranging from $6.25 an hour up to $9.00 an hour. The mean hourly wage for the rural partnership project was $7.83. Full-time employment of 30 hours or > was achieved by 75% of participants (15) and the remaining 25% (5) earning part-time employment of < 30 hours but greater than 20 hours. Months worked data were tracked on all participants by Kelley Services and MANPOWER and at the end of project funding period participants had employment records that ranged from 15 months to 1 month. Of the total number of individuals who achieved employment, 45% or nine individuals achieved continuous employment for greater than 180 days. Together, Kelley Services and MANPOWER were able to match 65% of all successful participants with positions that corresponded to their stated career goals. Like the original demonstration project, despite the grant project coming to an end, both Kelley and MANPOWER will keep all 20 individuals as active client accounts interested in maintaining employment.

Table 4: Characteristics of Successful Rural Participants Prior to Securing Employment

Name	Age	Primary Disability	Activity Prior to Employment	Career Goal
Katie	24	Learning Disability	unemployed	Food Service
Sharon	57	Mental Illness & Orthopedic	unemployed	Office Assistant, Data Entry
Deepak	21	Learning Disability	unemployed	Maintenance & Stocking

Name	Age	Primary Disability	Activity Prior to Employment	Career Goal
Casey	21	Cognitive Disability	unemployed	Production
Marquis	28	Cognitive Disability	unemployed	Production
Travis	19	Learning Disability	unemployed	Production, Grounds Keeping, or Materials Handler
Tracy	33	Mental Illness	unemployed	Spanish Interpreter, Office, or Customer Service
Jacqueline	20	Learning Disability	unemployed	Production
Deborah	49	Arthritis & Repertory	unemployed	Production or Packer
Elizabeth	56	Neck Injury	unemployed	Historical Preservation or Office Management
Sherrod	24	Drug and Alcohol Addiction	unemployed	Production
Dexter	42	Drug and Alcohol Addiction	unemployed	Production, Customer Service, or Warehouse
Paul	50	Mental Illness	employed	Call Center or Customer Service Representative
Lester	50	Mental Illness	unemployed	Janitorial
John	42	Blind	unemployed	Customer Service or Assembly
Natarska	34	Mental Illness	unemployed	Warehouse or Production
Rebecca	24	Learning Disabilities	unemployed	Office Assistant
Ashley	23	Cognitive Disability and Mental Illness	unemployed	Production
John	42	Paralysis in lower extremities; limited English	unemployed	Greeter, Office Work, Light Production, or Assembly
Stephanie	35	Blind	unemployed	Computer Office Work

Table 5: Employment Record for Successful Rural Partnership Participants

Participant Name	Position	Wage and Hour	Position Match Career Goal	Months Worked
Katie	Food Services	$7.00- full-time	Yes	15 months
Sharon	Book Binder	$8.50 – part-time	Yes	11 months
Deepak	Production/Assembly	$6.65 - full-time	Yes	10 months
Casey	Janitorial	$8.00- full-time	No	15 months
Marquis	Food Production	$6.50 part-time	Yes	14 months
Travis	Assembly Work	$7.00- full-time	No	4 months
Tracy	Pack Worker	$7.50- full-time	Yes	2 months
Jacqueline	Production/Assembly	N/A- full-time	Yes	1 months
Deborah	Handwork	$8.50- full-time	Yes	1 months
Elizabeth	Data Entry	$9.50- full-time	Yes	9 months
Sherrod	General Labor	$7.30 – full-time	No	1 months
Dexter	Janitorial	$7.50- full-time	No	1 months
Paul	Telemarketer	$9.00- full-time	Yes	2 months
Lester	Food Handler	$9.00 - full-time	No	1 months
John	Interviewer/Surveyor	$7.85- part-time	Yes	1 months

Participant Name	Position	Wage and Hour	Position Match Career Goal	Months Worked
Natarska	Food Processor	$7.75 – part-time	No	8 months
Rebecca	Receptionist	$9.25 – full-time	Yes	8 months
Ashley	Book-Binder; Production	$8.50 – part-time	Yes	7 months

Public-Private Partnership Results

The results previously described provide information on disability; career goals, wage, hours worked and months employed. Despite the fact that the total number of project participants is limited to 59 individuals it is useful to compare these project data with national and state employment outcomes to begin to assess the success of these public-private partnerships. The primary intent of this project was to direct grant resources to ensure that individuals with developmental disabilities had access to employment. This goal was achieved with both partnerships with 85% of the urban demonstration project and 60% of the rural project supporting persons with developmental disabilities in competitive employment. This population would most closely resemble a supported employment caseload with individuals typically receiving employment supports from a community rehabilitation provider (CRP) and a state vocational rehabilitation agency.

The Institute for Community Inclusion (ICI) in Boston conducted a series of national studies, funded by the U.S. Administration on Developmental Disabilities and the National Institute on Disability and Rehabilitation Research (NIDRR) with the U.S. Department of Education, which focused on employment and non-work service for providers and people with developmental disabilities (Boeltzig, Gilmore & Butterworth, 2006). This national survey covered the FY2004-2005 period and collected information from randomly chosen CRPs that provide employment services to individuals with disabilities. The ICI survey asked respondents to use a one-week snapshot to report employment outcomes for five individuals with developmental disabilities who had entered integrated or competitive job within the last two years (2003-2005) with support from the organization, and had been employed in the job for at least 90 days. When these national employment outcomes are contrasted with project data we can see that individuals with developmental disabilities served by a CRP project report an average hourly wage of $7.03 vs. $8.64 for individuals served through the public-private partnership. Additionally, CRP's reported that approximately 60% of those who obtained an individual competitive job they were employed as part-time employment obtaining an average of 23 hours per week. The public-private partnership secured full-time employment for over half of all participants or 54% with none of the participants working less than 20 hours per week.

ICI conducted a similar national survey of state agency vocational rehabilitation agency data which revealed that at the time of closure in 2005, supported employment employees were earning an average hourly wage of $7.41 and Virginia supported employment constituents were earning a slightly higher wage of $7.70. These data are contrasted with the Virginia public-private partnerships noting an average hourly wage across both demonstration projects earning $8.64. Further, these same data reveal that nationally supported employment employees work on average 23.49 hours per week compared with individuals in Virginia supported employment programs who work 26.15 hours each week. While the project only collected part-time vs. fulltime employment data, we do know that over half or 54% of the pilot participants achieved full-time employment.

Discussion

It is notable that 100% of all applicants receive some kind of Soft Skills Training when they register with either MANPOWER or Kelly Services. This Soft Skills Training covered topics such as quality service, exceeding expectations, handling problem situations, customer requirements, telephone skills, dealing with harassment in the workplace, and quality concepts. In most cases job coach support was provided to assist participants in completing these online programs. It is important to examine the placements made through MANPOWER and Kelly Services and the employment goals of participants. Both companies were enormously successful in matching employment goals and careers for participants. Much of this success was achieved through a process that MANPOWER describes as the "reverse funnel approach". The reverse funnel approach means that each individual worker enters the small end of the funnel, completes a skills assessment and training process, then emerges with the ability to perform and be considered for many jobs. The reverse funnel screens individuals into a variety of job opportunities, rather than screening out multiple applicants for a single job. They have also accomplished successful job matches by developing a comprehensive picture of each job assignment provided by their business customer.

Another very important partner in the accomplishment of these employment outcomes are the CRPs. One counselor stated that this whole process is a change in the way CRPs were trained to think. They were always taught the rules of confidentiality and through this partnership they were learning how an individual with a disability could expand the employment team. Staff members with the CRPs were open to this new way of thinking and began openly communicating with MANPOWER. This open communication and disclosure has been very important in achieving these results.

Finally, the educational component of this project has been essential in achieving collaboration and results. In the early stages of the project a great deal of time was spent on the roles and function of each organization and then comparing and contrasting how the public and private sectors are similar and more importantly how they are different in their missions. There were many rough periods where staff would not execute partnership model in a timely or appropriate manner. Components of the process were routinely changed in order to make the overall goals of referral and employment achievable for people with disabilities. In the end both the public and private sectors participated in a process that would ensure successful employment outcomes for individuals with disabilities. Everyone involved invested themselves in this partnership in a way that far exceeds other business relationships and ultimately are achieving real results.

Critical Force of Vocational Rehabilitation and Community Rehabilitation Programs

The rehabilitation professional is the key developer in public-private partnerships. They must acknowledge the employer as a customer and demonstrate how their resources and clients can meet the needs of the business (Anderson, 2001). Accessing employers and obtaining their investment in partnerships is not always an easy task. Rehabilitation professionals must research the companies they are approaching so they can market to that company's needs, ultimately affecting the return on investment for all associated partners. Through active development, companies from Microsoft to McDonald's are collaborating with the public sector and establishing initiatives to hire people with disabilities (Egan, 2001). These partnerships are developing because of the increased knowledge and awareness between the two sectors and the understanding of mutual benefits.

Futurist researchers at the Herman Group have reported that the private sector is facing an estimated 10 million-employee labor shortage in 2010 and they need to actively recruit from untapped talent pools (Herman & Gioia, 2000). Currently, the most untapped talent pools are individuals with disabilities. Employers are realizing that hiring people with disabilities is good business. For example, since 1985, the Chicago Marriott has trained and hired more than 100 individuals with disabilities through a partnership with a non-profit organization (Laabs, 1994). The benefits to the hotel are lower turnover, free labor while the students are in training and increased management skills (Laabs, 1994). Employers report that while hiring people with disabilities makes good business sense, they often do not know how to tap into this labor force. Furthermore, training programs such as ones like MANPOWER has developed are not widely available in many industries. The rehabilitation provider allows the employer the opportunity to save time and money in recruiting, hiring, and retaining valuable workers with disabilities (Anderson, 2001). On the other side, the primary objective of the public sector, such as rehabilitation providers, is employment. Through partnerships with the private sector the public sector gains competitive employment opportunities for individuals with disabilities.

Critical Forces of the Private Sector

One of the leading organizations promoting private-public partnerships is the Business Leadership Network (BLN) consisting of employers, corporate representatives, state and federal agencies, and community rehabilitation providers. The President's Committee on Employment of People with Disabilities established the BLN as an employer-led coalition promoting opportunities which benefit businesses and people with disabilities (Lieshout, 2001). In order for the BLN to exist effectively they have to have the participation of employers and businesses. Therefore, the BLN focuses primarily on meeting the interests and needs of the employer. Lieshout (2001) recognized that although there is a primary focus on employers the payoff comes to the public sector when the employers get more done than the provider may have been capable of accomplishing on their own. The BLN understands that partnerships between the public and private sector can expand opportunities and resources for both sectors and they work on demonstrating the benefits of a partnership to their members. People with disabilities are recognized by the BLN as the largest source of untapped talent and they are confident that they can help businesses effectively access this talent pool through introduction and education. The BLN has proven to be a successful partnership organization because of the success that job seekers and the employers have attained.

Another leading force in the development of public-private partnerships is supplemental staffing companies. Staffing companies have immense job opportunities for their applicants because they fill 80% of all information technology positions and 50% of all other positions (Egan, 2001). HirePotential realized their capacity to place people with disabilities in good jobs. Staffing companies must discover the talents that people with disabilities have to offer an employer. If pre-employment training is key to the future success of an applicant, then a high quality staffing company can coordinate it with an outside facility, or do it themselves in-house (Egan, 2001). Egan (2001) states that a quality service requires establishing a relationship between a staffing company, like HirePotential, and the people and agencies that specialize in returning people to work. The people and agencies that specialize in helping individuals with disabilities find employment also bring a key component of awareness training to the client employers of the staffing company. Hire Potential found that the hardest part of employing people with disabilities was selling the concept to their client employers because of the fears and misconceptions of how an individual with a disability might fit into their corporate environment. The training and information from agencies that support individuals with disabilities can help staffing companies dispel the myths and fears of their client employers. Egan (2001) recognized that HirePotential

and other staffing companies interested in employing people with disabilities needed to receive additional training on reasonable accommodations so they can inform and recommend accommodations and potential costs to their client employers. Favorable outcomes have occurred because of HirePotential's willingness to collaborate with vocational rehabilitation providers, social services, and other state and local agencies that specialize in the employment of people with disabilities and their good working relationship with large corporations and government agencies interested in hiring people with disabilities. They now experience approximately a 30% success rate for assisting individuals from this untapped workforce in obtaining permanent positions within client-companies (Egan, 2001).

Finally, a number of businesses are getting involved with local schools and students with disabilities and are obtaining business internships programs and ultimately achieving employment. These companies are recognizing that not only do they need to focus on recruiting from untapped talent pools, they also need to begin recruiting from students within that untapped pool of talent.

V. Conclusion

The outcome from this employment project provides preliminary evidence that the collaborations between CRP's and large corporations like MANPOWER or Kelly Services can be highly effective. Further efforts should include how to use a supplemental staffing company to assist people with disabilities in advancing their careers. The majority of the participants in this project were either unemployed or underemployed at the time they initiated a contract with MANPOWER and Kelly Services. Another way to maximize this relationship with a supplemental staffing company would be to identify individuals who are underemployed and are ready for career advancement.

Based upon the experience with these two demonstration projects, NIDRR with the U.S. Department of Education funded a research project to test the effects of a Public-Private Partnership Program on Employment Retention of Persons with Significant Disabilities. The purpose of this research project is to evaluate the differential effects of a private sector plus public sector employment intervention versus public sector intervention only on the employment outcomes of people with significant disabilities. MANPOWER, Inc., the largest supplemental staffing company in the world, will partner with community rehabilitation programs in five cities (Atlanta, Dallas, Huntsville, Miami, and Norfolk) to support the employment and job retention of individuals with significant disabilities. This intervention will be compared with a CRP intervention alone condition in a prospective randomized experimental-control group design (Shavelson & Towne, 2002). To the best of our knowledge, no experimental evaluation of the efficacy of a public-private sector partnership has been performed, especially with a supplemental staffing company involved with people who have significant disabilities

Additionally, the Virginia Board for People with Disabilities (VBPD) determined that the full power of supplemental staffing organizations had not been realized in Virginia because there remains a huge disconnect between staffing companies recruiting qualified applicants to fill client-employer work orders, people with disabilities who are seeking employment, professionals with state rehabilitation agencies and CRPs who assist job seekers with disabilities. VCU-RRTC along with the Virginia Governor Tim Kaine, VA Department of Rehabilitative Services (DRS), VA Department for the Blind and Vision Impaired, VA Department for the Deaf and Hard of Hearing, and VA Association of Community Rehabilitation Programs (VaACSES) will work together to support the development of a State Government Initiative Promoting Partnerships and Employment for Virginian's with Disabilities. The goal of this partnership is to address this disconnect with a competitive employment model that creates a strong business relationship among state-contracted supplemental staffing organizations, Virginian's with disabilities, and Virginia CRP's. This innovative personnel training and employment demonstration model will have national implications and assist supplemental staffing organizations in tapping into this existing pool of labor and ultimately increase the employment of people with disabilities.

Clearly, public-private partnerships are developing and have proven to be beneficial to all parties involved. Rehabilitation professionals are strengthening their relationships with businesses, which in turn is increasing the number of competitive job opportunities for individuals with disabilities. Finally, companies are realizing that the state Vocational Rehabilitation program and local CRPs can be an extremely valuable resource and employing individuals with disabilities and having a positive effect on their bottom line. The literature suggests that there has never been a better time than the present to develop these mutually beneficial public-private partnerships.

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Addressing Employer Personnel Needs and Improving Employment Training, Job Placement and Retention for Youth with Disabilities Through Public-Private Partnerships

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Abstract

As social and economic forces impact business practices, the significance of delivering effective employer-driven, employment services (i.e., demand-side model) to facilitate employment and retention for individuals who have not traditionally benefited from labor force participation is of increased importance. The purpose of this paper is to provide descriptions of two public-private partnerships (Manpower, Incorporated and Community Rehabilitation Programs; Project Search), that currently operate a market-driven or demand-side model in an effort to increase the labor force participation and job retention of persons with disabilities. Factors that increase employers' interest in collaborating with rehabilitation providers and critical components of effective partnerships are discussed.

I. Introduction

The passage of the Americans with Disabilities Act (ADA) in 1990 gave individuals with disabilities the right to access and participate in a workplace free of discriminatory employment practices. In 1992, when the employment regulations went into effect for the vast majority of businesses employing 15 or more workers, approximately 54 million working-age Americans would now be afforded the same protections in the workplace as those afforded to individuals representing other minority populations. In addition to recognizing that employment discrimination against persons with disabilities is unlawful, the ADA also required employers to provide reasonable accommodations to qualified applicants or employees with disabilities if they could perform the essential functions of the job.

Despite initial and widespread opposition by the business community to the employment regulations (Title I) of the ADA, several businesses and community based organizations had already established highly regarded alliances for facilitating the employment and retention of job seekers or employees with disabilities. These public-private partnerships assisted in fulfilling the unmet personnel needs of employers who were interested in: recruiting and hiring employees with disabilities in an effort to diversify their workforce or facilitating the return to work and long-term job retention of valuable and productive workers who experienced injuries or illnesses while employed. Supported employment providers also benefited from these partnerships as they were able to assist many job seekers with disabilities in accessing employment in the competitive labor market.

For instance, the Marriott Foundation's "Bridges From School toWork" program represents a successful partnership between supported employment providers, educational agencies, and private business [5]. Commencing in the mid to late 1980s, representatives from these organizations collaborated to provide individuals with disabilities opportunities for internships that would lead to employment within the Marriott Corporation. Similarly, Zivolich and Weiner-Zivolich [21] provide evidence of the effectiveness of a public-private partnership, referred to as "Jobs PlusTM", that begin in 1989 between Pizza Hut Corporation, Integrated Resources Institute (IRI) a non-profit agency, and several supported employment providers. While Pizza Hut reported financial benefits of over $19 million in tax credits resulting from the employment of individuals with disabilities and a reduction in the cost of employee turnover (over $8 million),

there were also significant economic benefits to the community as well. Specifically, taxpayers saved an additional $43 million in reduced Supplemental Security Income spending and an additional $12 million in local state, and federal taxes were paid by workers with disabilities hired by Pizza Hut. Perhaps most importantly from a human service and social justice perspective, the more than 14,000 individuals with disabilities served through the partnership reported a higher quality of life and an average increase in earnings of 104% (1997).

To professionals engaged in job placement and training services for individuals with disabilities, the process and participant outcomes resulting from the seminal experiences of these and public-private partnerships demonstrated the importance of delivering "demand-side employment services". In providing demand-side employment services, rehabilitation professionals provide services directly to employers to address their needs for qualified employees [7]. If public-private partnerships were going to be successful in engaging the business community to hire and support persons who have historically been excluded from mainstream society, then job developers and employment specialists needed to be able to assess employer needs, present the business case for employing workers with disabilities and demonstrate how partnering with rehabilitation providers in an effort to support job seekers or employees with disabilities would add-value to their business.

II. Public-Private Partnerships in a Post-ADA Workplace

Almost two decades have passed since the law's inception and business involvement in public and private partnerships to promote the employment and retention of individuals with disabilities in the workforce remains strong. The United States Business Leadership Network (USBLN), the national organization that supports development and expansion of Business Leadership Networks (BLNs) across the country, continues to grow from just five sites in 1994 to over 43 sites at the end of 2000 [19]. The BLN consists of approximately 1,700 employer members nationwide. The BLNs are comprised of representatives from business and industry that collectively engage in activities to recognize and promote best practices in hiring, retaining, and marketing to people with disabilities. The development of the USBLN is one example of a series of partnership initiatives, primarily led by the Office of Disability Employment Policy within the United States Department of Labor, that offers mechanisms for connecting employers with potential employees with disabilities [19].

Paralleling the growth in business participation, employmentservice providers recognized the increased importance of meeting employers' needs as job developers transitioned from a sales-oriented approach to securing job placements to a marketing-focused, demand driven approach. Employment services providers who were successful with the marketing-oriented approach were able to effectively communicate how the wealth of services they could potentially provide, including increasing the organization's ability to hire and retain persons with disabilities, as well as address employer training and disability-related needs, represented a value-added business proposition.

Successful marketers were able to differentiate their products (i.e., job placement and employment training services) from competitors, including public and private sector employment service agencies. Many rehabilitation providers served as consultants to businesses in addressing ADA related-concerns. They also facilitated the identification of workplace accommodations that not only benefited the employee with a disability but other employees in the work unit or position. Their marketing-related endeavors were also bolstered by the evolving nature of employer perceptions of the work potential of individuals with disabilities. Supported by evidence from employers (see, e.g. [10,17]), and representatives of business and industry such as the U.S. Chamber of Commerce (see e.g. [4]) and the Society for Human Resource Management (see e.g. [15,17]) employment support providers could more effectively address many of the myths and misconceptions commonly expressed by employers regarding the employment potential of persons with disabilities.

The purpose of this paper is to provide descriptions of two public-private partnerships that currently operate a market-driven or demand-side model in an effort to increase the labor force participation and job retention of persons with disabilities. The two case examples have been selected because they represent different degrees of partnership engagement. The first example provides a description of an evolving partnership between Manpower, Incorporated, the world's largest supplemental staffing industry and several community rehabilitation providers throughout the Southern United States. The description of the second public-private partnership, Project Search, provides an example of a well-engaged, business-driven partnership for delivering employment and training services within a specific industry – healthcare. Following the descriptions of the partnerships, justification for business and rehabilitation partnerships, as well as, critical elements related to the development and implementation of effective partnerships to promote the employment and retention of persons with disabilities are proposed.

III. Manpower, Incorporated and Community Rehabilitation Programs

Manpower, Inc. (Manpower), is one of the largest supplemental staffing companies in the world and has a long and successful history (i.e., 57 years) of providing temporary help services to employers. In 2005, they were ranked at the top of Fortune

Magazine's ranking for the staffing industry and 140th overall. They have approximately 4,300 offices operating in 68 countries. Manpower's customers include businesses seeking pre-screened, qualified workers (i.e., endusers) and people seeking employment, both temporary and long-term. Though the organization's niche is widely recognized as providing contract workers to address employers' temporary personnel needs, Manpower also facilitates long-term, permanent placements for many end-users (i.e., direct placement into permanent employment).

During fiscal year 2004, Manpower assigned approximately 457,000 job seekers to positions with end-users and in an average week approximately 147,000 temporary employees were out on assignment in the U.S. Job seekers assigned by Manpower during 2004 worked on average a 32 hour work week. Even though the majority of Manpower's assignments are temporary, approximately 40% of assigned individuals are ultimately hired into a permanent position by the end-user. Even still, for many Manpower assignees, a series of temporary placements represents continuous employment albeit within different businesses. The commonly held perception by rehabilitation providers that employment opportunities available through supplemental staffing agencies result in sporadic or intermittent employment is misguided. Decisions as to the continuous or episodic nature of employment often rest with the job seeker, which may present both challenges and opportunities for rehabilitation providers. Individuals assigned by Manpower are employees of Manpower and are eligible for a range of benefits including: affordable health insurance, optional life and dental insurance; paid holidays and vacation; and career development and training. In instances when Manpower assignees are offered permanent employment, the employee becomes a member of the end-users' workforce.

Manpower's end-users total approximately 400,000 clients worldwide and represent a diversity of business sectors. They serve 100% of the companies ranked in Fortune 100 list and 98% of the Fortune 500 list. The type of positions individuals are assigned to with end-users can be categorized as industrial (48%), administrative (30%), or professional (22%). The success of Manpower's staffing specialists in matching the abilities of job seekers with the human resource needs of their end-users is reinforced by the existence of over 350 site management programs within North America. In other words, Manpower staffing specialists are assigned to, and located at, a specific end-user's business. The existence of such a large number of on-site management programs provides evidence of the premium Manpower's management places on developing effective partnerships.

When a job seeker visits a Manpower office, he or she meets with a Manpower staffing specialist and participates in a series of assessments and interviews to identify assignments that match the individual's interests, abilities, and experiences. In addition to matching individuals with jobs, Manpower provides an array of soft skill and career development opportunities, free of charge, to those who registered for their employment services. For instance, individuals can access more than 5,000 hours of e-learning in end-user software applications, professional development and business skills, information technology, and telecommunications through Manpower's Global Learning Center (GLC). The GLC, available via the Internet, affords individuals the convenience of accessing the training materials at a time and location that best meets their needs and schedules. Assessments and certification testing preparation courses are also available.

Overall, the staffing industry has been frequently recognized for its efforts to provide soft skills training and new skill development to job seekers [2,18]. Yet, availability of training and professional development opportunities does not ensure that persons with disabilities can access these opportunities. Therefore, it is important that rehabilitation professionals facilitate access to the technology and also provide assistance or support to individuals in accessing and participating in the training modules. The training and skill development programs offered through Manpower can be of significant benefit to job seekers with disabilities as they develop or refine the knowledge and skills that are in the greatest demand by employers to increase their marketability.

In several communities, primarily in the South, Manpower is collaborating with community rehabilitation providers to provide job placement services for individuals with disabilities. In each locality, the community rehabilitation provider (CRP) identifies job seekers with disabilities who may be interested in receiving additional job search and placement assistance from an outside agency in addition to accessing all of the existing employment services that they typically provide to job seekers with disabilities. After assessments have been completed by the CRP, the individual is referred to Manpower for intake into the Manpower-CRP Partnership Program. The CRP shares information on the job seeker's interests, job preferences, employment experiences, and knowledge, skills, and abilities with personnel at the local Manpower office. Information on potential accommodations that the job seeker may need is also provided to Manpower staffing specialists from the representative of the CRP. In some instances, the job seeker accesses services from Manpower with little or no initial support from the CRP other than the initial exchange of information and scheduling of the intake appointment. In other instances, individuals with disabilities receive support from an employment specialist during the intake process with Manpower, which may last from one to three hours. The specific arrangements for intake into the public-private partnership are decided at the local level and are made on a case-by-case basis, contingent on the needs and desires of the job seeker.

When the intake process with Manpower has been completed, both representatives from the CRP and Manpower engage in job search activities for the individual. Representatives in

the partnerships work together to formulate and implement strategies aimed at securing end-user buy-in for using the expertise and resources of the partnership to facilitate the assignment of an employee with a disability within the business. If an offer of employment results from the work of the partnership, than an employment specialist is available from the CRP to provide job placement, job-site training and follow-along services for the individual as needed or requested. It is important to note, than when an assignment is made by Manpower with an end-user and the position is a temporary placement, Manpower is the employer of the individual with a disability. Thus, the representative from Manpower communicates with the end-user and works in consultation with the representative from the CRP to address any training or support needs that may benefit the individual. Any advocacy with the end-user originates from the Manpower staffing specialist, who relies on his or her own expertise and knowledge gained from working collaboratively with the representative from the CRP to address employer questions.

The partnership is not only building Manpower's capacity to address the diverse needs and abilities of individuals with disabilities but helping to develop Manpower's capacity and expertise to engage prospective employers in supporting people with disabilities in their workforce. This is especially important in overcoming common employer misconceptions about the work potential of people with disabilities and working with rehabilitation agencies. When given the choice many representatives from business and industry have indicated that they place increased value and credibility on information and assistance derived from colleagues in the business and industry versus human service or government agencies (see, e.g. [11,12,17]).

When an individual is placed into a temporary assignment by the Manpower staffing specialist they continue identifying other assignments to ensure the individual with a disability does not experience any periods of unemployment between assignments and facilitates the transition into additional assignments. Some individuals with disabilities may not like the uncertainty of long-term employment with various employers, work settings, and job responsibilities. Yet, others welcome the opportunity to experience new job environments and duties as well as exert increased control over their work schedules. For persons with chronic mental illness or multiple sclerosis, these employment assignments might work quite well given the episodic and reoccurring nature of these disability diagnoses.

In instances where the individual with a disability may not able to secure employment via the partnership, than the CRP is conducting job development for the individual, concurrent with the on-going partnership activities. Due to a variety of factors, such as types of businesses and job opportunities that drive the local economy, it may not be realistic to think that placement will be made by the partnership. In those instances, more customized job search procedures are being implemented by the CRP. For instance, a job seeker with a disability expressed a desire to work as a chef in a restaurant. However, the local Manpower office did not have a history of, or current assignments with restaurants or businesses where a need for a chef might arise. The job seeker would continue to be served by Manpower and the partnership but it is more likely that the employment specialist from the CRP would initiate job search activities with local restaurants to identify employment opportunities.

In two localities, the Manpower and CRP partnerships, have been in existence for over three years. Preliminary data as to the partnerships effectiveness in securing employment for persons with disabilities is encouraging [18]. Six other localities are participating in an experimental study investigating the effectiveness of the partnerships for improving employment outcomes for persons with disabilities and are in the initial stages of partnership development and implementation. Employment outcomes to be analyzed include length of time until job placement, wages, job retention, hours worked per week, and fringe benefits.

IV. Project Search

Another successful, widely recognized, public-private partnership that has helped facilitate employment and long-term job retention for individuals with significant disabilities is Project Search, at the Cincinnati Children's Hospital Medical Center (CCHMC). Approximately nine years ago, several forces transpired to prompt Erin Riehle, Clinical Director of the Emergency Department at the time, to consider hiring persons with disabilities to address a reoccurring performance problem and personnel need. As clinical director, Ms. Riehle experienced difficulty in retaining motivated employees who were committed to maintaining a well-stocked emergency department with the necessary supplies needed to for efficient operation of the hospital's ER department. Ms. Riehle had little difficulty attracting qualified employees for these positions but she often found herself engaging in these activities far more frequently due to the continuous turnover.

At the same time, senior management at CCHMC was attempting to implement an organization-wide diversity initiative into their hiring practices. In her position as clinical director, Ms. Riehle would be responsible for implementing the diversity initiative within her department. In brainstorming ways to implement the diversity initiative, she encountered a policy statement from the American College of Healthcare Executives that CCHMC had also adopted. The statement reflected the role and importance that healthcare organizations have in increasing employment opportunities for persons with disabil-

ities and advocating on their behalf. Due in part to CCHMC's customer base, Ms. Riehle recognized the fact that there were very few individuals who could serve as role models in the workplace for children with disabilities who accessed healthcare services at CCHMC.

The coalescence of these factors led Ms. Riehle to seek support from community partners to address her department's human resource needs and increase the diversity by including people with disabilities in her work unit. These partners included Great Oaks Institute of Technical and Career Development and Hamilton County Board of Mental Retardation and Developmental Disabilities (MR/DD). Great Oaks, a career and technical education (CTE) center, serves approximately 36 local education agencies in Cincinnati and surrounding localities. The CTE serves over 6,000 youth in full and part-time programs per year as well as over 70,000 adults through its workforce development program. The Hamilton County Board of MR/DD provides educational, vocational, and residential services to thousands of individuals with mental retardation and other developmental disabilities.

Working with representatives from these agencies, Ms. Riehle spearheaded the development of the public-private partnership based on the needs of her business unit or a demand-side approach to facilitating employment for persons with disabilities. The model contrasted with the traditional rehabilitation agency model which often translated into CCHMC representatives interacting with numerous human service agencies and professionals who provide employment services to people who experience barriers to employment. Prior to Project Search, Ms. Riehle describes the challenges in working with 13 agencies that supported individuals with disabilities at CCHMC. She explains that she had to interact with representatives from the various agencies and that often involved 13 job developers, 13 job coaches, and 13 follow-along people representing different agencies with diverse organizational philosophies and personnel expectations (e.g., different dress codes, training backgrounds, policies, etc.).

Project Search would provide a single conduit for organizing and delivering employment services, in collaboration with the community, and deliver them in an effective and accountable way as an integrated part of the work site [13]. The partnership created a model which would build on the collective expertise of personnel within the business (employer), educational agency (Great Oaks), and the rehabilitation agency (Hamilton County Board of MR/DD). They worked to cultivate their relationships between participating agencies in a systematic manner, with an emphasis on developing a mutually beneficial "effective partnership".

The resulting partnership, Project Search, operates out of CCHMC, with staff provided by each partnership. In her role as Director of Disability Services, Ms. Riehle serves as the overall director of Project Search. Great Oaks provides job developers and job coaches while the Hamilton County Board of MR/DD supplies an on-site employee to provide follow-along services. The presence of an on-site rehabilitation professional to provide post-employment support services offers several benefits to ensuring the success of the partnership. First, having a person on-site to provide follow-along saves money and is more efficient because they can follow a larger caseload. Each employee receives a minimum of eight hours of follow-along services per month. The on-site rehabilitation professionals also allows for additional support for employees in adapting to inevitable daily changes in their jobs. Lastly, having instant access to a human service professional that is knowledgeable about the employees support needs and preferences, as well as the individual being readily available to work through problems that arise, often prevents small issues from escalating into major issues that might ultimately lead to termination (e.g., working with employee assistance to obtain counseling services for behavioral problems).

At the present time, there are approximately 60–70 people with disabilities working at Project Search. All but one of the employees reports directly to their departmental supervisor, not to Project Search staff. On average, participants in the program earn over $8 per hour, have full-employee benefits and work 33 hours per week. CCHMC offers an extensive benefit package in which part- and full-time workers are eligible for. Ms. Riehle indicated that in the last 3–4 years, more Project Search employees are beginning to give up their government benefits, primarily Supplemental Security Income and receive hospital benefits.

Project Search's job development strategy is targeted toward "....identifying the most complex jobs that are routine and systematic", says Ms. Riehle. For example, employees placed by Project Search prepare trays for operating rooms; maintain incubators in the neonatal intensive care unit and stock equipment in the emergency department. Individuals also work in the dental clinic and lab administration, where two individuals with significant physical disabilities are responsible for collecting and delivering lab specimens to various locations throughout the hospital. In an effort to maximize opportunities for workers with disabilities to interact with nondisabled coworkers and to reduce any resemblance to an enclave, the partnership has established limits for the number of Project Search employees working in each department. One of the partnership's goal is to have people with disabilities filling 3% of health care positions at CCHMC [13].

On-site interviews conducted with senior management and key program personnel within CCHMC reflect managements' perceptions that Project Search represents a viable business unit adding value to the hospital's core services. The project is effective in meeting the personnel needs of the employer while helping to support the employer's diversity initiative. The human resource director believes the networking and

personalities of the people in Project Search contribute to the partnership's success. In addition, she stresses the importance of the culture of CCHMC where inclusion is valued and supported by top management.

V. Why should rehabilitation agencies engage the business community and what benefits exist for employers?

As social and economic forces impact business practices, the significance of delivering effective employer driven, employment services (i.e., demand-side model) is of increased importance. In today's competitive global marketplace, employers are looking at ways to maximize their human capital in order to increase productivity and profitability. Many have identified the importance of a qualified and well-trained workforce as a critical factor to sustained growth and competitiveness [4,14,16]. It is quite possible that the skill of an organization's workforce may be one of the last sources of competitive advantage. As such, employers have intensified their recruitment and retention efforts in an attempt to attract and keep qualified and productive employees.

Yet, employers are not having an easy time recruiting to fill current and projected openings. Findings from a recent study commissioned by the Center for Workforce Preparation, an affiliate of the United States Chamber of Commerce, revealed that 68% of the 1,800 participating employers reported experiencing either very severe or somewhat severe problems in recruiting qualified employees [4]. Employers' expressed difficulty in recruiting qualified applicants was almost universal across industries including government/non-profit, manufacturing, health/social care, wholesale trade, and construction and retail trade. When one considers these findings and the potential reality of a projected labor shortage, employers may find it increasingly more difficult to identify and retain qualified, committed employees.

Employers are not only looking to attract applicants with the necessary knowledge, skills, and abilities to compete in a global marketplace but they are also looking to attract those individuals who can benefit from on-going training and professional development to sustain the firm's competitive advantage. The hallmarks of a high-performance organization include on-going commitment to innovation and adding value; motivating every member of the organization; and accommodating workers' different learning styles [8]. These areas represent opportunities for rehabilitation professionals to target in presenting the business-case for the establishment of public-private partnerships.

Recruitment of qualified employees, designing and delivering training addressing the unique learning styles of a diverse workforce, consulting with employers to address workplace disability related issues, facilitating return-to-work, and identifying effective workplace supports should all be part of the rehabilitation professionals' expertise. In an effort to develop and sustain effective rehabilitation and business partnerships that truly address the needs of employers and promote employment and retention of individuals with disabilities, the call for rehabilitation agencies to move beyond the traditional rehabilitation emphasis on job placement services has intensified [3,7,17]. In addition, as various social and economic forces impact business practices, many corporations have been rethinking their traditional approaches to philanthropy and seeking forms of engagement that are of higher impact and of greater business relevance [1]. Yet, having the knowledge and expertise to address employer needs in the areas identified does not insure active employer participation.

VI. Critical Components of Effective Business-Rehabilitation Partnerships

There is limited empirical evidence that documents the critical components of sustainable business and rehabilitation partnerships. Furthermore, much of the existing literature on effective partnerships in general is not based on scientific evidence but the "tacit knowledge" derived from the experiences of partnership participants [20]. This also holds true for much of the work regarding effective business and rehabilitation partnerships. The limited evidence generated from two qualitative studies conducted with rehabilitation providers and employers reported similar findings (e.g. [3,6]).

For example, findings from semi-structured interviews conducted with rehabilitation professionals and employers identified six themes related to the establishment, development, and maintenance of partnerships [3]. These themes include:

1. a commitment to community responsibility by employers;
2. competency in service delivery by the agency in terms of responsiveness, reliability and consistency;
3. trust between the agency and the employer;
4. a customer focus by agencies;
5. exchange of benefits between employers and agencies; and
6. extensive period of working together in an effective and satisfying manner (2001).

The vast majority of these themes are represented in the preceding case studies. The lone exception being the lack of an extensive history between Manpower and the participating CRPs, as these partnerships are still evolving in the various localities.

The themes identified by Buys and Rennie [3] were also corroborated with findings resulting from independent focus groups conducted with employer representatives and rehabilitation professionals. Four recommendations based on the findings suggest the need for rehabilitation professionals to:

1. focus on the quality of services (e.g., responsiveness, follow-through, and business knowledge) provided to the business community versus job seeker capabilities;
2. adopt a more proactive approach to job placement for persons with disabilities (e.g., providing disability awareness training to the business community, conducting job analysis, etc);
3. assess customer satisfaction; and
4. conduct on-going focus groups with the local business community to determine employer needs [6].

However, the questions posed to focus group participants may have contributed to limitations in their recommendations as participants were queried almost exclusively on job placement services as the purpose for developing effective business and rehabilitation partnerships, not the broader services that rehabilitation agencies could ultimately provide. In addition, recommendations were targeted to rehabilitation agencies and professionals, exclusively, not business and industry representatives despite participation from both groups.

Though not grounded in business and rehabilitation partnerships specifically, Austin's [1] "Cross-Sectoral Collaboration Framework" probably provides the most current and comprehensive description of the factors that impact partnership development and sustainability derived from case studies of several partnerships between non-profit agencies and businesses. His framework consists of five components that describe how collaborative relationships develop and evolve, including factors that challenge and sustain the partnerships. These five, non-sequential, components include:

1. Collaboration Engagement Continuum;
2. Alliance Drivers;
3. Alliance Enablers;
4. Challenges; and
5. Collaboration Value Construct.

The Collaboration Engagement Construct helps identify the type of relationship and its evolution over time. In a business and rehabilitation partnership it represents the degree and form of collaboration between the employer and the rehabilitation provider over time. Austin [1] describes the nature of the relationship as passing through stages from "philanthropic", to "transactional" and to "integrative" (see Figure 1 below). In light of Austin's work and the preceding case examples descriptions, we can speculate that Project Search is much further along the continuum than the Manpower and CRP partnership. To the extent that all Project Search partners contribute fiscal and personnel resources, the nature of their relationship falls within the integrative end of the continuum. Whereas, the Manpower and CRP Partnership is still evolving and more likely to be described as "philanthropic" or "transactional", depending on the specific locality.

Alliance Drivers, Enablers, and Challenges all represent forces that move the partnerships along the continuum, including both advancements and regressions. Drivers are described as key forces propelling the relationship (e.g., strategies, mission, values alignment, personnel connection and relationships, value creation, shared visions, continual learning); Enablers represent D. Unger -- Addressing employer personnel needs and improving 47 secondary factors that support or advance the Alliance Drivers (e.g., focused attention, communication, organizational system, mutual expectations); and Challenges represent dimensions of the partnership that represent significant challenges to partnership effectiveness (e.g., creating mission and vision fit, building the value construct, managing the relationship, institutionalizing the alliance).

The final component of Austin's Cross-Sectoral Collaboration Framework is the Collaboration Value Construct which focuses on assessing the value of the partnership and its activities to the partnership members. The Collaboration Value Construct relates to the nature of resources transferred and involves assessing the benefits of partnership participation but also evaluating the opportunity costs associated with participation.

Figure 1: Austin's Collaboration Engagement Continuum

Level of Engagement	Low>>>	>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>High
Nature of Relationship	Philanthropic>>	Transaction>>>>>>>>>	>>>>>>>>>Integrative
Magnitude of Resources	Small>>>>>>>>>	>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>Big
Scope of Activities	Narrow>>>>>>>>	>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>Broad
Importance of Mission	Peripheral>>>>	>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>Central
Interaction Level	Infrequent>>>>	>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>Intensive
Managerial Complexity	Simple>>>>>>>	>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>Complex
Social Value	Modest>>>>>>>	>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>Magnified

Austin describes the magnitude of the Collaboration Value Construct along three dimensions of resource transfers including: generic, core competencies, and joint resource creation (2000). Undoubtedly, the partnership is much stronger and offers greater sustainability when mutual benefits exist for partnership members.

We can describe several of these forces as they pertain to the Manpower and CRP partnership due to the role of project staff from the Rehabilitation Research and Training Center on Workplace Supports and Job Retention at Virginia Commonwealth University in the development and implementation of the partnerships in each locality. For example, Alliance drivers include a commitment to improving the labor force participation of individuals with disabilities, shared organizational values that embrace inclusiveness and diversity, and the facilitation of personnel connections between staffing specialists with local Manpower office and rehabilitation professionals within the CRP through a mutually respected organization. Because many of the Manpower and CRP partnerships are in the initial stages of implementation, on-going continual learning is occurring. This is especially evident in addressing concerns by employers who may hire individuals with disabilities through the partnership program.

Therefore, the implementation of the Manpower and CRP partnerships are not without challenges as many Manpower staffing specialists address questions raised by skeptical end-users (i.e., prospective employers) regarding the capabilities of workers with disabilities. This example presents a challenge to the partnership but also an opportunity for the partnership to continue to evolve as partnership members support each other in addressing employer concerns. For instance, the rehabilitation professional addresses the concerns raised by the end-user by communicating the benefits of hiring persons with disabilities and the opportunity for on-site support and training assistance to facilitate successful employment outcomes to the staffing specialist with Manpower, who in turn communicates with the prospective employer.

VII. Conclusion

When attempting to engage the business community to promote the participation and retention of persons with disabilities, it is important for the rehabilitation agencies to recognize the value of the services that they provide in light of employer needs. From the descriptions of the rehabilitation agencies initial efforts to engage the business community prior to the passage of the ADA to the evolution of business and rehabilitation partnerships described in the Manpower and CRP partnerships and Project Search it is evident these public and private partnerships have the potential to engage participants beyond the philanthropic stage of Austin's Collaboration Engagement Continuum [1].

Yet, rehabilitation professionals must understand both the challenges and opportunities that they may encounter in attempting to develop effective and sustainable partnerships with business and industry. Effective public-private partnerships are just as diverse as the people with disabilities that seek employment and career services from rehabilitation agencies. It is not "a one size fits all approach" but instead an approach that is based on the unique contributions that each partner can deliver that facilitates the accomplishment of shared goals based on similar organizational values and missions.

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Towards a Public-Private Partnership in Competitive Employment for Persons with Disabilities: Supplemental Staffing and Community Rehabilitation Programs Working Together

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Abstract

Increasingly, businesses are engaging with employment support providers to support people with disabilities in the competitive workforce. Many of these partnerships have evolved beyond philanthropic corporate initiatives to reflect increasingly integrated services between businesses and rehabilitation providers. Yet, beyond case examples and descriptive data, there is little evidence as to the effectiveness of public-private partnerships in demonstrating enhanced employment outcomes for people with disabilities. The present investigation attempts to address this limitation through a multi-site, clinical trail study designed to estimate the effects of a business/rehabilitation partnership on employment outcomes for adults with significant disabilities when contrasted to community rehabilitation provider employment services. Findings and implications for future research are presented.

I. Introduction

Disability and employment policy involves the interaction between the labor market, health care, and income polices. While legislative and government initiatives have attempted to address barriers to employment for people with disabilities within and across each of these areas, many of the programs or practices, emulating from these initiatives have focused or been directed toward supply-side factors. In other words, interventions directed at facilitating employment for individuals with disabilities have targeted individual or job seeker barriers, such as the potential need for additional job training and supports beyond what employers may perceive as customary or reasonable, or the potential loss of federal disability benefits (e.g., SSI, DI, or Medicaid).

While many of these initiatives have been effective in addressing barriers to the workforce for some individuals with disabilities, they tend to ignore the increasingly complex role the business community or local economy plays in assisting many individuals with disabilities with accessing the competitive workplace. Furthermore, job placement and employment support programs for individuals with disabilities have primarily operated from a service delivery approach in which a single job seeker is linked to a respective employer, on a person-by-person basis. In this manner, services are directed to the job seeker and the respective employer in an effort to facilitate employment and favorable employment outcomes.

Recently, several economic and societal factors have caused providers of vocational services to explore additional strategies to assist many more individuals with disabilities in seeking employment beyond the one person at a time approach to job placement and support. These factors include: long waiting lists for vocational services, funding challenges and service reimbursement rates, increased incidence of workplace disability, evolving nature of work supports and federal polices to encourage work, and employers' increased acceptance and experiences with workers with disabilities. In their pursuit of additional

job placement and support strategies, employment support providers have expanded their efforts directed at meeting the employers' general personnel and disability-related training and assistance needs through the provision of demand-side employment services. This approach involves a more targeted marketing effort directed at employers and involves employment support providers understanding the human resource, workforce training or development, and employee retention needs of the business and then delivering employment services that address business needs.

Business and rehabilitation partnerships represent a viable mechanism for delivering demand-side employment practices as well as expanding the one-at-a time job placement scenario to include multiple employment possibilities within, or through, a single entity. These partnerships are especially desirable, and needed, to reduce the relatively high, and constant, unemployment rate reported by persons with disabilities. Increasingly, business representatives and rehabilitation professionals have called for the development of relationships and sustainable partnerships between employment support providers and businesses which result in mutual benefits for all partners (Buys & Rennie, 2001; Millington et al., 2003; Unger, 2006; Unger & Kregel, 2005; Wehman et al, 2008). These partnerships reflect the continued evolution of the vocational rehabilitation service delivery system as supply and demand side employment services are provided by employment support providers.

Recommendations resulting from a National Summit to Develop a Research Agenda Related to Employer Perspectives on Workers with Disabilities (2007) acknowledge the importance of public-private partnerships and identified the need to investigate the efficacy of public-private partnerships in stimulating employment for people with disabilities. The purpose of this paper is to describe the Virginia Commonwealth University (VCU) Public-Private Partnership Employment Model and present findings from an investigation of the differential effects of a private sector plus public sector employment intervention versus public sector intervention only on the employment outcomes of persons with significant disabilities.

II. Existing Evidence of Business and Rehabilitation Partnerships

It is generally reported that no universally accepted definition of partnership exists, although many partnerships share common elements, such as an arrangement between organizations, groups, agencies, individuals, or disciplines who share common aims, vision, goals, mission, or interests (Wildridge, Childs, Cawthra, & Madge, 2004). Partnerships between businesses and employment support providers are well documented in the rehabilitation and employment literature. Several of the well-documented and early partnerships emerged with the infusing of funding for supported employment and school-to-work transition services for youth with disabilities. While more recent partnerships have originated from the demand side in an effort to address an employer or business need, such as Project Search operating at Cincinnati Children's Hospital. Similar evidence can be found in business and industry trade journals, though the information appears less frequently. Large corporations such as Sears (Blanck, 1996), Walgreen's (Lewis, 2008), and others (McMahon et al, 2003) are recognizing that hiring persons with disabilities fills an important personnel need, as well as contributes to the expansion of the business's customer base. Thus, they are increasingly seeking out employment support providers in an effort to include and support people with disabilities in the workforce.

Evidence of business and rehabilitation partnerships most often reflect rich case studies or examples of employers collaborating with employment support providers. Suggestions on how employment support providers can more effectively market their services (Fabian, Lucking, & Tilson, 1995; Owens-Johnson & Hanley-Maxwell, 1999) and engage employers (Buys & Rennie, 2001) are prevalent in the partnership literature. It is not surprising that there is much interest in and information regarding partnership development, such as characteristics of effective partnerships and how employment support providers can deliver demand-side services to employers. Yet, much of the information on effective partnerships is anecdotal and descriptive. Although characteristics of the partnerships, such as the existence of a shared vision, or resources, are important to partnership development and sustainability, we know little about the benefits to participating organizations or individuals receiving services through the partnerships.

III. Populations Served and Business Sectors

Partnerships consisting of educational agencies, employment support providers, government agencies and representatives from business and industry highlight the individual and societal benefits of public-private partnerships to facilitate employment for persons with disabilities. Public-private partnerships in the disability and employment arena reflect benefits for: transition-age youth (Donovan & Tilson, 1998; Padolana, 2003; Rutkowski, Daston, VanKuiken, & Riehle, 2006), adults with disabilities (McCary, 2004; Miano, Nalven, & Hoff, 1996; Wehman et al., 2008; Weiner & Zivolich, 1998), individuals with severe disabilities (Hoff & Nalven, 1995; Rutkowksi et al., 2006; Weiner & Zivolich, 1998; Zivolich & Weiner-Zivolich, 1997) and individuals with less significant disabilities (Blanck, 1995; Donovan & Tilson, 1998; IBM, 1991).

Public-private partnerships have also engaged employers representing businesses historically associated with supported employment as well as high growth and emerging indus-

tries. For instance, employment support organizations have collaborated with employers representing: financial services and insurance (McCary, 2004; Miano, Nalven, & Hoff, 1996); healthcare (Rutkowski, Daston, Van Kuiken, & Riehle, 2006); retail (Blanck, 1995; Lewis 2008, Wing, 2008); hospitality and entertainment (Donovan & Tilson, 1998; Weiner & Zivolich, 1998; Zivolich & Weiner-Zivolich, 1997); supplemental staffing (Blanck,1998; Wehman et al., 2008), and technology services (IBM, 1991; Padolana, 2003).

IV. Job Seeker Benefits

Hiring

We know that individuals with disabilities are obtaining employment through the coordinated efforts of business and rehabilitation partnerships. The business initiated partnership between Cincinnati Children's Hospital Medical Center, Great Oaks Institute of Technical and Career Development, and Hamilton County Board of Mental Retardation and Developmental Disabilities has facilitated employment for over 70 individuals with significant disabilities since the partnerships inception in 1996 (Rutkowski et al., 2006). Similarly, the largest scale national business and rehabilitation partnership, the Pizza Hut Jobs Plus Program, documented over 15,000 job placements for persons with severe disabilities during a 6-year period (Zivolich, 1995; Zivolich & Weiner, 1996;1997).

More recently, Wehman and colleagues (2008) detailed the development and implementation of a public-private sector employment model, the VCU Public-Private Partnership Model, that engages community rehabilitation programs (CRPs) with supplemental staffing agencies in an effort to address personnel needs of the staffing agencies and increase employment opportunities for individuals with developmental disabilities. The model was implemented in an urban and rural area. Outcomes in the urban locality indicated that during 24-months, 140 job seekers with disabilities were referred to a supplemental staffing agency for job placement with almost one-third of the individuals (n = 46) secured employment through the partnership. During the 14 months of the rural project, findings indicated that approximately 27% of the 75 individuals served through the partnership secured employment.

However, other than aggregate reporting of the number of individuals hired and the types of job the individuals secured, we have very limited information as to whether the partnership assisted more individuals with securing employment beyond what the employment support provider would typically experience outside of partnership activities. For instance, the Employer Assistance and Recruiting Network (EARN), a program operated by the United States Office of Disability and Employment Policy (ODEP), represents a public and private partnership designed to increase the employment of people with disabilities by providing no-cost disability consulting and candidate sourcing services to the business community. Case examples from EARN detail the success of businesses that have employed people with disabilities. However, findings regarding the effectiveness of EARN in addressing businesses' personnel needs or facilitating employment for job seekers with disabilities is lacking.

Earnings

Increased earnings of persons with disabilities who were recipients of partnership services are often identified in descriptions of business and rehabilitation partnerships. For example, Zivolich and Weiner-Zivolich (1997) found that the income of employees with severe disabilities in the Jobs PlusTM Program increased an average of 104% in comparison to their previous wages. Wages or earnings reported for employees with disabilities in partnerships are the same or better than those reported for employees without disabilities (MBNA, 2004; Miano et al., 1996). Findings have also indicated that wages and hours worked per week for partnership participants are greater than those reported for a national sample of supported employment participants (Wehman et al., 2008).

Retention

There is less information related to the duration or length of time employees with disabilities remain in their jobs in comparison to other employment outcomes for individuals with disabilities that have been served through rehabilitation and business partnerships. Several case examples describe retention rates for a specified time period (Blanck, 1995; Miano et al., 1998; Rutkowski et al., 2006), or provide retention rates for employees with disabilities in comparison to their non-disabled coworkers (Weiner & Zivolich, 1998). However, the length of time individuals remain in their jobs was either not collected or reported for the vast majority of the reviewed studies. For instance, Projects with Industry (PWI) program sponsored by the Rehabilitation Services Agency (RSA) has been a robust service program for over 20 years in which rehabilitation programs partner with different businesses and trade associations for job placement. The private sector's involvement with PWI varies considerably and there is no formal mechanism for monitoring and reporting employment retention (Tashjian, 2003).

Even still, the measurement and reporting of retention is inconsistent across business and rehabilitation partnerships making it challenging to assess retention across different partnerships. Findings related to retention and duration of employment are frequently reported as the proportion of employees who leave or are separated from employment, (i.e., turnover rate) or the proportion of employees who work in excess of a given number of months (i.e., retention rate) making it difficult to draw conclusions.

Nonetheless, reported retention rates for workers with disabilities employed through the efforts of other business and rehabilitation partnerships can be viewed somewhat favorably. The Universal Access Program at Universal Studios in Hollywood, California, reported a 62.5% retention rate for workers with disabilities, while the rate for non-disabled coworkers during the same period was approximately 30% (Weiner & Zivolich, 1998). The duration of employment for employees with disabilities placed through a rehabilitation and business partnership involving the Prudential Insurance Company ranged from 7 to 34 months with several employees still working at the time data were collected (Miano, Nalven, & Hoff, 1996). For the 70 employees who are part of Project Search, based at Cincinnati Children's Hospital, the average length of employment is approximately five years (Riehle, 2003). While other findings report a 28.3% turnover rate for employees with disabilities in comparison to an average annual turnover rate of 150% for nondisabled employees (Zivolich & Weiner-Zivolich, 1997).

Societal and Business Benefits

The existing empirical evidence frequently reflects the benefits of rehabilitation and business partnerships as they relate to employment outcomes for individuals with disabilities while ignoring societal or business benefits beyond reduced turnover. The lack of evidence for the societal or business impact may have more to do with the methodological challenges associated with collecting these types of measures. Yet, a limited number of business and rehabilitation partnerships report the contributions that the outcome associated with these partnerships lend to society by facilitating employment for individuals with disabilities. For instance, approximately $43 million in reduced Supplemental Security Income expenditures and rehabilitation costs were associated with the 14,000 people employed through a rehabilitation and business partnership, Jobs PlusTM (Zivolich & Weiner-Zivolich, 1997). Additionally, $12 million in local state, and federal taxes were reported to have been paid by employees with disabilities employed through partnership. For the Jobs PlusTM partnership, the business partner, Pizza Hut corporation, reported financial benefits of over $19 million in tax credits, over six years, from its efforts to employ individuals with disabilities (Zivolich & Weiner-Zivolich, 1997).

While much of the empirical evidence originates from partnerships that resulted through the work of supported employment providers and emphasized job placement, more recent evidence reflects business and rehabilitation partnerships directed as addressing disability in the workplace and returning employees who experience disability or chronic health conditions while employed, back to work. McMahon and colleagues (2004) present 20 case examples of successful corporate models of business-based programs designed to hire and retain people with disabilities. Their findings indicated that businesses who were having the greatest impact on the employment of people with disabilities had strong recruitment and hiring programs that targeted people with disabilities or the company had a formal business plan that specified internal collaboration techniques, safety procedures, or an accommodations specialist for return to work issues when an employee became disabled.

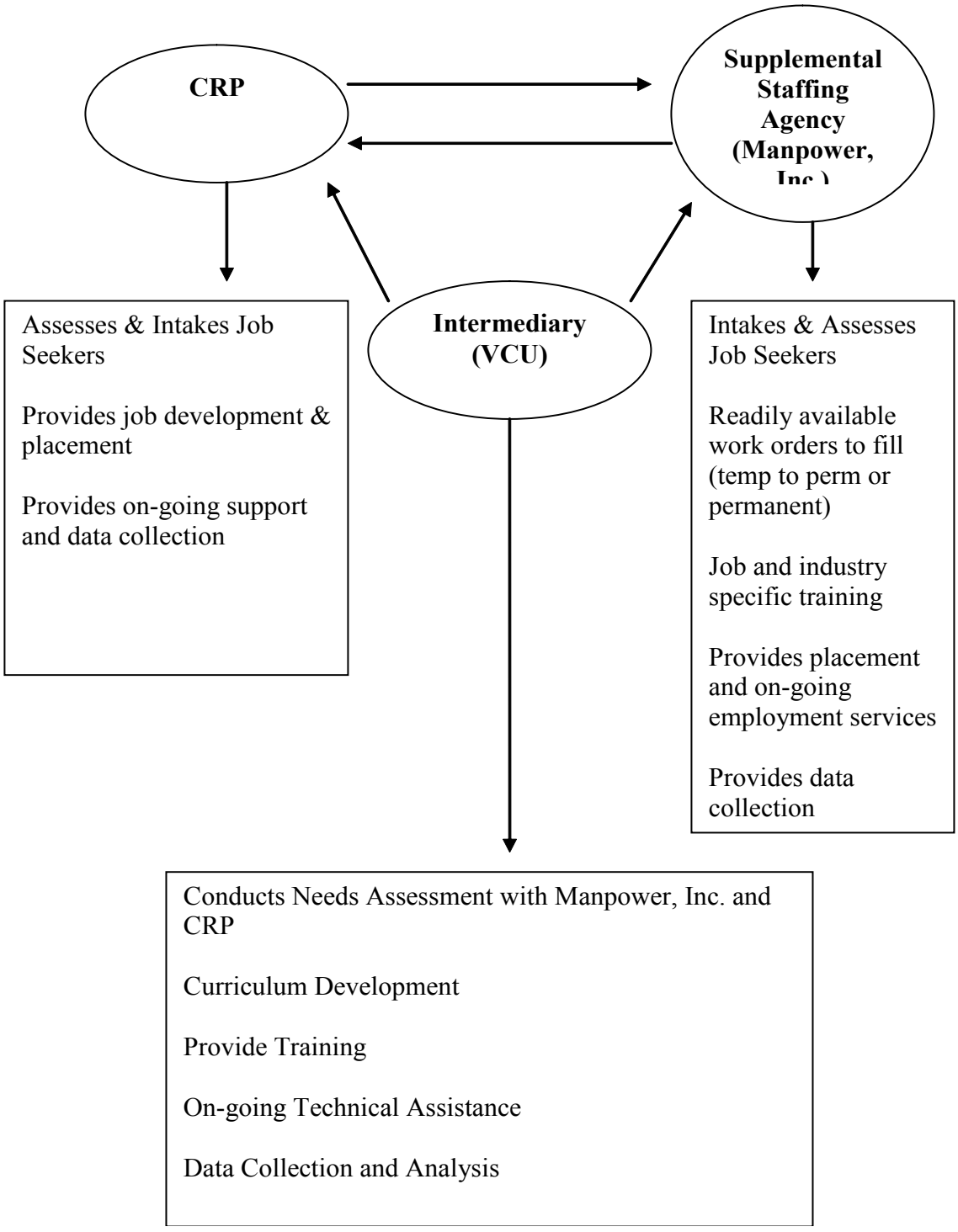
It is clear that business and rehabilitation partnerships are widespread and continue to evolve. Yet, beyond descriptive data there is little evidence as to the effectiveness of the public-private partnerships in demonstrating enhanced employment outcomes, such as increased work hours, wages, and retention for individuals with disabilities. Even still, the descriptive data is often limited to specific geographic areas and reflect the economy of the area and often lacks non-partnership participant employment benchmark outcomes to serve as a comparison. The present investigations attempts to address limitations of the existing evidence by conducting a multi-site, randomized clinical trial study that compares the employment outcomes of job seekers with disabilities served through a business and rehabilitation partnership with outcomes experienced by job seekers not served through the partnership.

V. The VCU Public-Private Partnership Employment Model

The VCU Public-Private Partnership Employment Model is represented in Figure 1 on the following page and illustrates the relationship between an intermediary (i.e., VCU), the community rehabilitation program (CRP) and a supplemental staffing agency (i.e., Manpower, Inc., Kelly Services, Inc.). Within the model, VCU engages interested community rehabilitation programs and the respective supplemental staffing company servicing the CRP's locality. Supplemental staffing companies were identified as collaborators due to their experience and success in linking qualified people to a variety of employment options to include: temporary jobs, temporary-to-permanent employment, or direct hires. Furthermore, the supplemental staffing agencies have positions that are available and which they are actively recruiting. However, employment support organizations and people with disabilities are often reluctant to call on supplemental staffing agencies due primarily to the commonly held misconception that supplemental staffing agencies only fill temporary work positions with no or limited prospects of long-term employment.

The VCU Public-Private Partnership Employment Model depicts the relationships and services offered between the participants in the model. **Step one** includes an independent, initial needs-assessment conducted by the intermediary with representatives from the CRP and representatives from the business partner. For the purpose of the current study, the

Figure 1: VCU Public-Private Partnership Model



business partner was Manpower, Inc. so representatives from the respective Manpower office serving the CRP's locality were targeted for participation. The intermediary conducts independent telephone surveys with representatives from the CPR and the business partner order to identify existing organizational capacity to provide employment services, understand each groups' knowledge of the services provided by the other, identify needs related to disability and employment training, supplemental staffing, and to assess the level of interest in working together. The needs assessment includes an initial conference call to representatives from each of the two participating agencies, as well as subsequent conference calls to clarify information and arrange for a face-to-face meeting with representatives from members of the emerging partnership.

During these activities, the intermediary reviews the information in light of the findings related to effective partnership development and identifies areas were similarities and differences may exist. Areas were discrepancies are noted are addressed during the face-to-face meeting and subsequent train-

ings. In addition, all key stakeholders in the partnerships meet to learn more about each organization and to become familiar with the key players in the developing partnership. Data gathered from the needs assessment is taken into account by the intermediary in the development of the training curriculum.

Step two involves the development of curriculum by the intermediary (i.e., VCU) that will address employment and disability related training needs of both groups, as well as contribute to the development of the partnership. **Step three** involves two days of on-site training for the partnership that addresses needs resulting from the assessment, as well as the job seeker referral process and project protocol. Upon the completion of the training, the CRP begins to identify job seekers for referral to the supplemental staffing agency for placement.

Step four involves technical assistance provided to both groups, either concurrently or independently, and both on-site and through the use of teleconferencing. In the initial stages of the partnership development, the intermediary plays a pivotal role in the development and sustainability of the partnerships, primarily through the delivery of technical assistance and support. Then, depending on the needs of the partnership, the intermediary begins to fade from involvement in the partnership and concurrently looks to the CRP to provide the support and the technical assistance to the supplemental staffing agency in serving individuals with disabilities. As depicted in Figure 1 on the previous page, the lines with arrows represent the exchange of information between the CRP and Supplemental Staffing Agency and the intermediaries and the Partnership. It is important to note that the VCU Public-Private Partnership Employment Model has drawn heavily on the participation of supplemental staffing agencies, due in part to the diversity of businesses and employment options represented and Manpower's reputation for advancing employment for individuals with challenges to employment. However, the model can be implemented with employment support organizations and any business, not just supplemental staffing agencies.

The main purpose of the present investigation was to assess the efficacy of this private sector plus public sector employment intervention versus public sector intervention only on the employment outcomes of persons with significant disabilities. In addition, we extended research on public-private partnerships generally and on our research program related to the VCU Public-Private Partnership Employment Model specifically in three ways.

First, we identified community rehabilitation programs (CRP) operating in diverse economic and geographic areas to partner with a single business entity with multiple units that has also been widely recognized as the world leader in the supplemental staffing industry as well as the employment and disability community. Second, at the job seeker level, we randomly assigned participants to receive employment services through a public-private partnership, where Manpower works collaboratively with a respective CRP to provide employment services, or through a control group (i.e., only CRP services). By using a control group that continued to receive employment services from the CRP and without the involvement of Manpower, we could estimate the effects of the public-private partnership. Third, our VCU Public-Private Partnership Employment Model protocol addressed and our dependent variables assessed the major challenges confronting job seekers receiving services through community rehabilitation programs and vocational rehabilitation: rapid entry into the workforce, desire for increase earnings, and employment retention. The present investigation builds on the work and model implemented by Wehman and colleagues in 2002 (2008) but differs in that the present investigation involves multiple-sites, random assignment of job seekers, and tracks participant data longitudinally.

VI. Method

Design. A randomized-groups, repeated measures design was used to estimate the effects of a business-rehabilitation partnership on the employment outcomes of adults with significant disabilities. Based on the descriptive findings from the pilot study, hypotheses were developed to determine if assignment to the public-private sector group would result in participants:

1. securing employment more quickly,
2. earning higher wages,
3. working more hours,
4. securing additional fringe benefits, and
5. experiencing increased periods of labor force participation than those experienced by participants in a "business as usual" control that received available public sector employment services.

Participant Selection

The investigation was conducted with six community rehabilitation programs (CRP) and the corresponding offices of the supplemental staffing company, Manpower, Incorporated (Manpower) in each of the localities identified in Table 1 on the following page. The CRPs were solicited for participation by research staff based on the following criteria:

a. operation of a supported employment service program receiving funding from the state Vocational Rehabilitation (VR) agency,
b. ability to enroll and provide employment services to a minimum of 50 individuals with significant disabilities over a 12 month time period, and
c. an ability to track employment outcomes of individuals receiving supported employment services through a management information system or other data collection protocol.

Table 1: Participating Community Rehabilitation Programs

Organization
Cobb County Community Services Board -- Cobb County, Georgia
Eggleston Services -- Norfolk, Virginia
Goodwill of Southeast Florida -- Miami, Florida
Huntsville Rehabilitation Center -- Huntsville, Alabama
RISE, Inc. -- Minneapolis, Minnesota
Young Adult Institute -- New York, New York

Contacts were made by VCU project personnel to approximately seven CRPs to solicit their interest for participation. If the CRP indicated a desire to participate, information was gathered from the CRP that reflected the proportion of new job seekers in a given month, demographic characteristics of individuals served by the CRP, proportion of consumers obtaining competitive employment in a given year, perceptions or experiences working with supplemental staffing agencies, number of staff that would be devoted to the project, and the CRP's interest in participating in the research project.

Consistent with the model described in the VCU Public-Private Partnership Employment Model demonstration project (Wehman et al., 2008), the CRPs served as the referral source for participants in the study. CRPs were requested to refer at least 60 job seekers with disabilities over an 18 month period that met the following definition of "work ready":

> "..clients who, in the view of the CRP, are ready for placement into competitive employment, and with all appropriate supports, would be able to start tomorrow. The agency intends to initiate job placement or supported employment services to the individual and anticipates the individual will be employed within the next six months. The client has no active substance abuse problems, does not possess a health condition that would prohibit the individual from working a minimum of 10 hours per week, and has a reliable source of transportation that can be used to and from a job." (VCU-RRTC PEP Operations Manual, 2005)

The CRPs conducted prescreening of currently unemployed clients using Manpower's referral guidelines. Each of the local Manpower, Inc. offices enrolled all individuals meeting the "job ready" section criteria into the local office's job placement services program.

From the consenting pool of participants, staff at each of the CPRs entered information from the study's intake form into a secure, web-based data entry system. Upon completion of data entry, participants were randomly assigned to the intervention or control group. Individuals assigned to the Partnership group (i.e., intervention group) were enrolled with Manpower and received employment assistance from Manpower as well as services from the CRP. Individuals assigned to the CRP group (i.e., control group) received all employment services normally provided by the CRP.

Over the 28 months of the study, 222 participants were identified and randomly assigned to either the PARTNERSHIP group (N=116) or the CRP Group (N=106). Table 2 below summarizes the proportion of participants across the six sites and treatment condition.

Table 2: Distribution of Participant Referrals Across Sites by Treatment Group

Site	CRP		Partnership		Total
	N	%	N	%	
Atlanta	24	22.64	25	21.55	49
Huntsville	13	12.26	6	5.17	19
Miami	25	23.58	21	18.10	46
Minnesota	12	11.32	16	13.79	28
New York	18	16.98	29	25.00	47
Norfolk	14	13.21	19	16.38	33
TOTAL	106		116		222

Participant Demographic Characteristics. Slightly more than half of the participants were female (54.59%). The ages were rather evenly distributed, with approximately half of both groups comprised of individuals 35 years of age or younger. The majority of participants were either Caucasian (58.11%) or African American (38.29%). Approximately one-fifth of participants were Hispanic or Latino. More than half of participants became disabled at some time between birth and age 10, with an additional one-third becoming disabled between the ages of 11 and 30. Table 3 on the following page provides demographic data for participants as a function of treatment conditions. Chi Square analyses revealed that the proportion of participants in each group was comparable on all demographic characteristics including: gender; race, ethnicity, age, and age of disability onset. In addition, the type of primary disability identified for study participants was also fairly consistent across the two groups. Overall, the two most prevalent primary disability types were Mental/Emotional Disorders (44.14%) and Cognitive/Intellectual Disability (33.78%).

Primary Disability by Treatment Group

Benefits received. Participants reported receiving a number of government-supported benefits (see Table 5 on page 33). Overall, more than half of the participants reported receiving Supplemental Security Income or Social Security Disability

Insurance, with approximately 40% of both groups receiving SSI, and 14.1% of the treatment group and 20.7% of the control group receiving SSDI. Almost one-third of the participants received food stamps (30.18%).

Some participants left the project after being enrolled, including 19 (17.92%) participants from the CRP group and 15 (12.93%) from the PARTNERSHIP group. Reasons for leaving included participants relocating to a geographic area outside the CRP's service area, and participants indicating that they were no longer interested in participating in the study. Analyses on demographic data revealed no significant difference between the job seekers who left the study as a function of treatment condition, and showed that the original sample did not differ significantly from the sample that excluded the participants who moved or withdrew from the program.

Table 3: Demographic Data by Treatment Group

Characteristics	CRP		Manpower		Total
	N	%	N	%	
Gender					
Female	60	56.60	62	53.45	122
Male	46	43.40	54	46.55	100
Age					
18-24	29	27.36	28	24.14	57
25-34	26	24.53	33	28.45	59
35-44	16	15.09	31	26.72	47
45-54	25	23.58	19	16.38	44
55+	10	9.43	5	4.31	15
Race					
American Indian or Alaskan Native	1	0.94	0	0.00	1
Asian	3	2.83	2	1.72	5
Black	46	43.40	39	33.62	85
Caucasian	55	51.89	74	63.79	129
Native Hawaiian or Other Pacific Islander	1	0.94	1	0.86	2
Ethnicity					
Hispanic	20	18.87	20	17.24	40
Not Hispanic	86	81.13	96	82.76	182
Age of Disability Onset					
Birth -Age 20	82	77.36	89	76.72	171
21-40	19	17.92	22	18.97	41
41-60 years	5	4.72	5	4.31	10

Table 4: Type of Primary Disability by Treatment Group

Type of Disability	CRP		Partnership		Total
	N	%	N	%	
Blind/Visually Impaired	3	2.83	2	1.72	5
Cognitive/Intellectual Disability	35	33.02	40	34.48	75
Hearing/Speech/Sensory	0	0.00	3	2.59	3
Mental/Emotional Disorders	47	44.34	51	43.97	98
Non-SC orthopedic/amputations/motor	7	6.60	5	4.31	12
Other	7	6.60	6	5.17	13
SCI	1	0.94	2	1.72	3
System Diseases	4	3.77	6	5.17	10
TBI	2	1.89	1	0.86	3
Total	106		116		222

Table 5: Type of Benefit Received by Treatment Group

Benefits	CRP		Manpower		Total
	N	%	N	%	
SSA Benefits					
SSI	42	39.62	46	39.66	88
SSDI	15	14.15	24	20.69	39
Concurrent SSI and SSDI	2	1.89	7	6.03	9
Social Security Dependents Benefits	3	2.83	2	1.72	5
Other Benefits					
Subsidized housing	12	11.32	12	10.34	24
Food stamps	34	32.08	33	28.45	67
General assistance	15	14.15	10	8.62	25
TANF	16	15.09	16	13.79	32
Veterans benefits	0	0.00	1	0.86	1
Workers compensation	0	0.00	1	0.86	1
Other federal support	13	12.26	20	17.24	33
Other state support	9	8.49	9	7.76	18
Other local support	9	8.49	11	9.48	20

Treatment

CRP (and Control) Employment Services. Participants assigned to the CRP only group, would receive all of the services that were typically afforded individuals served by the CRP. These services generally included assessment, job placement, job coaching, and ongoing support.

Partnership Employment Services. The treatment intervention represented a combination of services and supports provided by both Manpower and the local CRP. The Manpower/CRP employment partnerships received training and support from a third-party intermediary, VCU, to deliver collaborative employment services.

The treatment, partnership employment services, represented all of the services that are available from the CRP, the employment services available through Manpower, and the combined knowledge and resources represented by both organizations for job seekers support in securing employment. Manpower employment services represents a multi-component assessment-placement support model, referred to as their "reverse funnel" approach. This approach varies significantly from traditional approaches to job placement. For example, in a more traditional approach large numbers of potential job candidates are initially identified and screened, with one person ultimately emerging as the best qualified for a desired position. The reverse funnel approach allows an individual candidate to emerge with multiple skills and job opportunities that can be matched against available positions across different employers requiring various skills. Manpower representatives complete a Work Environment Service survey on every customer (i.e., business) to access the expectations, physical demands, hours and breaks, safety issues, required equipment and overall building and workplace accessibility.

Each job seeker goes through a complete assessment procedure that is individualized and systematized according to Manpower procedures. The assessment includes an in-depth interview, and job skill assessment to measure abilities and interest. Once this process has been completed, the job seeker is now able to access an array of employment services and supports, including training and job placement.

PARTNERSHIP group participants had access to employee job skill enhancement through Manpower sponsored or delivered training programs provided to workers at no cost. These services are offered pre-placement but can also be accessed once employment is secured. Manpower allows their workers to make use of multiple training courses through an Internet site called the Global Learning Center (GLC). This training can be completed in a Manpower office, an individual's home, or other places where the candidate can make use of a computer with Internet accessibility. The types of interventions provided to the treatment group are summarized in Table 6 on the following page.

Each candidate in the treatment group will receive these core services from Manpower with supports from the CRP as needed. For instance, job seekers with significant cognitive disabilities may receive job coach support during the intake process. In addition, if job coaching services or other public service interventions are needed on the site where a job seeker has been placed, Manpower staff, in consultation with the CRP representative, determined the appropriate course of action on a case-by-case basis.

Within 24 hours of a participant being assigned to the PARTNERSHIP group, selected information from the two-page project referral form was sent (i.e., faxed or emailed) to a designated

Table 6: Treatment Group Interventions from Manpower, Inc.

Individual job skills assessment (personal interview and appropriate testing)
Individualized skill training provided if appropriate through Global Learning Center
On-going training through the GLC to enhance skill for upward mobility and career advancement
Job match and placement to one of Manpower's business customers
If needed, Manpower will broker the use of job coaching with their customer through the relationship with the CRP
Follow-up and on-going support by Manpower employment representative.

staffing specialist at the local Manpower office. The information included the job seeker's employment interests, skills, work experience, and employment-related support needs. Then within seven days of referral to Manpower, the Manpower staffing specialist contacted the job seeker or employment specialist from the CRP to schedule an interview with Manpower. Depending on the job seeker's preferences and support needs, the employment specialist may or may not have accompanied the individual to the interview with Manpower. Intake interviews with Manpower were completed for all study participants and typically lasted from two to six hours contingent on the job seekers employment interests, which in some instances might require additional skills assessment or training. For all treatment group participants, the CRP employment specialist contacted the Manpower staffing specialist weekly to discuss potential placements for the job seeker with both agencies working to actively place the individual.

Dependent Variables

The dependent variables included employment outcomes, specifically: number of participants placed and job placements, wages, hours worked per week, and job tenure. Job placement refers to the number of jobs held by participants as a participant may report more than one placement. Wages is simply defined as the amount of money that the participant earned per hour at their job. Job tenure was defined as the difference between the participant's start date for employment and end date. Additionally, mean time to job placement represented a dependent variable defined as the length of time between intake into the study and employment begin date.

Data Collection

Representatives from each site were trained in data collection. The VCU-RRTC PEP Operations Manual (2005) outlines the data collection process and the necessary data elements. Data elements were included in five forms that were specific to the research project: Participant Referral; Employment Placement Form; CRP Update; PARTNERSHIP Update; and Participant Completion Form. Representatives from the CRP were responsible for entering data related to all of project forms, except the PARTNERSHIP Update for all project participants including participants in the PARTNERSHIP group.

The staffing specialists from Manpower were required to enter data for all PARTNERSHIP group participants using the Employment Placement Form and Partnership Update as guides for the information needed to complete the on-line data entry. Once research participants were entered into the database (i.e., completed Referral Form), data were reported for each quarter for the duration of the project, unless the participant opted to leave the study. Data verification occurred through semi-monthly conference calls.

Data Analysis and Results

Descriptive statistics were computed and reviewed for all demographic and outcome variables. A combination of statistics and qualitative techniques were used to address the four research questions.

Hypothesis 1: The PARTNERSHIP Group would yield more job placements.

There were 53 total jobs reported for participants in the CRP group compared to 44 job placements in the Partnership group. Therefore, Hypothesis 1 was not proven. A summary of number of participants placed as well as number of jobs is found in Table 7 below.

Table 7: Number of Participants Placed and Number of Placements by Treatment Group

Number of Participants	CRP	Partnership
Total Number of Participants	106	116
Number of Participants Placed	38	26
Number of Placements (jobs)	53	44

The variable Job Type was developed using a version the EEO-6 job classification system developed by the U.S. Equal Employment Opportunity Commission. Slightly more than half (54.55%) of all positions were classified as maintenance positions, with other positions classified as executive/managerial, secretarial/clerical, professional, technical/paraprofessional, skilled craft or other.

Hypothesis II: PARTNERSHIP group makes higher wages.

As indicated in Table 8 below, the CRP group earned a lower mean wage ($6.89) than overall ($7.08), and the PARTNERSHIP Group earned a higher mean wage ($7.31). Results from Pooled t-test failed to identify statistically significant differences in mean wages between the two groups (p=0.16).

Table 8: Descriptive Statistics for Wages, Overall and by Treatment Group

Statistics	Wages		
	All Placements	CRP Only	Partnership
N	97	53	44
Mean	$7.08	$6.89	$7.31
Median	$6.50	$6.50	$7.00
Minimum	$3.62	$3.62	$5.15
Maximum	$12.00	$12.00	$11.54

Hypothesis III: PARTNERSHIP group works more hours

Similar to the Wages variable, Hours Per Week was not a computation but rather a straight reporting of the number of hours per week that was worked for a particular job. As indicated in Table 9 below, the CRP group reported higher mean and median hours per week than the Partnership group. Results of a t-test found no significant difference between the CRP and PARTNERSHIP group on hours worked per week (p=0.12).

Table 9: Descriptive Statistics for Hours Per Week, Overall and by Treatment Group

Statistics	Hours Per Week		
	All Placements	CRP Only	Partnership
N	97	53	44
Mean	27.78	29.42	25.82
Median	30	30	25
Minimum	3	6	3
Maximum	40	40	40

Hypothesis IV: PARTNERSHIP group has better job tenure.

The variable Job Tenure was computed as the difference between Job Begin Date and Job End Date. The result is the duration of the job measured in days, which can be converted roughly to months by dividing by 30. Due to the date for conclusion of the study, not all jobs have a Job End Date, because some of the Participants were still working in their jobs when the study ended. For the purpose of computing descriptive statistics, the value of Job End Date for individuals still working was set to May 15, 2007, or the last day of the study. In our analysis of job tenure, it is understood that censoring Job End Date for these placements results in some imprecise calculations, and this should be taken under advisement in evaluating Job Tenure.

For the 48 placements that were still in progress on May 15, there is no association between still working and treatment group according to a chi-square analysis. This means that at the time the study was concluded, placements from both groups were still in progress in rather equal proportions. A summary of descriptive statistics for Job Tenure by group assignment follows in Table 10 below.

Table 10: Descriptive Statistics for Job Tenure, Overall and by Treatment Group

Statistics	Job Tenure (in days)		
	All Placements	CRP Only	Partnership
N	91	53	44
Mean	176.46	186.88	177.47
Standard Deviation	163.14	172.40	167.11
Upper Quartile	118	288	326
Median	288	132.50	116
Minimum	3	3	6
Maximum	673	673	524

As the data indicate, the CRP placements had higher mean and median job tenure than the Partnership group placements, which would seem to suggest that the job tenure for CRP was better. However, the difference in the mean and median values between the groups was by 10 and 16 days, respectively, equivalent to a difference of 1.4 weeks and 2.3 weeks, which does not seem appreciably large in terms of job tenure. The differences between the groups may simply reflect the additional amount of time involved in developing the collaborative partnership relationships between the Manpower and CRP staff members. Due to the bias introduced by the censoring of Job End Date, a t-test was not performed for Job Tenure.

Hypothesis V: PARTNERSHIP Group obtains employment sooner.

Time to Placement is calculated as the difference in days between the participant intake date and the date each placement

was made. Data contained in Table 11 below indicates that the overall mean time to placement was 160 days, or 5.3 months. At least one placement was made in five days. Another placement took a year and a half to be made (573 days).

Table 11: Descriptive Statistics for Time to Placement by Treatment Condition

Measures	Time to Placement		
	All Placements	CRP Only	Partnership
N	109	53	44
Mean	159.61	170.92	168.75
Median	113	123	113
Minimum	5	5	16
Maximum	573	454	573

The length of time it took participants to secure employment was roughly the same regardless of treatment group, differing on average by only two days. The PARTNERSHIP group reported a lower median time to placement, but it also had a higher maximum time to placement than the CRP group. This can be attributed to a larger variance in the data for the PARTNERSHIP group.

VII. Discussion

The present research represents the first study which has looked at the efficacy of a public-private partnership on employment outcomes of persons with disabilities by using a randomized clinical trial at multiple national sites. We examined whether persons with intellectual and psychiatric disabilities would be more likely to be employed competitively, work more hours, at better pay, and for a longer period if they had the benefit of a staffing specialist from Manpower working in coordination with their job coach. Each participant had a job coach from a local community rehabilitation program also working to find jobs for the participant. The results did not support the hypotheses that treatment subjects would do better than control subjects. Furthermore, the higher level than normal wages attained by the clients with developmental disabilities in the Wehman et al, (2008) were not supported nor were the significantly greater hours of work achieved in the demonstration project supported by our recent findings.

The present study was enormously helpful in terms of identifying the challenges involved in replicating a successful pilot demonstration program (Wehman et al, 2008), through a large multi-site randomized clinical trial. For example, we devoted several hundred staff hours at the six sites over the two years and facilitated numerous conference calls, emails and web-based meetings. Yet, we were still unable to facilitate the connection critical to maximize the private sector capacity of Manpower. This has caused us to examine closely: a) why data from the initial pilot study were so favorable (e.g., over 30 hrs per week of work on average and close to $9.00 per hour for pay, and b) the crucial role of the staffing specialists in the Manpower offices. Our current findings reflected higher wages for participants in the partnership group, approximately $7.30 per hour, still a much higher level than the national supported employment average of about $5.50 (RSA 911 data, 2007). Yet, the wages were not statistically significant from the control group and less than wages reported for participants in the demonstration project. In the pilot study, we were on-site weekly and worked with the Manpower staffing specialists in facilitating the screening of job seekers, designing workplace supports and most importantly, meeting the end –user; the Manpower customer who would actually be employing the worker with a disability.

Also, we were able to understand much better the perceptions of the job coaches relative to a supplemental staffing company such as Manpower. Oftentimes, the direct service staff did not see the value of using the supplemental staff firm when they anticipated they could do the job faster. In other words, once the initial clients were screened by Manpower and no jobs were quickly forthcoming, then many job coaches believed they could make the placement more quickly and efficiently. Hence, the job coach would access the assessment data gleaned from the initial Manpower intake and then move ahead directly into a placement. The data showed no appreciable differences in the time to placement in either group. We would have hoped that the Manpower group, having the benefit of the job coaches and staffing specialists, as well as positions to fill, would result in participants entering the workforce more quickly.

Through our experiences across both studies, we learned that Manpower and presumably other supplemental staffing companies have tremendous placement pressure on them and, obviously have to meet the end user who is their paying customer. When participant referred to Manpower possessed significant or unique support needs, often the staffing specialists were not able to quickly get in touch with the job coaches to assess the level of workplace supports or accommodations which might make a big difference in making employment happen for job seekers in the partnership. In contrast, in the pilot study, a project staff member employed by VCU was often on-site and could readily address questions from the Manpower staffing specialists and the end-user.

Even though the findings do not support our hypothesis, there were favorable experiences reported by representatives of the partnerships which indicate that public-private partnerships can work and facilitate employment opportunities for job seekers with disabilities. For example, oftentimes during the

assessment of a job seeker by Manpower staffing specialists, a job coach would be available to assist with instruction and this was beneficial to the staffing specialists. Additionally, Manpower staffing specialists' often requested training on disability-related topics such as accommodations and interviewing individuals with disabilities for their end-users or Manpower personnel. Staffing specialists also reported being much more cognizant as to the needs of job seekers with disabilities and their willingness to facilitate employment. Lastly, at two of the six sites, partnership representatives reported engaging in mutual business development opportunities.

VIII. Implications for Future Research

Although we believe that the findings reported are of potential interest to policy makers, disability researchers and service providers, we want to highlight several limitations of the study. When considered, these limitations may warrant further investigation into the efficacy of the VCU Public-Private Partnership Employment Model or business and rehabilitation partnerships in general. To our knowledge, the use of experimental methodology to study the efficacy of public-private partnerships for providing employment services for individuals with disabilities is the first of its kind.

The usefulness of the investigation's findings is restricted in part to the lack of appropriate fidelity criteria applied or used in the study. According to some sources, failed implementation of the intended program or intervention is the most common reason for failed outcomes (Mills & Ragan, 2000). Further research is needed to identify whether the intervention does indeed influence participant employment outcomes as well how closely the partnerships adopt or adhere to the VCU Public-Private Partnership Employment Model.

We have little empirical data to support implementation fidelity for the Model across the six sites. Based on project's staff interaction with the partnerships during bi-monthly conference calls, e-mail, and on-site visits, we have anecdotal evidence to suggest that model drift occurred at two of the sites. Additionally, the partners were required to maintain weekly contact and discuss employment opportunities and support needs for partnership group participants. We know that at two sites, the frequency of contact between the partners waned over the duration of the study.

Similarly, we know several instances across all sites in which the partnership group participants were not interested in the types of employment opportunities available through the local Manpower office. For several partnership group participants, their job or career goals did not match the positions that the local Manpower office typically staffed. Also, the experimental design did not permit CRPs to identify what they described as "ideal" candidates for referral to Manpower, as was the case in the pilot study. For example, Manpower staffing specialists would convey their frustration with having to intake job seekers who in advance of their meeting would communicate job preferences for positions that Manpower, Inc. did not staff, such as food service.

Business and rehabilitation partnerships have emerged with the growth of such programs as supported employment and disability management. Many of the partnerships were initiated by the rehabilitation community. Increasingly, we have evidence that employers are leading the charge to partner with community rehabilitation programs and disability providers (e.g., Rutkowski et al., 2006; McMahon et al., 2003). For many of the partners, the question is no longer should they engage in the partnership but how employers can effectively partner with employment support providers, and vice versa, to address mutual economic and societal needs.

While it is critically important to continue research related to the efficacy of public-private interventions designed to facilitate employment for job seekers with disabilities, it is also necessary to understand why the partners engage in these activities and how some partnerships are able to move beyond more philanthropic partnerships to reflect increasingly integrated services. Similarly, when one considers the proliferation of case studies and anecdotal information related to business and rehabilitation partnerships, it is clear that the two parties are interested in pursuing collaborative activities, yet there is little information about how these partnerships are sustained.

These factors will be important for any future research agenda.

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Organizational Factors that Facilitate Successful Job Retention of Employees with Health Impairments and Disabilities

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Abstract

This report is based on the premise that retention-oriented employment policies and practices can facilitate the prevention of unnecessary exits from the workforce due to health conditions and disability. An extensive literature review was conducted on the major factors and organizational practices associated with successful general employee retention. A series of constructs was developed from this review and organized into organizational, operational, and case level factors. These constructs are discussed in terms of their policy implications for improving the overall employment level of people with disabilities.

I. Introduction

After many years of lower levels of participation in the labor market for people with disabilities, and despite creative policy interventions to alter this seemingly intractable state, the news reported is basically the same (GAO, 2004; Harris Poll, June 24, 2004). Some estimates report reductions in level of employment while participation in public disability benefits programs continues to grow (Burkhauser et al., 2002).

In recent years, research has accumulated regarding the issue of poor job retention for people with disabilities who attain employment and for employed people who develop disabling health conditions or impairments during employment. For beneficiaries of SSDI and SSI benefits, job retention is a major challenge facing the successful implementation of the Ticket to Work (Employment and Training Reporter, October 17, 2005). For beneficiaries of workers compensation benefits, initial returns to work are more often unsuccessful than previously assumed in evaluating outcomes (Baldwin, Johnson, & Butler, 1996; Butler, Johnson, & Baldwin, 1995).

The problems contributing to low job retention vary for specific subgroups. For example, problems in productivity, performance or attendance may emerge when people with cognitive impairments have changes made to their job (Pierce, 2003; McDermott, Martin, & Butkus, 2003; Moran, McDermott, & Butkus, 2001; Shafer, Banks, & Kregel, 1991), or when people with mental impairments have increased work demands that occur along with episodic symptoms or a medication change (Bond, 2004; Bond, Dietzen, McGrew et al. 1995; Lehman,Goldberg, Dixson, et al., 2002; McHugo, Drake, & Becker, 1998; Salyers, Becker, Drake, Torrey, & Wyzik, 2004), or when workers with limitations return to work with job modifications that get ignored in the face of production demands, or when workers with chronic health conditions experience increased pain or impairment and no adjustments are made to accommodate their reduced capacity (Daly & Bound, 1996).

The thesis of this review is the seemingly stagnant level of overall participation in the labor market reported by people who have disabilities obscures important underlying activity that may be amendable to improvement for a portion of this population. This activity includes unsuccessful entries into new employment, unsuccessful attempts to return to work, and premature exits from employment for many people with disabilities or health impairments. These failures in job retention and unsuccessful accommodation result in significant direct and indirect costs for people with disabilities, employers and taxpayers (Habeck, 1999; McMahon, Danczyk-Hawley, Reid, et al., 2000). We assert that much broader and more effective implementation of best

practices and policies for job retention and accommodation could significantly reduce some of these costs and negative outcomes and lead to greater earnings and sustained labor force participation for individuals with disabilities.

Our premise is that job retention is not only a concern for people with disabilities and those concerned with their employment. Many leading employers are highly focused on retention to keep skilled employees, preserve the health and productivity of their aging employees, and reduce the costs of negative turnover (Hursh, Lui & Pransky, 2006; Nicolson, Pauly, Polsky, et al., 2005). In a random telephone survey of 28,000 workers to quantify the impact of health conditions on work, results indicated that workers experienced an average of two hours per week of Lost Productive Time (LPT), with 66% of this resulting from reduced work performance due to personal health (Stewart, Ricci, & Morganstein, 2003). The aggregate cost of LPT for the US workforce was estimated to be $226 billion in 2002, or an equivalent of an average of $1685 per employer per year (Stewart, Ricci, Chee, & Morganstein, 2003).

Retention-oriented employers value their employees and typically provide better working conditions and benefits of employment. Their polices and practices are geared to attracting and retaining desired employees, including flexibility to accommodate individual work-life balance needs. These employment conditions are highly relevant to meeting the needs of many people with disabilities for long-term employment (Gilbride,Stensrud, Vandergoot, et al., 2003). These people-oriented workplace cultures are more likely to provide the policies and practices that prevent and effectively manage health conditions and impairments that develop among their employees and sustain their employment (Amick, Habeck, Hunt et al., 2000; Habeck, Hunt, & Van Tol, 1998; Schur, Kruse, & Blanck, 2005)

The main thesis of this perspective is that retention-oriented employment polices and practices can improve the employment level of people with disabilities by facilitating the prevention of unnecessary exits due to health conditions and disability. These workplace factors also deserve more attention in public policy as a means to improve the duration and quality of employment (wages, benefits, safety and health) for people with disabilities.

The purpose of this paper is to present the results of an extensive literature review relevant to this thesis and to provide the constructs developed from the review for policy consideration and further research. Currently, the constructs are being investigated in a longitudinal, qualitative study of workplace factors associated with the job retention of employees with disabilities in five exemplary workplaces. The study is part of the Rehabilitation Research and Training Center on Workplace Supports at Virginia Commonwealth University, funded by the National Institute of Disability and Rehabilitation Research.

II. Method

The following four main themes were identified and pursued in the literature search:

1. organizational factors and managerial strategies associated with successful retention of employees, in general;
2. specific strategies associated with successful disability prevention and management and return-to-work of employees who develop health conditions or are injured; and retaining employees with disabilities or health limitations; and
3. perceptions and attitudes at the supervisory and employee levels that affect successful retention of employees with disabilities.

In order to capture the major factors and organizational practices associated with employee retention, an extensive literature search was conducted using the databases available through the VCU library system, including InfoTrac OneFile, PsycINFO, and Ovid Web Gateway Databases. Keywords initially included employee retention and job retention, and were later expanded to include turnover and voluntary turnover as well. The titles of articles generated by these searches were first reviewed, and abstracts were then obtained for those that appeared to be applicable to the study. These abstracts were further reviewed, and articles that seemed relevant were retrieved and incorporated into the literature review. In addition, the references contained within selected articles were screened for their pertinence to the study, and included in the literature search when appropriate. Results from the review were analyzed, abstracted and categorized into major topical themes that emerged, to provide a framework for better understanding the totality of available literature related to employee retention and voluntary turnover.

This process was used again in two sets of additional searches, specifically relating to retention and accommodation of employees with disabilities. These literature reviews were conducted through online bibliographic resources in the VCU library system and World Wide Web searches (e.g., InfoTrac OneFile; Lexis-Nexus Universe; ArticleFirst; ABI/INFORM Global; MEDLINE/PubMed; Ovid Web Gateway Databases; PsycINFO). Key search terms or combinations of terms used to conduct the literature search included retention, disabled or injured workers, workplace accommodation, return-to-work, disability management, absence management, and supervisors. In addition, high quality and well-known review articles and empirical studies were heavily relied upon for their content and as a guide to remaining literature for review. Finally, sources of specific accommodation strategies for particular types of disabilities were also reviewed. Again, results from this review were analyzed, abstracted and categorized into major topical

themes that emerged, providing a framework to summarize the relevant literature in this portion of the review.

Once it was determined that the available literature had been adequately covered, a preliminary outline was created. Key statements were taken from the abstracted material and written as declarative statements, linking each one to the specific outcome supported and its reference. These construct statements comprised the proposed study variables and were grouped into broad thematic areas.

Each statement was numbered and, disregarding theme headings, a deck of "construct cards" was prepared for each of the five reviewers, with one construct statement per card. Each reviewer independently sorted his or her cards into groups of like content, designating those construct statements that should be dropped from the process, separated into multiple statements, or merged with other statements.

After placing their construct cards into 5–20 specific theme groupings, each reviewer developed a title for each group of cards to convey the essence of the shared content of the cards. Next they developed a short description for each group of cards, with descriptive statements to capture the main components. Once each reviewer completed this process, all five reviewers convened to discuss their independent work in detail.

The reviewers then iterated the process on the specific themes until consensus was achieved that best characterized the major content represented in the constructs, balancing specificity and parsimony in the final number of unique theme areas retained. The reviewers reassigned constructs, as needed.

III. Results

Table 1 below provides the final list of construct statements derived from the literature and organized according to the theme areas developed from their content. The major theme areas are organized into organizational, operational, and case level factors. Although the research protocol incorporates all the constructs, only those amenable to policy manipulation are addressed in this paper. Immutable characteristics of workers (e.g., gender), and the company (e.g., industry type) are not included. The narrative presentation provides a description of each construct and support for its relationship to retention.

Table 1: Constructs of Organizational Factors Associated with Successful Job Retention

1. General Retention Strategies	a. Favorable Organizational Culture i. Compelling vision with clear and strategic goals. ii. Positive management philosophy and style. iii. People-oriented workplace culture that values employees. iv. Employee involvement, engagement, and empowerment. v. Open and frequent communication within and across all levels of the organization. b. Policies and Programs for Employee Retention i. Competitive compensation. ii. Flexible and supportive approach to employee work arrangements. iii. Informal rewards and incentives. iv. Opportunities for professional development and education. v. Clear job expectations and performance feedback. vi. Feedback elicited from employees on aspects of the company.
2. Maintaining Health and Productivity	a. Promoting Healthy Lifestyles and Preventing Disease i. Wellness programs and incentives. ii. Disease prevention. b. Identifying and Preventing Job Related Health Risks i. Systematic, data driven safety interventions. ii. Participatory and proactive use of ergonomics. c. Early identification and intervention for issues impacting productivity and attendance i. Presenteeism and absence management ii. Employee assistance programs iii. Disease management d. Integrated data system to track injuries, illness, absentence, and return-to-work
3. Managing Injuries, Health Impairments and Disability in the RTW Process	a. Early and effective contact with employee, physician, and supervisor. b. Prompt, individualized, and comprehensive intervention from qualified professionals. c. Effective communication, coordination, and cooperation of parties. d. Provision of needed modifications for appropriate accommodation. e. Training/education for the parties involved in accommodation. f. Data-driven system for case monitoring. g. Guidelines and procedures for the RTW process, which are consistently applied. h. Inclusion of occupational and non occupational causes of disability in an integrated

4. Accommodating Newly Hired Employees with Disabilities	a. All types of accommodations are considered to meet employee needs. b. Systematic process is used for developing accommodations (source, timeline, funding) that includes all parties involved. c. Employee needs and workplace needs are considered and balanced. d. Management of workplace accommodations includes on-going evaluation, training, and support.
5. Supervisor's Role and Response	a. Managing the Supervisor's Role in Working with Employees with Disabilities i. Clear guidelines for supervisors on their role and responsibilities in maintaining contact with the employee when they are absent from work and in handling RTW process. ii. Monitor and assist supervisors in their RTW efforts. iii. Financial incentives for supervisors to make accommodations and retain people at work. iv. Training of supervisors to develop their knowledge of disabilities, and their abilities to access medical information and respond appropriately to employees. v. Facilitate supervisor's access to medical and rehabilitation providers to obtain needed services and design appropriate accommodations to supervisors. b. Managing the Nature of the Supervisor's Response to Employees with Disabilities i. Provide timely and facilitative contact by supervisor when employee is out of work. ii. Provide support and responsiveness to employee needs iii. Monitor the ongoing impact of accommodations on job performance and the effect of work on the employee's health status. iv. Maintain appropriate attitude toward the employee and effectively address concerns about the impact of their accommodations on productivity and co-worker reactions.
6. Coworker Involvement and Response	a. Managing Coworker Involvement i. Effective approach to enlisting coworker support. ii. Facilitate coworker acceptance of employees with disabilities and provision of accommodation b. Nature of the Coworker's Response to Employees with Disabilities i. Coworkers perceive accommodation to be equitable and fair. ii. Negative attitudes of coworkers are addressed.
7. Employee Work Related Attitudes and Perception that Affect Retention	a. Employee perception of employer support and supportive social context (cohesiveness, coworker trust). b. Employee satisfaction with job and personal working conditions.

General Retention Strategies

Having a clear understanding of the factors that are likely to lead employees to voluntarily depart from their jobs is critical for building effective general retention strategies (Griffeth & Hom, 2001). While personal and demographic factors no doubt play a role in turnover intentions, employer actions and the work environment may also promote employee retention through the organizational culture and targeted policies and programs they create.

Organizational Culture

Compelling vision with clear and strategic goals. Each organization has its own culture, or pattern of shared basic assumptions that have been invented, discovered, or developed (Schein, 1985). There is anecdotal evidence that organizations with clear or compelling mission statements can promote organizational commitment (Curry, 2004; Hewitt, 2004), which in turn leads to a greater likelihood of retention. Recent research shows that corporate culture, including the image, ethics, and values of the organization, can play a greater role in loyalty than compensation (Miodonski, 2004; Chang, 2004).

Positive management philosophy and style. A positive management philosophy can help companies retain good employees. Providing praise and acknowledgement of staff contributions, regardless of the employee's role in the company, may lead to increased retention (SHRM, 2002; Gallagher, 2004; Macdonald, 2004; Alati, 2004; Befus, 2004; O'Connor & Fiol, 2004; Powell, 2004). Conversely, managers who are careful to avoid negative behaviors such as impatience, rudeness, and intolerance may also promote a culture of retention, especially given that the power of position can intensify the detrimental effects of such behaviors (Gunn & Gullickson, 2004).

People-oriented workplace culture that values employees. It has been demonstrated that employees seek out and remain longer in organizations that foster interpersonal relationship values such as team orientation, fairness, and tolerance, than in those where work task values such as detail and stability are emphasized (Sheridan, 1992; Mainiero, 1993). Similarly, an organizational culture that fosters learning is associated with increased job satisfaction and reduced turnover (Egan, Yang, & Bartlett, 2004). Such findings suggest that cultures where employees feel as though they are valued beyond what they bring to the company as performers of work tasks, and where

the employer invests in them as staff members, may lead to a greater likelihood of retention.

Employee involvement, engagement, and empowerment. Retention is directly related to how engaged an employee is in his or her job, and respect, honesty, and communication all contribute to employee engagement (Frank, Finnegan, & Taylor, 2004). More mechanisms for employee voice within the organization may translate into higher retention rates (Spencer, 1986). A recent survey of employees from 59 companies indicated that the belief that talents are valued and the employee's perspective in decision-making are considered a strong relationship to employee retention (Chang, 2004).

Open and frequent communication within and across all levels of the organization. Organizational cultures with mechnisms that allow for frequent communication and opportunities to develop rapport among employees can reduce voluntary turnover intentions (Curry, 2004; Earls, 1998; Gallagher, 2004; Ligos, 2004; Emerson, 2004; Sheridan, 1992; Bernthal & Wellins, 2000; Lyman, 2003). There is evidence that many employees would rather work for companies whose organizational culture fosters interpersonal relationships and frequent communication between leaders and employees than those geared only toward valuing work task (Bernthal & Wellins, 2000; Lyman, 2003; Mainiero, 1993). Communication from the top to keep employees informed about company developments and policies, and attempts to elicit their feedback may help to retain them (Macdonald, 2004; Alati, 2004; O'Connor & Fiol, 2004; Powell, 2004). In many organizations, a large share of organizational information is now communicated through both email and company intranets. However, employees prefer it when senior management talks to them directly more often (Colvin, 2005).

Policies and Programs for Employee Retention

Competitive compensation. Formal compensation and benefits packages likely play a role in employee retention, although there is much debate as to the level of their impact. A recent MetLife study on employee benefits trends found that employers view employee retention (78%) and cost control (73%) as their two most important benefits objectives (Mullaney, 2002). However, increasing employee retention does not necessarily depend on providing more pay, benefits, or other tangible compensation, given adequate provision as a starting point of comparison. Hannay and Northam (2000) argue that in order to improve employee retention, employers should strategically deploy resources into the areas that are most important to their employees, rather than focusing solely on financial compensation.

Flexible and supportive approach to employee work arrangements. Employer flexibility and accommodation of employees' personal and family needs may also promote retention. For example, the length of leave available for childbirth and the ability to avoid mandatory overtime upon return are important in retaining women following childbirth (Glass & Riley, 1988). The most effective responses to work-family conflict and turnover are those that combine work-family policies with other practices, including work redesign and commitment-enhancing incentives (Batt & Valcour, 2003). Specific strategies to accommodate employees' needs may include child-care options (New York State Department of Civil Service, 2002; Perry, 2004; SHRM, 1993) and flextime, such as unconventional hours, part-time work, job sharing, leaves of absence, or working from home (Alexander, 2004; Earls, 1998; Holtom, Lee, & Tidd, 2002; Institute of Management & Administration, 2004a; Institute of Management & Administration, 2004b; Miodonski, 2004; Perry, 2004; SHRM, 1993; Woolnough, 2004;).

Informal rewards and incentives. Reward experiences consistently have been shown to relate to retention (Gregory & Meyer, 1994), including such things as free meals at the company's cafeteria, free parking/rideshare incentives, time off, or opportunities for informal camaraderie. Offering rewards to employees based on length of service (Frank, Finnegan, & Taylor, 2004) or providing bonuses when certain organizational objectives are met (O'Connor & Fiol, 2004) are also effective retention strategies.

Opportunities for professional development and education. Turnover can also be viewed from a proactive growth perspective, where employees strive to find jobs that allow for active learning and growth through challenging work assignments and responsibilities, ongoing training, mentoring or job coaching relationships, and educational opportunities that will allow them to develop marketable skills (Nicholson & West, 1988). For employees with high career commitment, the expected utility of their present job to future career opportunities is related to a low intent to leave (Bedeian, Kemery, & Pizzolatto, 1991).

Assisting employees to explore internal job switches can enhance satisfaction and retention (Beale & Holinsworth, 2002). A survey of 188 working adults pursuing a college degree indicated that they would be more likely to remain with their employer if they perceived that there would be future opportunities for growth within the organization, such as additional responsibilities, promotions, and pay increases. Those respondents who received tuition assistance from their employers were also more likely to remain in that organization than those who did not (Hannay & Northam, 2000), consistent with other research in this area (e.g., Benson, Finegold, & Mohrman, 2004).

Clear job expectations and performance feedback. There is evidence that providing employees with realistic prehire information can help to establish the foundation for longer term employment relationships (Buckley, Fedor, Veres, et al., 1998; Wanous, Poland, Premack, et al., 1992). Potential employees

should be informed of both the positive and negative aspects of their job, as well as attributes of the organization itself to reduce turnover (Hannay & Northam, 2000; Lee, Ashford, Walsh, & Mowday, 1992). Job expectations for current employees should be similarly well defined, in both written job descriptions and discussions of job responsibilities, to enhance retention (Du Toit, 2004; Gallagher, 2004; Buckingham & Coffman, 1999; O'Connor & Fiol, 2004). Feedback on current employees' job performance can also lead to increased retention (Discenza & Gardner, 1992; Du Toit, 2004; Emerson, 2004).

Feedback elicited from employees on aspects of the company. There is evidence that surveys to encourage employee feedback on organizational factors can promote retention, particularly when results are subsequently discussed with employees to gain a deeper understanding of their perspective (SHRM, 1993; Louiseize, 2004; Macdonald, 2004; Thomas, 2004). Specific targeted questions should be used to evaluate employees' job satisfaction and identify their needs (Curry, 2004; Earls, 1998; Frank, Finnegan, & Taylor, 2004). Exit interviews can also improve employee retention rates (Harris, 2000).

Maintaining Health and Productivity

The cost of retaining employees is comprised of three components;

1. wages paid to employees,
2. fringe benefits such as health insurance, short and long term disability coverage, and workers' compensation, and
3. human capital costs for programs that increase productivity and morale such as training, health promotion, fitness facilities, and leisure activities.

More and more employers, recognizing the relationship between poor health and employment costs as well as retention (Claxton, Chawla, & Kennedy, 1999; Cockburn, Bailit, Berndt, & Finkelstein, 1999; Collins, Baase, Sharda, et al., 2005; Goetzel, Andersen, Whitmer, Ozminkowski, Dunn, & Wasserman, 1998), are proactively providing services and programs that increase productivity and morale and incentives for staying at work. The high costs of health care, global competition, and the need for highly skilled and productive workers have forced progressive employers to devote extensive resources toward sustaining the health and productivity of their work force (Hymel, Baase, Berger, et al., 2004; Nicholson, Pauly, Polsky; et al., 2005).

Promoting Healthy Lifestyles and Disease Prevention

Wellness programs and incentives. A review of literature on health promotion programs found that although health promotion programs vary tremendously from company to company in their comprehensiveness, intensity, and duration of the intervention activities, the most effective programs offered individualized risk-reduction counseling and behavior change support within the context of a comprehensive health awareness-building corporate culture (Heaney & Goetzel, 1997). Although the financial aspect is generally the focus of companies that provide health promotion and wellness programs, there can be equal concern directed at the well-being of their employees (Johnson & Johnson, 1989). Recent evaluation studies indicate that health promotion programs can achieve long-term health improvements among its employees (Aldana, 2000; Goetzel, Ozminkowski, Bruno, et al., 2002; Heaney & Goetzel, 1997). These programs are also associated with lower levels of absenteeism (Aldana, 2000) and decreased burnout, which can improve retention (Sand & Miyazaki, 2000). In fact, individuals who reduce their risks generally experience increased productivity, whereas those with increased risks or who remain at high risk status experience decreased productivity (Burton, Chen, Conti, et al., 2006).

Disease prevention. Provision of disease prevention services, such as immunizations, smoking cessation, oral health, health screening, and nutrition and weight management, are increasingly being demonstrated as critical in maintaining productivity and retaining qualified employees at work. Employee health risks and adverse health behaviors often lead to various significant diseases. Health risk factors, such as poor health, stress, diabetes, and being overweight, have been reported to be significantly associated with worker productivity (negatively and defined as presenteeism) (Boles et al., 2004; Burton et al., 1999; 2005) and illness related absenteeism (Aldana, 2000). Employee productivity decreases as the number of health risks increases (Boles, Pelletier, & Lynch, 2004; Burton et al., 1999; 2005).

Johnson & Johnson offers a Health and Wellness Program (HWP) to its employees, which focuses on reducing individual behavioral and psychological risk factors before they progress into disease and disability. Appropriate intervention services are provided before, during, and after major health related incidents such as illnesses or injuries. Due to the financial incentives ($500 medical benefit plan credit) and corporate culture that encourages engagement in health-promoting activities, approximately 90% of the domestic US employees participate in the program. A series of evaluation studies show that this health promotion and disease prevention program was associated with improved employee health, reduced inpatient health care expenditure, decreased employee absenteeism, and better employee attitudes, subsequently reducing benefit expenditures and increasing worker productivity (Goetzel, Ozminkowski, Bruno, et al., 2001).

Identifying and Preventing Job Related Health Risks

Systematic, data driven safety interventions. Occupational health and safety practices, ergonomic considerations,

and other strategies for identifying and preventing employee health risks increases productivity and retention of qualified employees (Lutz et al., 2001; Torrey, 2002). Companies successful in preventing the incidence of injuries and lost work day cases were found to provide a management system for achieving and rewarding diligence and accountability in supervisor performance of safety responsibilities (Habeck et al., 1998b). Although it is impossible to prevent every illness and injury from occurring at the workplace (Kumar, 1994), a significant reduction of occurrences is attainable through a comprehensive approach that considers ergonomic and human factors, with input from occupational medicine, engineering, health and safety, etc. (Amick et al., 2000; Drury et al., 1999; Feuerstein et al., 2000).

A number of examples of successful prevention efforts have been reported (Lincoln et al., 2000; Lutz et al., 2001; Brisson et al., 1999; McCluskey et al., 2005; National Institute for Occupational Safety and Health, 1997; National Research Council, 1998; 1999), but those that are universal in design are limited due to the uniqueness of each job task (National Research Council, 1998). Therefore, when developing an ergonomic program or an intervention program, it is critical to monitor each situation and derive a solution based on local data (Bayeh & Smith, 1999). Monitoring the workplace for unsafe work practices or unsafe employee behaviors and taking corrective action are related to lower workers compensation claims filings (Habeck et al., 1991).

Perdue Farms developed its occupational health and safety program after a fine was imposed due to violations of North Carolina occupational safety standards, along with rising workers' compensation costs and high incidence of carpal tunnel syndrome (Reese, 1998). With the help of a consulting firm, they studied the movements of their employees by videotaping them as they worked and ascribing numeric values to the stress that various tasks placed on different parts of the body. Perdue relied heavily on worker feedback in designing its ergonomic program because employees' comfort levels would ultimately determine the value of an adjustment. From the evaluation, low tech solutions, such as easy to grip knife handles, were implemented along with acquisition of expensive equipment, such as automated eviscerating machines, to eliminate many of the movements associated with carpel tunnel syndrome. Job rotation was also implemented. Employees are trained to perform three to four different tasks and spend only half an hour on a particular task. This increased training costs considerably but has resulted in lowering their workers' compensation costs, lost time, serious repetitive stress case incidents, and incidents of back injuries that result in lost time or surgery (Reese, 1998).

Participatory and proactive use of ergonomics. Ergonomic programs have been reported to significantly reduce work-related injury and absenteeism (Reese, 1998). Participatory ergonomic programs have been reported to reduce the incident rate and severity of injuries (Bernacki, Guidera, Schaefer, & Tsai, 2000; Robertson & Robinson, 2000) and shorten the duration of work disability (Loisel, Abenhaim, Durand et al., 1997). According to Bernacki et al. (2000), job analysis, with subsequent interventions as indicated, resulted in a reduction of employees presenting upper extremity injuries and virtually eliminated the need for surgical procedures to correct the damage. Upper management support and employee involvement in ergonomic training programs is critical since it leads to successful implementation of ergonomic programs (Klumb & Morgan, 2002; Reese 1998).

The International Truck and Engine Corporation's Springfield Assembly Plant utilizes the 5S program, a systematic process of improving workplace organization, standing for Separate, Straighten, Scrub, Standardize, and Sustain (Klumb & Morgan, 2002). The 5S workshops provide a forum for operators to raise concerns, and utilize a cross-functional team to address and correct as many concerns as possible. The team consists of skilled trades employees, line supervisors, maintenance supervisors, safety/ergonomics representatives, upper management representatives, and the production employees themselves. At the end of the workshop, employees present before-and-after photos and explain what led them to improve a particular area and what actually has been done to eliminate the concern. The employees are empowered to learn about ergonomic risk factors, the importance of keeping the workplace neat and organized, appropriate safety procedures, and setting up their workshop to suit their needs. The workshop is responsible for creating, and empowering to create, the 5S improvements by collecting data, following through with action plans, agreeing on workplace standards, and following the established workplace standards. Since the workshop's inception, there has been a significant reduction in both Incident Frequency Rate (IFR) and Lost Time Case Rate (LTCR), in addition to continued efforts in safe design and evaluation processes, following up on safety-related corrective actions and tracking trends for IFR and LTCR. The program's success can be attributed to two things: a strong management commitment allowed not only for the process to be implemented, but also fosters continuous improvements; and the employee-owned and operated process resulted in increased job satisfaction, better solutions, increased productivity and a less dangerous workplace.

Enhancing Productivity (Presenteeism)

Early identification and intervention for issues impacting productivity. Detecting personal, health and workplace issues before they negatively affect work performance is especially important in order to maintain productivity.

According to Stevens (2004), many employers have been focused on absenteeism, tracking and managing planned and unplanned employee absence incidents. However, presenteeism, which occurs when the employee is present but not per-

forming at their best due to non-work factors such as illness, distraction from family care needs, personal problems, or other concerns, is becoming a larger issue in order to reduce costs, improve productivity, and promote employee health and wellness. Depression is reported to have a more substantial and persistent association with diminished productivity than any other illness and has far greater impact on presenteeism than absenteeism (Druss, Schlesinger, & Allen, 2001). However, with appropriate diagnosis and treatment, the majority of those with depression can return to work. Jones and Brown (2003) found that after only 3 weeks of treatment, the number of employees with depression who were work-impaired was cut in half, and after 21 weeks of treatment, almost three fourths were no longer work-impaired.

Employee assistance programs (EAPs) are worksite programs designed to assist in the identification and resolution of productivity issues for employees having problems such as emotional stress, mental health concerns (e.g. depression), marital, family, financial, substance abuse problems, or other issues negatively affecting employees' work performance (Watkins, 2004). Difficulty returning to work after an illness or injury may also affect the worker's productivity (Stevens & Hursh, 2005).

Effective interventions are varied, and may include stress-management workshops, peer-collaboration programs, instruction in time management, and assertiveness training (Cooley & Yovanoff, 1996; Higgins, 1986), as well as social support, such as supervisory assistance, seminars, office meetings, and wellness programs (Sand & Miyazaki, 2000). Because employees are more likely to work in team-based environments than in the past (Cropanzano & Schminke, 2001), Moliner et al. (2005) argue that coping interventions aimed at preventing and reducing burnout should be focused on the work unit when possible, and not just on the individual.

The availability of EAPs, both formal and informal, can help an organization retain its employees when they experience difficulties (Habeck, Scully, VanTol, & Hunt, 1998). Job stress is recognized as one of the most serious occupational hazards in industrialized countries, leading to high turnover rates (Mao, 2003; Kahn & Byosiere, 1992). It has been demonstrated that on-the-job support interventions can benefit employees who show signs of burnout, job dissatisfaction, or job stress in order to prevent voluntary turnover (de Croon et al., 2004).

Integrated Data System to Track Injuries, Sickness, Absenteeism, and Return-to-Work

To provide comprehensive and effective services, employers must first determine where the company is most at risk, people-wise, program-wise, and cost-wise (Goetzel, 2005). This can best be done by aggregating data related to injuries, sickness, absenteeism, and return-to-work from all parties in the company and then evaluating the data so a comprehensive understanding of the situation becomes available. In addition to identifying where the risks exist, having an integrated data system can also be beneficial in developing a comprehensive approach to services for targeted employees to enhance productivity and retention.

More and more employers are transitioning from the traditional silo-based management of benefits programs to managing them together (IBI, 2006). However, many organizations lack the data capability needed to identify which programs have the greatest impact and return on investment. At least one-fifth of employers do not know how effective their strategy has been in achieving various outcomes due to insufficient data (Watson Wyatt, 2006).

Hartford, the second largest group disability carrier in the country with 28,000 employees, was one of the first companies to integrate workers' compensation and disability insurance, reporting and managing both occupational and non-occupational cases (Stevens, 2004). Job modifications and temporary assignments for workers' compensation cases were also made available to those who suffered illness or injury away from work. Examining the combined cases, they found that 24% of both workers' compensation and disability cases were due to musculoskeletal problems. This led the company to invest in ergonomics and onsite medical and fitness services. The focus shifted from serving employees with injuries into prevention for all employees. Since then, they have integrated FMLA absences with workers' compensation and disability. This enabled employees to call a single 1-800 number whether they are off work due to illness, injury or family issues, and the absences are all tracked together. At the same time, when an employee calls in to report a FMLA absence, he or she can be reminded of EAP services, which could enable the employee to go back to work and remain productive.

Employee Measures of Productivity, Absence, and Quality (EMPAQ) was developed by the Council on Employee Health and Productivity (CEHP, 2003) of the National Business Group on Health with the participation of more than 470 thought leaders. EMPAQ was "designed to provide metrics and protocols to enable employers and suppliers to determine the effectiveness of their health-related lost-time programs in critical areas such as cost, employee satisfaction, productivity, and overall quality of life." They created and defined standardized data elements and metrics for four absence programs: workers' compensation, short-term disability, long-term disability and family medical leave. The measures were also designed to examine efficiency and outcomes of the programs and as a result, improve outcomes, enhance quality, and manage costs.

Managing Injury/Health Impairments/ Disability Events and the RTW Process

Within an organization, there can be two groups of employees that require support in order to be productive; those who be-

come injured or ill during their employment and those who are hired with a known disability. Provided they have access to appropriate accommodation, both groups of employees are able to retain their employment and be productive (James, Cunningham, & Dibben, 2002; Leff, Cook, Gold, et al., 2005). There is increasing evidence of greater effectiveness of interventions provided at the workplace as opposed to those provided from outside the workplace (Loisel, 2005; Loisel et al., 1997). The majority of those who are injured or develop health impairments during their employment experience are supported by programs and policies aimed at managing injury/health impairment events and the return to work process, including the management and coordination required to implement such effort.

Early and Effective Contact with Employee, Physician, and Supervisor

The majority of studies indicates that early contact with the worker after he/she has become ill or injured is associated with reduction in work disability duration (Amick et al., 2000; Cooper et al., 1997; Franche, Cullen, Clarke, et al., 2005; Habeck et al., 1998b; Hunt & Habeck, 1993; Loisel et al., 1997; Loisel et al., 2002). For example, in an interview of laypersons with experience of long-term sickness-absence, contacting the absent employee was emphasized as one of the critical component in the return-to-work process, along with informing fellow workers of possible changes in task assignments upon return of the absent person (Nordqvist et al., 2003).

However, the impact of the contact may depend on the quality of the contact and the support that follows to meet identified needs. Brooker et al. (2001) surveyed 1,833 workers with soft-tissue injuries about employer contact and found that contrary to commonly held views, employer contact was not associated with a reduction in time receiving compensation benefits. They concluded that merely contacting the worker in the absence of other interventions was not associated with a faster return-to-work and that more comprehensive support is required .

Prompt, Individualized, and Comprehensive Intervention from Qualified Professionals

Intervention is most effective when provided at the right time and meets the individual's ongoing needs. Prompt assessment, treatment, rehabilitation, and provision of modified work are related to reduction in lost work time (Habeck, Leahy, Hunt, Chan, & Welch, 1991; Yassi et al., 1995). In a study conducted by Bernacki et al. (2000), individualized multidisciplinary return-to-work strategy and immediate evaluation/treatment resulted in a reduction employees presenting upper extremity injury associated with musculoskeletal disorders and virtually eliminated the need for surgical procedures needed to correct the procedure.

Accommodation decisions are usually made by supervisors (Cleveland et al., 1997, Florey & Harrison, 1998; MacKenzie et al., 1998) and appointing people responsible for coordinating the return-to-work process is related to reduction in absenteeism due to injury/illness (James et al., 2002). Provision of services only from an accredited rehabilitation provider was associated with an average reduction in the amount of time lost from work (Kenny, 1994). In order for an injured or ill worker to successfully return-to-work, involvement of all parties is critical (Franche & Krause, 2002; Frank et al., 1998)

Effective Communication, Coordination, and Cooperation of Parties

When workers become ill or injured, all parties involved in the return-to-work process have the common goal of assisting them to becoming productive again in a safe and timely manner (Guzman et al., 2003; Scheel et al., 2002; Young et al., 2005). However, the priorities of each party may differ, requiring good communication and trust among them to achieve the best outcome. For some stakeholders, ensuring return-to-work effectiveness will be a priority, while for others, particularly those concerned with the cost of the return-to-work process, maximizing the efficiency will be of greater importance (Young et al. 2005). Involvement and cooperation of unions may be necessary to allow light duty as an accommodation (Lee & Newman, 1995). Optimal relationships among stakeholders are critical for RTW interventions to be most effective (Franche et al., 2005; Friesen et al., 2001). Retention strategies are a joint effort among human resource managers, employees, and if applicable, unions (Frank et al., 2004; New York State Department of Civil Service and Governor's Office of Employee Relations, 2002).

If intervention must be provided from outside the workplace, collaboration between the rehabilitation professionals and the employer is of great importance for successful return-to-work outcomes. In these cases, integration of the rehabilitation interventions into the company's policies, planning and practices is suggested as a collaboration strategy, since rehabilitation professionals have little direct power over organizational practices (Kearns, 1997). Because collaborative initiatives are difficult to apply, one of the factors associated with the outcomes of a multipartite collaboration is an agreement between the parties on the nature of the problem, expected benefits and interventions, and the scope of the collaboration (Gray, 1989).

Case managers can facilitate communication among involved parties and ensure consistent application of RTW protocols, subsequently reducing work disability duration and associated costs (Arnetz et al., 2003; Bernacki et al., 2000; Pransky et al., 2004). They can also facilitate return to work by maintaining a balance between the employers' focus on productivity and healthcare providers' focus on protecting the patient (Feuerstein et al., 2003; Arnetz et al., 2003). Case management has

been reported to be related to lower absenteeism and early return-to-work (Fergason et al., 2001; Song et al., 1997). Case managers may also be able to improve communication between providers and employers and thus facilitate the return-to-work process, as well as acting as ombudsman for workers who require assistance dealing with their supervisors, providers, or insurers (Shaw et al., 2001).

Provision of Needed Modifications for Appropriate Accommodation

Provision of accommodation can be effective in delaying the exit of workers to disability benefits and prolong and retain their employment (Burkhauser & Weathers, 1999; Burkhauser, Butler, & Kim, 1995). In a literature review on work-based return-to-work interventions (Franche, Cullen, Clarke, et al., 2005), the authors concluded that there was strong evidence that offers of workplace accommodation reduced the duration of work disability as well as related costs. Campolieti (2005) reported that not all accommodations increase retention, but that flexible work schedules and modified workplaces were reported to prolong duration of post-injury employment spells.

In a literature review on modified work, Krause et al. (1998) identified five main types of modified work: light duty, graded work exposure, work trial, supported employment, and sheltered employment. Modified work programs are designed to facilitate return-to-work for workers with a work-related injury or illness and have been reported to shorten duration of work disability (Bernacki et al., 2000; Crook et al., 1998; Habeck, Leahy, Hunt et al., 1991, Krause et al., 1998). Workers who received accommodations, such as reduced hours, provision of modified equipment, or light workloads, were significantly more likely to return-to-work more permanently (Butler et al., 1995; James et al., 2002; Kenny, 1994) and significantly less likely to experience further periods of absenteeism (Butler et al., 1995).

Proactive return-to-work strategies, as part of an employer-based disability management program, that involve injured employees and their supervisors throughout the return-to-work process, use creative placement strategies to accommodate and accomplish return-to-work, involve parties across departments in the company to achieve return-to-work, and coordinate the actions of external providers with the return-to-work goals, have been associated with lower lost work day case rate and lower claim rates for work injuries (Habeck, Hunt, & VanTol, 1998, Habeck, Scully, VanTol, & Hunt, 1998).

The accommodation process can be facilitated by case managers, in consultation with workers and their immediate supervisors, by developing a list of needed workplace accommodations and specifying responsibilities and target dates for obtaining management approvals and modifying equipment or work stations, if needed. Treating physicians can be asked to review and approve the needed accommodations as part of their regular medical orders specifying job restrictions (Shaw & Feuerstein, 2004).

Returning to work is a process, not just an event (Pransky et al., 2005), and the ongoing assessment of individuals' needs as well as technical support is vital to successful employment outcomes for employees with disabilities. Throughout the employee's job tenure, his or her health, functional status, or job conditions will undergo changes, requiring ongoing adjustment and employment interventions (Baldwin et al., 1996; Butler et al., 1995).

Training/Education for the Parties Involved in Accommodation

Training has the purpose of increasing the understanding of what needs to be done to achieve successful outcomes and why these practices are beneficial to the company and the participants, and of enhancing rapport and collaboration among everyone. (Franche, Baril, Shaw et al., 2005; Young et al., 2005). Lincoln et al. (2002) examined the effect of a 2-day training program for nurse case managers designed to facilitate the implementation of workplace accommodation in a workers' compensation health care delivery system. Claimants of trained nurses received 1.5 times as many recommendations for accommodations as those managed by nurses who were not trained. Trained nurses were more likely to recommend accommodations addressing workstation layout, computer-related improvements, furnishings, accessories, and lifting/carrying aids, where those not trained were more likely to suggest light duty and lifting restrictions.

Education is one of the most frequently used strategies to promote collaboration among stakeholders (Loisel et al., 2005). A review of literature on stakeholder motivation, interests, and concerns regarding return-to-work outcomes (Young et al., 2005) indicated stakeholders will continue their involvement in return-to-work activities as long as they perceive the goal of RTW is worth pursuing and is still in line with their wider goals.

Data-Driven System for Case Identification and Monitoring

A number of organizations have developed data management systems to record and track information regarding injuries or illness, along with absenteeism and health and productivity information (Bernacki et al., 2000; Burton & Conti, 2000; Lincoln et al., 2002). This becomes very useful in understanding the organization's health related problems and in designing, implementing, managing and evaluating programs that address these occurrences (Burton & Conti, 2000). Systematically monitoring the return-to-work process and lost work days has been associated with lower lost work day rates (Fergason et al., 2001; Habeck, Hunt, & VanTol, 1998, Habeck, Scully, VanTol, & Hunt, 1998).

General Electric (GE) has adopted the Six Sigma method to improve not only the quality of their products but also the health care quality the company provides its employees around the globe (Buck, 1998; Henderson & Evans, 2000). Six Sigma, as defined by GE, is "a disciplined method of defining, measuring, analyzing, improving, and controlling quality in every one of the company's products and processes". It is an approach to quality that sets a target of 3.4 mistakes per 1 million opportunities, which is close to none. Six Sigma helps to gain an understanding of customer expectation, and applies the continuous cycle of Measure-Analyze-Improve-Control to processes, aiming to reduce defects. Health care plans and providers that GE does business with are encouraged to make systematic changes so that the quality of access, customer service, and care improves.

Guidelines and Procedures for the RTW Process, which are Consistently Applied

The presence of workplace guidelines and procedures for returning injured workers to work leads to a reduction in absenteeism (Kearns, 1997; Kenny, 1994). Companies that have in place multiple health and productivity strategies are succeeding in reducing lost time as well as improving employee health (Watson Wyatt, 2006). However, if the guidelines are only provided in general terms, it results in inconsistent application of RTW policies (James et al., 2002). Despite the reported benefits of RTW guidelines and procedures, not all companies have them in place. In an interview of 30 organizations regarding their employer strategies and policies concerning the management of long-term absence, only a few had comprehensive policies and arrangements for handling such cases in place, with operational difficulties with regards to the policies that do exist (James et al., 2002).

Addresses Occupational and Non-occupational Causes of Disability in an Integrated System

Whether the cause of the disability is occupational or non-occupational, all employee absences from work increase benefit costs and reduce productivity (Ferguson et al., 2001). In a study of 275 U.S. organizations with a minimum of 1,000 employees, those with integrated health and productivity programs were achieving desired outcomes such as reduced costs and lost time. Both non-occupational and occupational causes of illnesses and injuries contribute to the associated costs and lost productivity of absence (Ferguson et al., 2001) regardless of the origin.

Accommodating Newly Hired Employees with Disabilities

Individuals with disabilities, including cognitive and psychiatric disabilities, are able to obtain competitive employment and become productive employees with appropriate accommodations (James, Cunninghamn, & Dibben, 2002; Leff, Cook, Gold et al., 2005). Those hired with an existing disability are provided with accommodations and ongoing support from employers, often in conjunction with VR or other community-based services.

However, those who are hired with existing disabilities face challenges in retaining employment due to inadequate intervention, accommodation, and support to maintain expected performance and attendance, and changes in work content, work conditions, health conditions or personal circumstances (e.g. Pierce, 2003; Botuck, Levy, & Rimmerman, 1998; Drake et al., 1996; Kregel, Parent, & West, 1994; Lehman et al., 2002).

There is little empirical evidence on retention of individuals hired with existing disabilities and the impact accommodations have on job tenure (MacDonald-Wilson et al., 2002). In one study, the provision of job supports such as on-site counseling, support, and problem solving, was associated with longer job tenure (not necessarily increased hours worked) and workplace accommodations have been reported to improve productivity (Leff et al., 2005).

All Types of Accommodations are Considered to Meet Employee Needs

The types of workplace accommodations that promote successful employment outcomes vary depending on the types of disabilities employees have. For example, many workers with developmental and physical disabilities may need more time dedicated to learning their jobs, while those with psychiatric disabilities may need more ongoing support to address their emotional needs in order to sustain their employment.

There are a variety of workplace accommodations that employers have provided successfully to workers with disabilities. These accommodations have included: restructuring job duties or changing job descriptions (Burkhauser & Daly, 1996; Harlan & Robert, 1998; SHRM/Cornell, 1999), adapting or altering the workplace (Granger et al., 1997; Harlan & Robert, 1998; McFarlin et al., 1991; SHRM/Cornell, 1999), making changes to employee's schedules (Blanck, 1994; Burkhauser & Daly, 1996; Electronic Industries Foundation, 1992; Harlan & Robert, 1998; McFarlin et al., 1991; SHRM/Cornell, 1999), providing specialized training and orientation (Blanck, 1994; McFarlin et al., 1991); purchasing equipment (Burkhauser & Daly, 1996; Electronic Industries Foundation, 1992; Harlin & Robert, 1998; SHRM/Cornell, 1999); and providing assistive technology, which has been reported to play an integral part in retention strategy (Langton & Ramsur, 2001).

Wehman and Bricout (2001) have defined accommodations as one type of business mediated support among the following categories of intervention focused at the workplace:

1. job restructuring,
2. workplace accommodations (environmental and task mod-

ification, assistive technology, and schedule modification),
3. coworker mentoring (job task training and support, social support), and
4. job creation.

Many individuals with disabilities experience difficulties in interacting and socializing with their coworkers (MacDonald-Wilson et al., 2002). While physical integration has been relatively easy to achieve, many employees with disabilities are socially segregated in the workplace (Chadsey & Beyer, 2001; Storey & Garff, 1999; Storey & Horner, 1991). The need to foster workplace inclusion becomes critical since job retention can be related to employees' participation in social relationships with coworkers (Kirmeyer, 1988; Klein & D'Aunno, 1986, Young, 1986). In a literature review of strategies for increasing interactions in supported employment settings (Storey, 2002), four strategies to promote social integration of employees with disabilities were reported; social skills instructions (Collet-Klingenberg & Chadsey-Rusch, 1991; Park et al., 1991; Storey & Garaff, 1997), problem solving (Chadsey-Rusch, 1991), communications skills instruction (Heller et al., 1996; Mautz et al., 2001; Storey & Provost, 1996), and co-worker supports (Chadsey et al., 1997; Mautz et al., 2001; Park et al., 1991; Storey & Garff, 1997; Storey & Garff, 1999).

Systematic Process is used for Developing Accommodations (source, timeline, funding) that Includes all Parties Involved

For workplace accommodations to be successfully implemented, all parties in the workplace, such as co-workers, labor representatives, and supervisors must be involved (Gates, Akabas, and Oran-Sabia, 1998; Gates, 2000). Their contribution to the development of workplace accommodation is essential, and often requires partnership between the employment service provider and business in the implementation and evaluation process (Bricout & Wehman, 2001).

Gates (2000) designed an intervention that takes into account the social nature of the accommodation process. Key intervention components include:

1. development of a disclosure plan since workplace intervention cannot occur without disclosure,
2. a systematic method of identifying work group members,
3. formal psycho-education training that includes the supervisor, identified work group members, and the individuals in the work organization who have the authority to approve accommodations, and
4. on-going follow-up support to the supervisors and the worker with disabilities.

As a result of this intervention, individuals were more successful in securing the assistance they needed to maintain work.

Similar to other employment interventions, supported employment is comprised of a number of different types of programs and service delivery mechanisms, although little is known about the effectiveness of each service (Kaufman, 1995). During the assessment process, the individual's career goal is identified, an environmental analysis of the individual's functional capacity is conducted, and the individual's potential support needs within the workplace are assessed. These support needs include compensatory strategies, training natural supports, environmental modifications, personal assistance services, and assistive technology services and devices (Inge, 1997)

Having a well-developed technology assessment process can be instrumental in assuring that each step is considered and properly carried out, resulting in successful employment outcome (Langton & Ramsur, 2001). The accommodations must be reviewed on an ongoing basis so they meet the individual's changing needs.

Employee Needs and Workplace Needs are Considered and Balanced

Workplaces more open to hiring and accommodating persons with disabilities focus on the worker's capabilities and effectively match the worker with the job requirements. People with disabilities should be included in all accommodation discussions, providing input on their ability to perform job duties (Buys & Rennie, 2001, Gilbride et al., 2003). Individuals with disabilities who were provided with training to advocate for themselves were more successful in securing the assistance to maintain employment (Gates, 2000).

Employers are constantly concerned about the return on the investment that they make and this concern influences their hiring decision (Nietupski et al., 1997). Employment specialists, who often assist individuals with disabilities obtain and maintain employment, can meet with the employers and ask questions to gain information about their needs, as well as stimulate the employer's thoughts and allow them to conclude that hiring an individual with disabilities will meet their needs (Nietupski & Hamre-Nietupski, 2000). According to Bricout and Wehman (2001), it is important to communicate to senior management an understanding of the business goals and how a particular configuration of accommodations will further those goals, as well as to articulate to the supervisors and co-workers an appreciation of how the accommodations will benefit their own efforts in addition to those of the worker being accommodated.

Management of Workplace Accommodations Includes On-going Evaluation, Training, and Support

Ongoing access to accommodation is crucial to job success and retention (Bond et al., 1997; McHugo, Drake, & Becker, 1998). For example, even after the employment specialist withdraws from the workplace, they continue to provide support to solve

problems that arise on the job (Becker et al., 1998), as well as emotional support (Rogers et al., 1997). Timely and easy accessibility to all types of accommodations at all times is the key to long-term success (Rogers et al., 1997).

Supports provided by supervisors and coworkers are of great importance for job maintenance for workers with disabilities, especially after the employment specialists withdraw and support initially provided by them is lost (Gates, 2000; Vandergoot, 1991). Therefore, providing ongoing training to those who are supporting the individuals with disabilities, the coworkers and supervisors, as well as continuing to provide support to supervisors is critical to job retention (Gates, 2000).

Supervisors Role and Response

Absence from work is determined not only by the employee's health situation but is also affected by other factors, such as work environment and social support (Kristensen, 1991, Rael et al., 1995). Behavior of supervisors has been reported as one of the non-medical determinants that affect return-to-work of workers with disabilities and those who have become ill or injured (Gates, 1993; Kushnir & Luria, 2002; Linton, 1991). Positive supervisory behavior has been associated with fewer work days lost (Habeck, Hunt, Van Tol, 1998; Stansfeld et al., 1997) and better job accommodations in employees who had successfully returned to work (Gates, 1993). Supervisors play a key role in the return-to-work process. They are most familiar with the requirements of the job, are the first to communicate with workers who are going to return-to-work, may be the first level in evaluating performance and in clearing barriers for effective accommodation and job performance, are a liaison between the employee and corporate policies and resources, and are typically involved in providing necessary accommodation (Gates, 1993).

Managing the Supervisor's Role in Working with Employees with Disabilities

Clear guidelines for supervisors on their role and responsibilities in maintaining contact with the employee when they are absent from work and in handling the RTW process. There have been reports of hesitancy on the supervisor's part to place absence management as a priority in relation to other duties (Cunningham & Hyman, 1995; McGovern et al., 1997; Storey, 1992). Lack of guidelines provided to line managers related to their role and responsibilities in the return-to-work process can inhibit the process of employees with illness or work impairments (James et al., 2002). Companies with lower workers' compensation claims more often use procedures to monitor and encourage supervisors to assist with return of injured workers to their departments (Habeck et al., 1991).

Monitor and assist supervisors in their RTW efforts. James et al. (2002) suggests establishing appropriate mechanisms to monitor performance of supervisors in the return-to-work process, as well as addressing any weaknesses that are identified, such as case management arrangements. Monitoring supervisors while showing support in their return-to-work efforts has been reported to have a positive effect on workers' compensation claim frequency (Habeck, Leahy, Hunt, et al., 1991). Accommodation does not occur unless the supervisor feels that he or she has the authority to accommodate; therefore, an individual at the workplace who provides that sanction, such as the VP of HR, the Employee Assistance Program or its union counterparts, risk management or benefits, or the Equal Employment Opportunities Office, is needed as part of the intervention (Akabas, Gates, & Galvin, 1992, Kenny, 1994)

Financial incentives for supervisors to make accommodations and retain people at work. Providing incentives to supervisors for successful return-to-work of workers or reductions in workplace absenteeism is related to positive outcomes in these areas (Ferguson et al., 2001). If sickness absence had financial consequences for the department, the supervisor was more likely to communicate frequently with the employee (Nieuwenhuijsen et al., 2004). Similarly, accountability for incidence and costs of claims assigned to departments was associated with supervisors' willingness to return injured workers back to work (Habeck, Leahy, Hunt, et al., 1991). Lack of a centralized budget for making accommodations impacts the supervisor's ability and willingness to make workplace adjustments, and as a result hindered return-to-work of worker (James et al., 2002)

Training of supervisors to develop their knowledge of disabilities, and their abilities to access medical information and respond appropriately to employees. Disability management training programs for supervisors are useful (McLellan, Pransky, & Shaw, 2001; Wood, 1987) but training programs that are focused specifically on supervisor role and improving supervisory behavior have been reported to be more effective (Haldorsen, Jensen, Linton et al., 1997; Jensen & Bodin, 1998; Linton, 1991; McLellan, Pransky, & Shaw, 2001; Shaw, Robertson, Pransky, & McLellan, 2003; Wood, 1887). While the majority of the programs result in reduction in work absence, one study did not find a significant effect of supervisory behavior on return-to-work rates in the long tern, even when the supervisors changed their behavior as reported by the patients (Jensen and Bodin, 1998).

Training may cover areas such as communication skills (Shaw et al., 2006), supportive response to employees (McLellan, Pransky & Shaw, 2001), accommodation provision (Shaw et al., 2006), modified or transitional assignments (Christian, 2005), knowledge of specific disability (Kushnir & Luria, 2002), and conducting follow-up meetings (Haldorsen et al., 1997).

Facilitate supervisor's access to medical and rehabilitation providers to obtain needed services and design appropriate accommodations to supervisors. Supervisors

often times do not have the expertise in medical or rehabilitative knowledge necessary, and working together with physicians and other professionals is a key component in successful return-to-work outcomes. Supervisors have indicated the importance of ongoing consultations between themselves and the occupational physician through the rehabilitation process and RTW process of employees (Kushnir & Luria, 2002).

Supervisors may help to prevent disabilities after injuries by interacting with medical providers, especially to design optimal work restrictions (Shaw et al., 2003). It is also important that supervisors are provided with some level of autonomy in terms of achieving effective interdisciplinary interaction. Supervisors who were responsible for return-to-work process in their organization were more likely to communicate better and to consult more often with other professionals (Nieuwenhuijsen et al., 2004).

Nature of the Supervisor's Response to Employees with Disabilities

Timely and facilitative contact by supervisor when employee is out of work. In most businesses, line managers are responsible for keeping in contact and providing follow-up with the absent worker (James et al., 2002). Supervisors can help to prevent workplace disabilities after injury and promote return-to-work by responding promptly and appropriately immediately following the report of injury or discomfort (Shaw et al., 2003) and making an effort to keep in touch with injured workers while out of work (Nordqvist et al., 2003, Shaw et al., 2003). These efforts have been related to decreased absenteeism of workers with injuries/illness/disability (James et al., 2002).

Support and responsiveness to employee needs. Workers experiencing the recent onset of a disabling condition list "responsiveness of the supervisor" as a major determinant in their decision to return-to-work (Akabas & Gates, 1991, Shaw et al., 2003). Supervisors can help to prevent workplace disabilities after injury by making an effort to validate the pain complaints of employees, by treating injured workers with fairness and respect, and communicating with injured workers (Shaw, Robertson, Pransky, & McLellan, 2003). Better communication between supervisor and employee was associated with time to full return to work in non-depressed employees (Nieuwenhuijsen et al., 2004). A negative response by supervisors may lead to injured workers feeling alienated or ignored during a time when they expected support (Nordqvist, Holqvist, & Alexanderson, 2003).

Supervisor support along with coworker support has been shown to predict less disability among workers with chronic pain syndrome (Marhold, Linton, & Melin, 2002). Workers with longer absences were more likely to report that their supervisors had little interest in their return-to-work and were inflexible towards accommodation provision (Akabas & Gates, 1991). Inflexibility of supervisors toward accommodation also contributes to longer work absences (Akabas & Gates, 1991).

Ability to monitor the ongoing impact of accommodations on job performance and the effect of work on the employee's health status. Return-to-work is affected by the ability of supervisors to develop appropriate accommodations and monitor accommodation effectiveness (Akabas & Gates, 1991), and to make accurate assessments when the conditions of employees with disabilities interfere with job performance (Gates, Akabas, & Kantrowitz, 1996). Supervisors who continue to monitor employee discomfort and functional limitations, even in the absence of official physician restrictions, may be more effective in reducing risks of re-injury and providing secondary prevention (Shaw, Robertson, Pransky, & McLellan, 2003).

Ability to maintain appropriate attitude toward the employee and effectively address concerns regarding the impact of their accommodations on productivity and coworker reactions. Supervisors can help to prevent workplace disabilities after injury by conveying a positive attitude or expressing empathy or support (Shaw, Robertson, Pransky, & McLellan, 2003). Supervisor perceptions of injury, illness, and work productivity of employees who are returning to work are related to the return-to-work of employees (Kushnie & Luria, 2002, Strunin & Boden, 2000). There is evidence that supervisors may view workers returning from an injury or illness in a negative way because of reduced productivity or the need for special attention and support (Kushnie & Luria, 2002; Strunin & Boden, 2000).

The ability of a supervisor to facilitate communication between a worker with a disability and coworkers affects job maintenance (Gates, Akabas, & Kantrowitz, 1996). Coworker responses may be one factor that supervisors consider when deciding whether to grant an accommodation (Cleveland, Barnes-Farrell, & Huestis, 1996; Cleveland, Barnes-Farrell, & Ratz, 1997).

Coworker Involvement and Response

Coworkers can provide various types of work support to individuals with disabilities at the workplace, including instruction (skills training, job modifications and adaptations) (Storey & Certo, 1996), advocacy (Park et al., Chadsey et al., 1997), and mentoring (Lee et al., 1997; Zivolich, 1990). These supports from coworkers can assist individuals with disabilities to be productive and to maintain their employment and may comprise a significant source of workplace supports (Carr, Hewlett, Hughes et al., 2003; Detaille, Haafkens, & van Dijk, 2003).

However, there is a fine balance between providing sufficient accommodation to workers with disabilities and having coworkers perceive accommodations as being fair (Colella, 2001). When the need for accommodations is apparent due to the type and significance of the disability, perceived fairness may be easier to attain. However, when these needs are not

obvious and confidentiality must be maintained, accommodations that are not understood by coworkers may lead to perceptions of unfairness. Gaining coworker support is the key to positive employment outcomes with workers with disabilities who require some accommodation.

Managing Coworker Involvement

Effective approach to enlisting coworker support. Providing support to workers with disabilities is usually not included in coworkers' job descriptions. However, many accommodations require the cooperation and support of others at the workplace (McLaughlin & Gray, 1998) and it becomes critical to enlist coworker support so that workers with disabilities are able to become and remain productive. When coworkers are enlisted to provide assistance to an employee, it is suggested that management make this completely voluntary with follow-up checks on coworker satisfaction, trade for some other job task in a fair way such as through job carving (Griffin, 1996), or provide reimbursement (Hood et al., 1996). Identifying a particular coworker, with that coworker's agreement, to act in the role of mentor for an employee at risk of experiencing problems, is another approach (Chadsey, Sheldon, Horn, & Cimera, 1999).

Facilitation of coworker acceptance of employees with disabilities and provision of accommodation. A generally supportive workplace culture seems to be associated with coworker acceptance for workers with disabilities (Akabas, 1994; Kirsh, 2000; Schneid, 1999). Work arrangements that were associated with successful attempts to involve coworkers in the process of supporting employees with disabilities includes having them work the same shift, having some non-work related interactions with their supervisors, occasional informal socializing outside of work, and viewing the social atmosphere of the workplace as "relaxed" (Chadsey et al., 1999). It has also been suggested that informing coworkers of the impact of a disability can promote an environment of acceptance, thus increasing coworker acceptance (Barson, 1995; Westmoreland et al., 1998). Involving coworkers in the support process can provide them with opportunities to air their feelings and give them a stake in positive outcomes (Rogan, Banks, & Howard, 2000).

The way in which accommodations are provided to employees with disabilities can affect the way coworkers respond, so effectively communicating with coworkers and providing a rationale for the accommodation is a critical factor (Hagner, 2003). Providing sufficient and accurate information about employee health problems and their effects on productivity to coworkers can promote return-to-work (Nordqvist et al., 2003).

Nature of the Coworker's Response to Employees with Disabilities

Coworkers perceive accommodation to be equitable and fair. According to Colella (2001), coworkers make fairness judgments when accommodations are salient and affect coworkers personally. Factors influencing the salience of accommodation include:

1. visibility of accommodation, where visibility is influenced by the degree to which the accommodation makes working conditions different from coworker's conditions,
2. autonomy of work environment, whether the individual can accomplish their work in an autonomous manner, and
3. environmental diversity climate, where the accommodation would be less salient if providing accommodations occurred as common events.

The impact of accommodation on coworker;s lives may also play a role in the coworker's perceptions (Colella, 2001). Coworkers may sometimes adopt a negative attitude or engage in hostile behavior if they perceive the employment situation of an employee with disabilities as unfair (Gates, Akabas, & Oran-Sabia, 1998). Accommodations are more likely to be perceived to be fair when management provides a justification for the accommodation (Lee, 1998; Lee & Newman, 1995, Zuckerman, 1993).

Negative attitudes of coworkers are addressed. Coworker receptivity towards individuals with disabilities has been reported to be positive in general (Beare et al., 1992; Belcher & Datlow-Smith, 1994; Gates, Akabas, & Oran-Sabia, 1998). Coworkers' positive attitudes towards employees have been associated with positive return-to-work of employees with heart diseases (Kushnir & Luria, 2002). However, some coworkers do act unsupportive or rejecting (Hagner, 2003). Goodall & Nisbet (1992) reported that in addition to at least one supportive coworker, there was one or more unsupportive coworker behavior in five of the 12 workplaces they examined. Other problematic coworker behaviors include being unreceptive to requests for support, behaving disrespectfully towards individuals with disabilities, and trying to make workers with disabilities perform undesirable jobs (Chadsey et al., 1999). Workplace 'incivility' among coworkers should be avoided to promote retention (Hagner, 2003).

Employee Work Related Attitudes and Perceptions that Affect Retention

The perceptions of the worker who has the disability, injury, or illness are important to consider in workplace disability management (Hogg-Johnson & Cole, 1998; Smith et al., 1998; Tarasuk & Eakin, 1994, 1995). Smith et al. (1998) explored the constructs of legitimacy and job vulnerability as important factors in determining chronicity from musculoskeletal injuries and found that suspicion and mistrust of the workplace, as well as insecurity about one's work are potential prognostic factors. Workers with more positive recovery expectations spent less time off work (Cole et al., 2002). Similarly, open

communication between the worker, health care provider and the workplace reduces prolonged work disability (Hogg-Johnson & Cole, 1998).

Employee perception of employer support and social context (cohesiveness, coworker trust). A people-oriented culture within a company, both from employer perspective (Habeck et al., 1991, 1998) and worker perspective (Amick et al., 2000), is correlated with low incidence of workers' compensation claims. The employees in these companies were involved in decision making and there was trust between management and employees, and a willingness to share information in a cooperative workplace. Organizational policies and practices influence prevention and management of work disability and the broader company environment creates a context in which certain types of disability prevention and management interventions are implemented, subsequently decreasing the incidence and duration of work disability (Amick et al., 2000; Habeck, et al., 1991; 1998).

Employee satisfaction with job and personal working conditions. Retention has also been shown to be related to job satisfaction and organizational commitment (e.g. Jaros, 1997), family attachment or conflicts between work and family roles and hobbies (e.g. Cohen, 1995; Lee & Mauer, 1999), and attachment to the organizations they work for (e.g. Cohen & Bailey, 1997). Dissatisfaction with employment has been related to absenteeism, turnover intentions and turnover (Hoogendoorn et al., 2002; Moore, 1998; Perry, Hendricks, Broadbent, 2000) and disability retirement (Krause et al., 1997). Van der Giezen et al. (2000) reported job satisfaction as being one of the most important predictors for being at work, along with subjective evaluation of health status. Fair assignment of tasks and rewards (job satisfaction, work related stress, general measures of self esteem and mastery, promotion potential) was related to retention of workers with mental illness (Akabas & Gates, 2000). Some factors affecting satisfaction for those with chronic illness include wage and salary levels (Bokemeier & Lacy, 1986), impact of impairment on one's ability to perform work tasks (Hershenson, 1996), and job/person match (Roessler, Rumrill, & Fitzgerald, 2004b).

Individual prediction of continued disability is related to prolonged duration of work disability (Clancy, Wey, & Guinn, 1984; Frymoyer & Cats-Baril, 1987; Stansfeld, Tarasuk, & Ferrier, 1994; Vendrig, 1999, Hoegelund, 2000). Perception of inability to change jobs is related to prolonged duration of work disability (Gallagher et al., 1989). Between employed and unemployed individuals with mental illness, there is a significant difference between organizational climate and person/environmental fit, while there is no difference in empowerment or perceived social support (Kirch, 2000). Job embeddedness can also affect job retention (Lee et al., 2004; Mitchell et al., 2001). Aspects of job embeddedness include:

1. links to other people, teams, and groups,
2. perception of their fit with the job, organization, and community, and
3. what they say they would have to sacrifice if they left their jobs (Mitchell et al., 2001).

IV. Discussion

Employer behaviors related to hiring and managing its workforce are very important for policymakers, program administrators and advocates who wish to improve the quality and duration of the participation of people with disabilities in the labor market. In recent years, employment efforts have broadened to include activities to increase the demand from employers for labor from people with disabilities. Success in this effort will depend on how effectively we can align the goals and approaches of these efforts with the interests and practices of employers, especially with employers who can offer the conditions to accommodate and retain them effectively, as described in this review.

Research about employer practices that results in retention is needed to inform policy efforts that seek to impact demand side behavior. Research methodology should include factors that are relevant to employers' hiring and retention behavior in order to guide policy efforts that will favorably impact employees with disabilities. The constructs presented here provide a valuable collection of variables that have been linked in prior research to positive job retention efforts, especially those that are targeted to meet the needs of employees with health conditions and disabilities. Further study is needed to empirically establish the contributions of these variables to retention outcomes and then to demonstrate how they can be promoted and adopted among employers. Such research would provide new considerations for policy incentives to stimulate demand and new models of service delivery to meet it.

If these employer behaviors are demonstrated to prevent or improve impaired productivity and/or to prevent or delay exits from employment due to health or disability at some meaningful threshold, public policy makers should consider how these behaviors can be stimulated and supported as part of a comprehensive demand side approach. Improving the quality and duration of jobs obtained, reducing unnecessary exits due to disability, and improving the productivity and health of employees with disabilities are all outcomes that serve the mutual interests of all the stakeholders involved.

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The Role of Disability Management Practices in the Long-Term Employment Retention of Individuals with Disabilities

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Abstract

The goal of this research study was to examine the strategies and supports that are most effective for assisting persons with disabilities to maintain employment and advance their careers. To that end, the present study was designed to better understand the current status of demand-side activities used by progressive employers to promote the general retention of their workforce, and how these practices and strategies can be optimized to include people with disabilities. This paper presents the preliminary, descriptive findings from a survey designed to assess these practices that was conducted with employer members of the Disability Management Employer Coalition (DMEC) by the Rehabilitation Research and Training Center of Virginia Commonwealth University in collaboration with DMEC.

The paper presents employer ratings of important practices currently used by employer organizations to promote the general retention of their workforce, as well as those used specifically to prevent health risk and injury, manage health conditions, restore function, and accommodate limitations to sustain productive employment for absence and disability management efforts. Results are also presented regarding employer ratings about the perceived status of program efforts and their effectiveness and the factors motivating absence and disability management efforts. Results are also presented for the current practices reported by these employers regarding diversity, the inclusion of disability in their diversity efforts, and their levels of hiring and views regarding the value of hiring new employees who have disabilities.

I. Introduction

The overall level of employment among people with disabilities has remained relatively unchanged, despite many successful interventions and systems of services to assist people with disabilities to be hired into jobs. This stagnant level of workforce participation is likely due in part to the high rate of employment exits and separations by workers with disabilities. Until the ratio between job placements and job exits is more favorable, the net gain in employment for people with disabilities will be smaller than desired. Much greater understanding is needed about these exits, as well as the factors that contribute to their occurrence and approaches that can prevent or resolve them.

Retention is a major issue currently concerning employers. The aging of baby boomers is leading to skill shortages already with a potential shortage in the labor market generally not far off. Controlling health care and benefit costs is another immediate concern of employers. We maintain that there is an unrecognized opportunity here for meeting employer needs for retention of skilled workers and controlling health care and benefit costs through successfully managing the health and disability conditions that employees develop over the course of employment, and retaining them at work through effective accommodations

and support. It is known that successful employer efforts to sustain health and productivity can reduce the progression of private sector employees

to public sector disability benefits (McMahon et al., 2004). Similar results have been demonstrated in workers' compensation programs (e.g., Upjohn Institute/MSU studies) and with integrated disability benefits (e.g., NBGH, IBI).

The present study is therefore timely in its attempt to document and explore how employment policies can better incorporate practices that are effective in managing health conditions and disabling conditions for job retention. It can be presumed that developing best practices would assist employers to retain skilled workers and control health care and benefit costs by sustaining the employment of workers who develop disabling conditions through the provision of effective support and accommodation in the workplace. Increasing the proportion of employers who are able to support the duration of employment for workers who have or develop disabling conditions through best practices could reduce or delay the number of workers who leave employment and enter the Social Security Disability benefit system.

II. Research Questions

The purpose of the present study is to better understand the current status of demand-side activities related to retention, to explore the dynamics that influence their presence and their functioning, and consider how these can be optimized to include people with disabilities for long-term employment. Specifically, the study explores the following research questions:

- What are the current best practices used by progressive companies to promote retention of their workforce?
- What are the current best practices used by progressive companies to promote absence and disability management of their workforce?
- How do these efforts relate to and affect the retention of employees in general and the stay at work/return-to-work of people who develop health conditions or disabilities?
- How do these efforts relate to the presence and success of people with disabilities in the workplace, including the likelihood that they will be recruited and hired, and their chances of remaining employed?

III. Design and Research Methodology

The approach to this project was reconceptualized, to incorporate the knowledge gained about retention from research activities involving the study of the relationship between specific disability management practices and the successful job retention of persons with significant disabilities. These findings are presented in this monograph: Organizational Factors that Facilitate Successful Job Retention of Employees with Health Impairments and Disabilities. Constructs to use as the basis for developing the survey items could be developed from the literature review and from the employer case study findings that already were known to be associated with successful retention and effective disability management. We also determined that using a sample of employers known to be knowledgeable about and involved in disability management would provide a better basis for assessing the importance of practices and reporting experience.

Thus, the focus changed to identifying the practices reported to be most important for successful workforce retention and for successful absence and disability management and to explore how practice ratings are associated with reported outcomes and how disability management practices may relate to retention outcomes. Finally, because this sample of employers was known to be more familiar with the topic of disability and their association endorsed the study, we believed we could also explore their views about and experiences in hiring people with existing disabilities. This would let us also explore whether there is a relationship between an organization's opinions about and engagement in effective retention and disability management and their reported opinions and engagement in employing people with disabilities.

The employer members of the Disability Management Employer Coalition (DMEC) were selected as the survey sample because of their proficiency and interest in the areas of recruitment and retention, employee health and productivity, and integrated disability management, and the relative heterogeneity of its membership. This association consists of 1,500 members in 39 states, 66% of whom are employer members representing 400 different organizations. These employers encompass a wide array of industries, sizes, and geographic locations.

A focus group meeting was held with the Employer Advisory Board of the DMEC in May, 2007 to examine current practices related to retention and disability management. Focus group participants identified a number of current challenges in HR management, such as the constant pressure to "do more with less." The group also identified a broad range of strategies and considerations for the successful retention of employees, emphasizing tools and opportunities for career development and effective leadership and guidance. Participants described some of the challenges and opportunities frequently faced by DM staff, and the importance of shifting from a reactive (return to work only) to proactive (prevention and early intervention) role to improve DM programs and outcomes. A variety of suggested practices for delivering and evaluating DM services were identified, including clearly described policies and procedures, and standardized indicators of program performance. [See complete report in Appendix A.]

A survey was developed to determine the relative importance of factors hypothesized to contribute to the retention of general employees in employment. The content of the survey was developed from a complete review of the focus group results, the comprehensive literature review, and the findings to date from the case studies for Project 3: The relationship between specific disability management practices and successful job retention of persons with significant disabilities. Constructs identified from the comprehensive literature search on retention (Organizational Factors that Facilitate Successful Job Retention of Employees with Health Impairments and Disabilities) were reviewed by the authors and developed into items for the survey. The same process was used to develop items from the constructs identified in the literature review that contribute to absence and disability management (i.e., safety and prevention, wellness and early intervention, disease and disability management, accommodation, and return-to- work). A third section was developed to explore the linkage between retention and disability management practices and the organization's activities and attitudes toward diversity and employees with disabilities. The final section of items was constructed to collect the basic demographic information needed to describe the respondents (job title, number of years in DM related work) and their organization (industry, number of employees and locations). Constructs were also identified from the case study reports and from the focus group report, and were used to refine and substantiate the constructs developed from the literature.

The instrument was reviewed and edited by two experienced researchers who have conducted research on disability management and employment practices with employers. The revised draft was provided to the employer members of the RRTC Business Roundtable for business members to provide feedback. The subsequent revision was reviewed by the executives of the employer organization for item relevance, clarity and length. This proposed version was uploaded to the VCU-RRTC web site and a pilot test was conducted with the DM/HR representative of each of the four organizations participating as case study employers for Project 3 and the administrator of the employer organization. Each respondent completed the instrument for their organization and replied with suggestions for revisions to improve the clarity, relevance and length of the survey. Again, the survey was edited and reduced and the revised final version uploaded for survey administration. The survey was estimated to take 15 minutes to complete when reduced.

The final instrument consisted of the following:

Section I: Retention Practices (20 items; 18 items rating practices; 2 items rating impacts achieved);

Section II: Absence and Disability Management Practices (ADM) (26 items; 23 items rating practices; 3 items rating motivations and impacts);

Section III: Exploring Potential Connections Between Absence and Disability Management Efforts and General Recruitment/Retention Efforts (13 items; 6 items rating the contribution and recognition of the A&DM function for retention; 6 items rating practices and views about hiring people with known disabilities and the potential impact of A&DM on hiring); and

Section IV: Demographic Information (6 items; 2 about the respondent; 4 about the organization).

This product is presented in Appendix B of this paper.

IV. Survey Administration

A summary of the focus group findings was sent out in the newsletter and made available at the DMEC annual conference, announcing the upcoming electronic survey and encouraging participation by the CEO. Two weeks prior to the survey's administration a notice was included in the email bulletin sent to the membership from the COO. A letter was sent to the employer members from the CEO and the Project Director, explaining the survey, inviting participation, and addressing informed consent requirements (see Appendix C). Three days later, an email was sent to the employer members from the Project Director with the study link (see Appendix D). One week later, a reminder was sent to all participants encouraging their reply if they had not yet participated. This process was repeated three more times, until the number of respondents neared 100.

The employer email list consisted of approximately 732 individuals, representing approximately 400 employers. Because this was a study of practitioners' perceptions of practice importance, each individual name was considered to be a unique respondent, regardless of employer. However, some large employers gathered staff together to develop their ratings and designated one staff person to reply. Eighty were returned with undeliverable email addresses. The association administrator confirmed that this is the expected rate of successful emails to this group, due to rapidly occurring changes in positions, locations, and employers in the private sector. A total of 650 are assumed to have received the survey. The final number of 95 represents 15 % of the reachable sample.

V. Results

The descriptive findings are presented in this report. Because most of these are self-explanatory and do not explore analytical questions to interpret; only the highlights will be mentioned in this report.

As expected, the respondents represent a wide distribution of industries (and job types), with the largest proportions coming from healthcare and manufacturing. A complete breakdown of participating industries is presented in Figure 1 below. The organizations varied in the number of people they employ, although the majority (53%) is large employers (10,000 or more). Only 5% of the sample employs less than 500 people, so the results should not be assumed to represent the experience of small employers (see Figure 2 below for a breakdown of organizations by size). The respondents ranged widely in their years of experience in absence and disability manangement. Nearly 20% have less than 3 years experience, while nearly 25% have from 17 to 33 years in this work. Figure 3 on the following page provides a complete breakdown of DMEC respondents' years of experience with absenteeism and disability management programs. It will be interesting to see if ratings of practice importance, program performance, and orientation toward hiring people with disabilities are different for people with more and less experience in this work and in different types of employer organizations (industry type and size).

Figure 1: Industries Represented by DMEC Survey Respondents

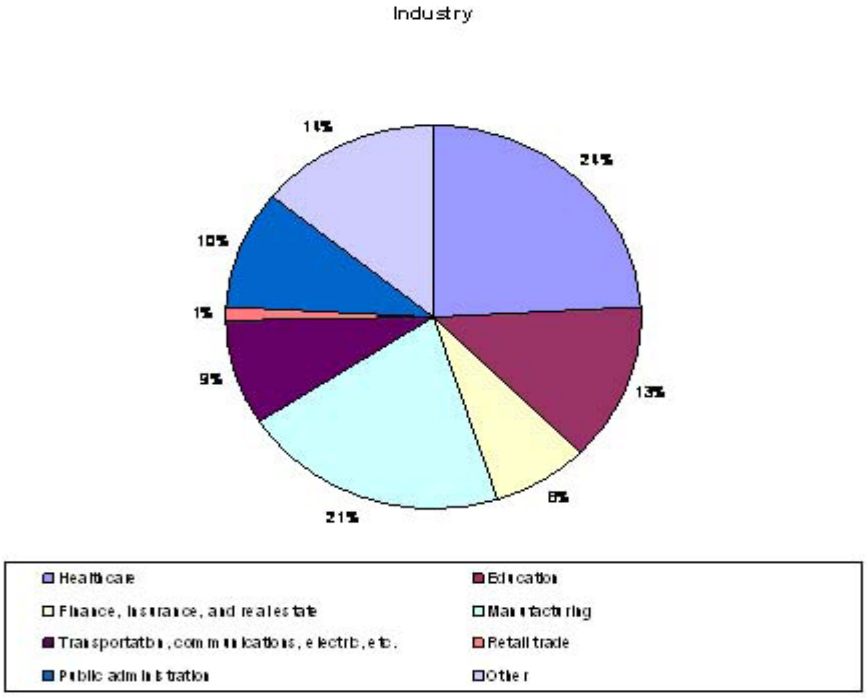


Figure 2: Employment Level of DMEC Survey Respondents

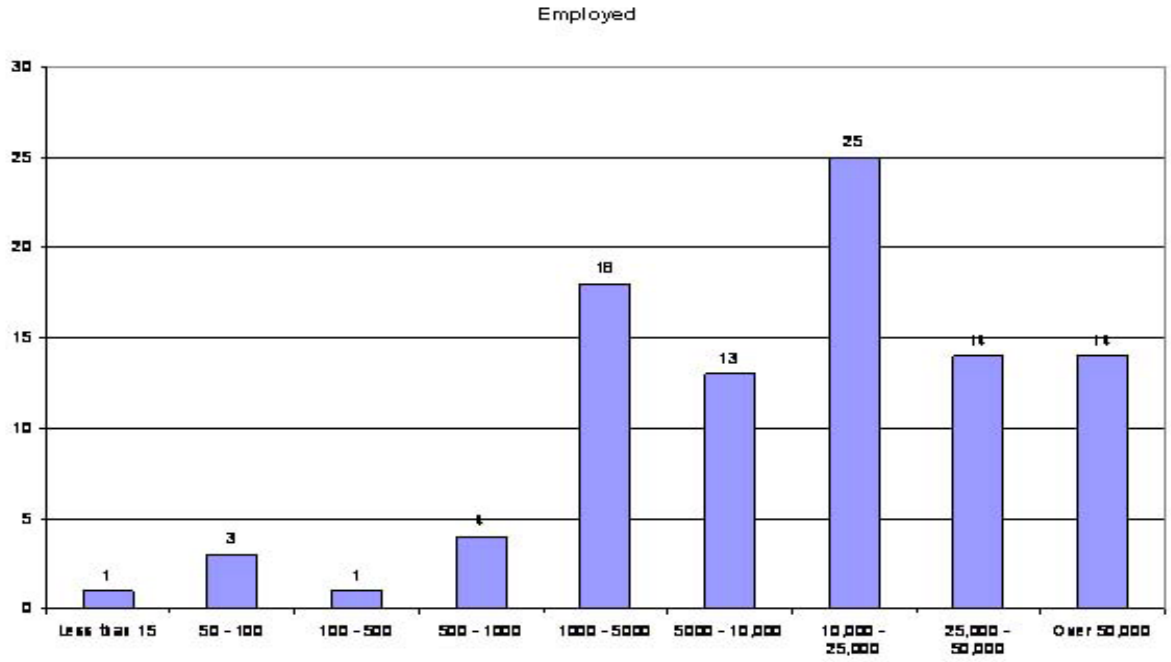
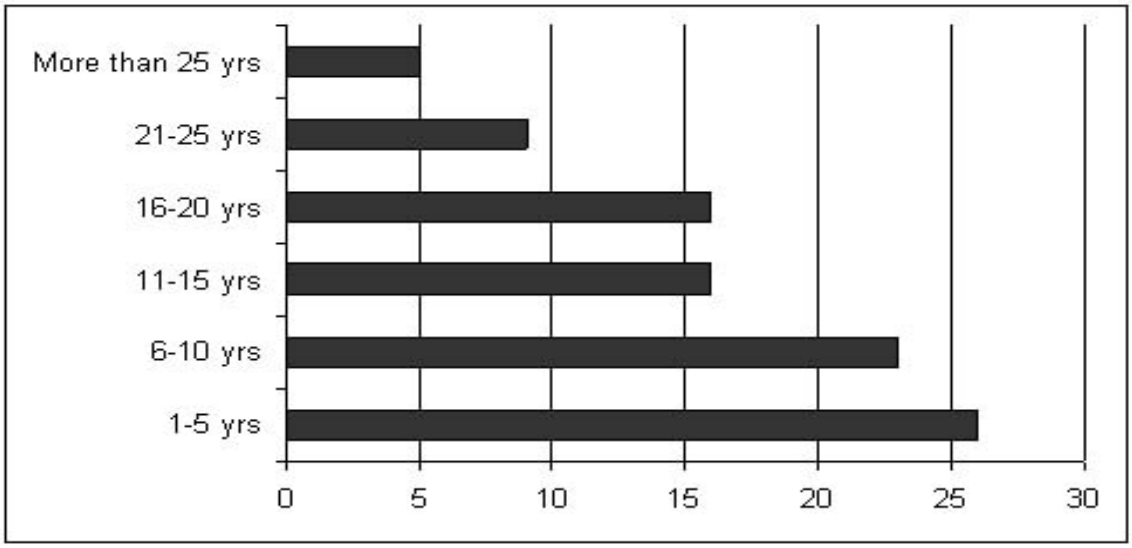


Figure 3: Years of Absence and Disability Management Experience of DMEC Respondents



The remainder of the results are displayed in Appendix E. As expected, all of the retention practices were rated to be considerably or very important, as consistently documented in the literature review. The 5 items rated as most important for retention depict a positive corporate culture characterized by trust, equity, openness and involvement, as found in previous research. Variations in ratings will be analyzed with reported program performance to explore their potential relationship. It does seem safe to say that the respondents have validated the items in the retention practices scale as capturing important dimensions of employer efforts to retain their workforce. Interestingly, flexibility in work arrangements and productivity demands, suggested in our case study reports and in the disability management literature as being key to continued employment when health conditions arise, were rated lowest among the factors rated as affecting general retention, with benefits and wage levels being rated highest.

Most respondents rated the effectiveness of their organizations' retention efforts to be at least moderately effective (nearly 90%) with the majority claiming to be very or highly effective (56%). Those at the extremes (roughly 10%) can be used to see if there are important differences between these groups in the practices rated most important.

Most of the absence and disability management practices were rated as important, with seven items rated clearly as very important. These top seven capture the central tenets of disability prevention and management that have been reported in the literature, including a clear and consistently applied RTW process, supervisor buy-in with RTW, an employee-oriented organizational culture, targeting upstream with safety and risk prevention, an integrated approach (nonoccupational and occupational causes, FMLA, etc.) to benefit and claim/case management, directly assisting supervisors at the job site to make accommodations, and providing very early intervention for all types of health and injury incidents.

There was less agreement about the relative importance of some other aspects, such as having a designated coordinator, professional training, mental health, EAP and wellness interventions, access to open positions, and integration with overall health and productivity. Yet many of these practices are mentioned by practice leaders and in the professional literature as cutting edge aspects for realizing the full potential of absence and disability management efforts in health, productivity and retention. Again, it will be important to see if there are differences in the ratings of these practices by respondents with high program performance ratings as compared to their peers who report their efforts to be less well developed.

Interestingly, respondents report retention of employees to be the most important factor motivating their absence and disability management efforts. This is an important finding, it suggests that employers may become motivated to adopt accommodating practices if they can be demonstrated to facilitate general employee retention; yet their mean rating of the overall contribution of their absence and disability management efforts to employee retention tend to be moderate. Do respondents who rate this contribution higher, also rate their programs to be more effective and endorse practice items differently; or is this a good estimate of the extent to which absence and disability management can contribute to overall retention, relative to other factors known to impact retention. The distribution is similar regarding the ratings of effectiveness of absence and disability management efforts in delaying or preventing exits due to health conditions and other impairments.

As expected, respondents rate their organizations as being farthest along in the development of their return-to-work efforts, followed by their efforts in preventing health and injury risks, and last in their efforts to improve and manage health conditions. These developments mirror the evolution of absence and disability management. Respondents are mixed in their opinions about the potential for external incentives to be effective for

employer efforts to prevent job exits from health conditions or disability. There is a generally positive range of expectations regarding the potential for absence and disability management practices to be helpful in the organization's efforts to hire and accommodate new employees who have disabilities.

In general, respondents reported quite favorable expectations and experiences in hiring employees with known disabilities; although there are mixed expectations about the benefit cost risk their hiring entails. It will be valuable to understand how practices and experiences in retention and in absence and disability management and organizational flexibility in placement of employees may be related to these more and less favorable ratings regarding employment of people with disabilities.

VI. Discussion and Conclusions

These practices appear to have important implications for improving the long term retention of people with disabilities; either by preventing or delaying their exit from employment through policies and practices that support and accommodate, or by encouraging their entry into employment due to the favorable and open practices they use in recruiting and retaining a diverse work force.

Questions to be addressed in the next phase of analysis will include the following:

1. Are practice ratings related to reported performance?
2. Do organizations that report high performance view different practices to be most (and least) important?
3. Is performance in ADM related to retention?
4. What factors distinguish organizations that have successfully achieved prevention, health management, and RTW efforts?
5. Do organizations that report more activity and higher expectations regarding hiring people with disabilities differ from other employers in their practices or performance in ADM and retention?
6. Are years of experience in absence and disability management associated with practice ratings and expectations regarding employees with disabilities?
7. Analyze the relationships among absence and disability management practices and general employee retention, diversity, and hiring practices.
8. Identify the factors associated with reported program effectiveness and implications for program development.
9. Identify potential public policy implications of effective employer practices for hiring and retaining people with disabilities in employment.
10. Consider the potential for public policy to encourage employer best practices.

Future discussion will explore the implications of the analytical findings for program development and for public policy. Particular focus will be given to the questions of how absence and disability management efforts support workforce retention in general, and how retention efforts for the general workforce can be optimized to include employees who have or are at risk for developing health conditions, injuries and disabilities. Finally, the use of public policy and incentives for preventing or delaying exits from employment will be considered.

References

Habeck, R., Yasuda, S., Rachel, C., and Kregel, J. (2008). Organizational Factors that Facilitate Successful Job Retention of Employees with Health Impairments and Disabilities. In P. Wehman, J. Kregel & V. Brooke, Virginia Commonwealth University Rehabilitation Research and Training Center on Workplace Supports and Job Retention : Research Outcomes Improving the Employment of People with Disabilities, Richmond, VA: The Virginia Commonwealth University Rehabilitation Research and Training on Workplace Supports and Job Retention.

Habeck, R. and Kregel, J. (2007) DMEC and VCU partner on employee retention study: Preliminary results are released. (Research Brief): Richmond, VA: The Virginia Commonwealth University Rehabilitation Research and Training on Workplace Supports and Job Retention. Summer, 2007.

McMahon, B.T., Danczyk-Hawley,C.E., Reid, C., Flynn, D., Habeck, R., Kregel, J., and Owens, P. (2000). The progression of disability benefits. Journal of Vocational Rehabilitation 15: 1-16.

DMEC and VCU Partner on Employee Rentetion Study: Preliminary Results are Released

Appendix A

Research Brief
Summer, 2007

DMEC and VCU Partner on Employee Retention Study:

Preliminary Results are Released

DMEC is collaborating with the Rehabilitation Research and Training Center at Virginia Commonwealth University (VCU) on a study that will identify the activities currently used by progressive employers to promote the retention and productivity of their workforce, and to explore the ways in which these activities can be optimized to include employees who have or are at risk for developing health conditions, injuries and disabilities. VCU is funded by the The National Institute on Disability and Rehabilitation Research (NIDRR) of the U.S. Department of Education to examine the strategies and supports that are most effective for assisting people who have disabilities to maintain employment and advance their careers.

This fall DMEC will partner with VCU to conduct a survey of its members to identify retention practices and explore their relationship with DM efforts. To develop the most relevant survey possible, the VCU study team conducted a focus group with DMEC board members in May 2007 that examined current practices related to retention and disability management. The major findings from this conversation are summarized below.

July, 2007

Virginia Commonwealth University Rehabilitation Research & Training Center on Workplace Supports & Job Retention

Current Challenges in Human Resource Management

The focus group members identified a number of current challenges in HR management. A central issue is the constant pressure to "do more with less." Many organizations increasingly need workers to have broader skills and to broad array of job functions due to reductions in workforce size from downsizing or work restructuring efforts. Yet, it is very difficult to attract, train, and retain enough qualified new workers who have the necessary level of skill and productivity required to be competitive. Increased productivity demands compete with the HR strategies needed to attract and retain workers, especially supporting the work-life balance that meets the high expectations of the new generation. The large proportion of skilled, experienced and productive workers who are reaching retirement further compounds this issue.

Providing the benefits and supports needed to attract and retain valuable workers while balancing health care costs and reducing risks for an aging workforce is viewed as a major challenge. Also, the current business climate negatively affects health, by increasing the prevalence of stress-related health problems (e.g., depression, GI symptoms). In turn, the vital need for health insurance keeps many people working longer to older ages, even when they experience declining health and functional capacity. This results in a greater need for supports to accommodate older workers.

Strategies for Workforce Retention

Focus group participants identified a broad range of strategies and considerations for the successful retention of employees. Pay that is market equitable and competitive for the job type is viewed as important for attracting and retaining employees at all levels, but the group members emphasized that money alone is not sufficient to retain valued workers.

Providing tools and opportunities for career development and advancement is valuable to employees at all stages. To improve retention, employees' needs should be assessed, and training offered both for those who want to develop themselves and for those who wish to advance within the organization. Successful programs have linked tuition assistance to a specified duration of employment upon completion of coursework. Vesting earlier for retirement is used as a strategy to attract younger skilled workers who plan to stay for a shorter duration and advance their careers through mobility.

Effective leadership and guidance can contribute to retention efforts. Group members identified strategies such as a formal mentoring program for new hires; a leadership rounding process to improve the quality of supervision, and a progressive performance management approach that rewards good performance and addresses poor performance as key elements of overall effects to increase employee satisfaction. Employee surveys are viewed as a valuable tool for revealing new ways to "re-recruit" employees by addressing their particular needs, such as increased flexibility in work arrangements (e.g., schedule, hours, telecommuting, job sharing, allowing time for community service, etc.).

Strengthening successful retention practices can avoid or reduce many unmeasured costs of replacement. Obvious costs incurred by turnover include direct expenses for recruitment efforts, relocation costs, training costs, and increased salaries to compete for new talent. Indirect costs result from lower productivity during the time it takes new employees to become trained and assimilated to the workplace culture, to rebuild team strength and synergy, and to regain efficiency lost from the departure of experienced employees.

Current Challenges and Opportunities in Disability Management

Focus group participants also described some of the challenges and opportunities frequently faced by DM staff. Many companies do not yet see DM functions as part of their retention efforts or consider the contribution of DM activities in evaluating retention outcomes. Hiring staff typically do not recognize the value of assisting DM staff to accomplish repositioning or job transitions (temporary and permanent placements into suitable vacant positions in the firm) when workers are unable to be accommodated in their own jobs or departments.

The number of employees who need modified or restricted duties is large and increasing with an aging workforce. There is significant need for innovation in creating modified work options for employees with restrictions, especially in workplaces where many jobs involve essential functions that are physically demanding. Although many organizations have developed DM organizational structures, processes and policies, there is often a gap in their capacity to deliver these services on the front lines. Supervisors want and need more direct assistance in carrying out the DM process and in working out accommodations for RTW.

DM is not yet generally recognized as part of a comprehensive absence prevention program. Within the organization, DM needs to be linked with health, safety and other prevention efforts, in order to fully monitor and analyze incidence, trends, and outcomes and develop proactive solutions. Shifting from a reactive (RTW only) to a proactive (prevention and early intervention) role will improve DM programs and outcomes. Focus group participants felt that few companies are dealing with occupational and nonoccupational absence claims together in an integrated manner that better manages time away from work to improve health care utilization and leads to more timely return to work from all causes.

Strategies for Delivering and Evaluating Disability Management Services

Group members described a variety of strategies and solutions that could improve the quality of DM programs. Positive and effective contact with each employee who is absent from work by an experienced person representing the company is still the foundational element for successful RTW. Early contacts should include written communication that provides detailed information about the DM process and options available, establishes a framework of care, and communicates about resources available to help the employee.

The most effective DM programs fit the culture of the organization. They establish an infrastructure for DM within the company that clearly describes the policies, processes, roles, phases and procedures used in DM/RTW, including an interactive process to develop accommodations and a review committee to address complexities. They communicate with labor organizations in the DM effort and involve the EAP in the DM process and program.

Companies with effective programs hire people in DM roles who have the necessary attitudes, skills, and professional certification (e.g., CPDM). They use case managers who can “think outside the box” to develop creative solutions that are effective with all types of employees. Supervisors should also be trained to effectively participate in the accommodation and RTW processes, with DM specialists directly assisting them in designing accommodations.

Focus group participants identified a number of desirable outcomes that result from successful DM programs, including reduced payroll costs for time off for illness, for injury, and for disability measured as a percent of payroll; lower total operating costs for the organization; and reduced total claims man

agement expenses. Preventive outcomes include maintaining productivity, lowering organizational risks, and fewer legal claims. Qualitative outcomes include the organizational understanding and valuing the potential contribution of employees with work limitations, successful transitions into new positions when RTW to the previous job is not possible, and perceptions of the DM role as a valuable resource to employees and managers.

Indicators of program performance need to be standardized (e.g., costs as a percent of total payroll; incidence rates as a percent of total FTEs) and include frequencies of claims, benefits use and costs; days off work and restricted days; RTW rate; litigated claims or grievances; and savings from prevention of losses and wellness investments.

Hiring New Employees with Disabilities

In many organizations, recruitment focuses solely on qualifications and does not consider disability. Focus group members believe organizations routinely hire people with disabilities if they are qualified for the job. When accommodations are minor, they are typically provided if the business is able, and few accommodation needs rise to the level of consideration under ADA.

Disability is not typically recognized as a specific group in diversity efforts. In the current economic climate and labor market, employers are trying to retain and develop their existing employees and keep them healthy and productive, and devote little time to recruiting employees from special groups. DM is helping internal retention through new placement of individuals who are unable to RTW to their own jobs due to health or disability limitations. Data points need to be identified that demonstrate the value to the organization of retentions that are accomplished by DM.

DM professionals do not view hiring people with disabilities as a benefit cost risk. They do believe that helping employers build their infrastructure to successfully manage their own employees who develop health issues or become disabled may make employers less fearful and more willing to hire people with known disability. Although focus group participants see DM bearing significantly on retention, currently they see no impact on hiring.

Final Phase: DMEC Survey

Disability management appears to have great relevance to preventing the exit of employees due to health conditions, aging, and other factors associated with disability. The coming survey will seek your input in documenting these practices and demonstrating the relationship between disability management and the retention efforts of employers. The potential application of these strategies to diversify efforts in recruiting and hiring qualified people with disabilities will also be explored.

We need your help in order to make this survey successful. Please watch your email box for an invitation to participate in this survey in the fall of 2007. Your time to complete the survey will insure that we obtain a large and diverse sample of employers. Final study results will be released to DMEC members when completed.

Virginia Commonwealth University, School of Education and Department of Physical Medicine and Rehabilitation is an equal opportunity/affirmative action institution providing access to education and employment without regard to age, race, color, national origin, gender, religion, sexual orientation, veteran's status, political affiliation, or disability. If special accommodations are needed, please contact Vicki Brooke at (804) 828-1851 VOICE or (804) 828-2494 TTY. This activity is funded through a grant (#H133B040011) with the U.S. Dept. of Education, National Institute on Disability and Rehabilitation Research (NIDRR).

For more information contact:

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Appendix B

FINAL SURVEY INSTRUMENT

DMEC and VCU -- Workforce Retention, Absence and Disability Management Study

DMEC-VCU
WORKFORCE RETENTION, ABSENCE AND DISABILITY MANAGEMENT STUDY

Thank you for participating in this research. The purpose of the study is to document (1) the activities currently used by employer organizations to promote the general retention of their workforce, (2) the activities used specifically for Absence and Disability Management (A&DM) efforts, and (3) how Absence and Disability Management efforts support workforce retention in general. In this study, Absence and Disability Management efforts refer to activities to prevent health risk and injury, manage health conditions, restore function and accommodate limitations to sustain productive employment.

The survey takes approximately 20 minutes to complete. The survey is organized into the three topic areas. The first section asks you to share your opinions on the contribution of various retention practices. The second section asks you to focus specifically on the contribution of various Absence and Disability Management practices. The third section explores the ways in which the previous two topics may be potentially related.

Please select the responses that reflect the importance of these activities in your experience. Keep in mind that there are no incorrect answers, and none of your responses will be associated in any way with your name or that of your organization.

TOPIC I - Retention Practices

In this section, we would like your opinions about the importance of practices your organization may be using to promote overall employee retention, and the factors that motivate these practices.

Importance of Specific Retention Practices

Please use the five-point scale to rate how important you think each of the following practices is in contributing to successful retention, based on your experience. If the statement does not apply to your experience, select N/A.

Not important at all — Very important

1 2 3 4 5

1. Compensation is set fairly, in accordance with responsibility, performance and market competitiveness	1	2	3	4	5	N/A
2. The organization has a compelling mission and clear vision	1	2	3	4	5	N/A
3. Employees are engaged with the organization and their jobs	1	2	3	4	5	N/A
4. Managers are seen as credible, employees are respected, and fair and equitable treatment is expected	1	2	3	4	5	N/A
5. Managers recognize the impact of employee job satisfaction on quality of performance, productivity, and health	1	2	3	4	5	N/A
6. Leaders are open and communicate honestly and effectively	1	2	3	4	5	N/A
7. Employees are made aware of how their job and performance fit into the organization's mission	1	2	3	4	5	N/A
8. Employees are listened to, their ideas are sought out, and they are involved in decisions that affect how they get their work done	1	2	3	4	5	N/A
9. Employee surveys are conducted regularly (e.g., annually) and the results are used to target change	1	2	3	4	5	N/A

10. Employees are made aware of all the benefits and services provided and available	1	2	3	4	5	N/A
11. Employee benefit packages offer choice, flexibility, and customization	1	2	3	4	5	N/A
12. Mentoring and support is available for new employees	1	2	3	4	5	N/A
13. Leadership and supervisor development is available	1	2	3	4	5	N/A
14. Tools and opportunities are provided for career advancement and personal development	1	2	3	4	5	N/A
15. Managers use a flexible and supportive approach to work arrangements (e.g., working from home)	1	2	3	4	5	N/A
16. Longevity is rewarded	1	2	3	4	5	N/A
17. Physical work environment is safe and attractive	1	2	3	4	5	N/A
18. Other:	1	2	3	4	5	N/A

Implementation of Retention Practices

19. Please rank the following factors from 1 (least significant) to 5 (most significant) based on how much you think each factor affects employee retention in your organization:

Not a factor Very significant factor

1 2 3 4 5

(a)	Wage levels	1	2	3	4	5
(b)	Benefits	1	2	3	4	5
(c)	Company culture	1	2	3	4	5
(d)	Productivity demands	1	2	3	4	5
(e)	Flexibility in work arrangements	1	2	3	4	5

20. How effective would you say your organization's efforts are at this point in retaining valued employees?

Very ineffective Very effective

1 2 3 4 5

TOPIC II - Absence and Disability Management Practices

In this section, we are interested in your opinions about the importance of specific Absence and Disability Management practices your organization may be using to sustain the health and continued employment of workers who experience potentially job-threatening health conditions, and the factors that motivate these practices.

Importance of Specific Absence and Disability Management (A&DM) Practices

Please use the five-point scale to rate how important you think each of the following Absence and Disability Management practices is in contributing to successful retention in your organization. If the practice does not apply to your organization, select N/A.

Not important at all Very important

1 2 3 4 5

1. Achieving ownership (buy-in) with supervisors about the value of RTW (Return to Work)	1	2	3	4	5	N/A
2. Using an integrated approach to benefits administration and claims/case management	1	2	3	4	5	N/A
3. Targeting wellness interventions to various worker group needs, including aging workers	1	2	3	4	5	N/A
4. Coordinating with safety and risk prevention to target improvements upstream	1	2	3	4	5	N/A
5. Incentives for health and safety behaviors (e.g., rewards or premium reduction)	1	2	3	4	5	N/A
6. Disincentives for health risk behaviors (e.g., increased health premium)	1	2	3	4	5	N/A
7. Training supervisors on the A&DM/RTW process, how to make accommodations and carry out their role	1	2	3	4	5	N/A
8. Having a A&DM/RTW coordinator on site	1	2	3	4	5	N/A
9. Having A&DM staff with professional training in A&DM and related fields (e.g., CDMP, occupational health nurse)	1	2	3	4	5	N/A
10. Having sufficient work tasks or jobs identified and available for transitional and modified duty placements when needed	1	2	3	4	5	N/A
11. Providing workplace flexibility to develop creative and effective accommodations	1	2	3	4	5	N/A
12. Providing prioritized hiring of qualified employees into open positions when they are unable to return to their own job/department due to limitations	1	2	3	4	5	N/A
13. Providing direct assistance to supervisors at the job site, when needed, to work out accommodations and supports for employees returning to work or attempting to stay at work with a physical or mental health impairment	1	2	3	4	5	N/A
14. Having active involvement of an EAP in addressing needs and working out solutions for SAW/RTW (Stay at Work/Return to Work)	1	2	3	4	5	N/A
15. Having the capacity to address and accommodate mental health issues	1	2	3	4	5	N/A
16. Providing very early intervention for nonoccupational and occupational cases	1	2	3	4	5	N/A
17. Quantifying and managing all absences	1	2	3	4	5	N/A
18. Using a data system for case identification and monitoring	1	2	3	4	5	N/A
19. Connecting A&DM/RTW with overall health, productivity and absence management (structural linkage and reporting relationships)	1	2	3	4	5	N/A
20. Having consistently applied guidelines and procedures for the return to work process	1	2	3	4	5	N/A
21. Having cooperation and assistance from HR staffing personnel in placing workers who cannot go back to own job in open positions	1	2	3	4	5	N/A
22. Having a company culture that is employee-oriented	1	2	3	4	5	N/A
23. Other:	1	2	3	4	5	N/A

Implementation of Absence and Disability Management Practices

24. Please rank the following factors from 1 (most important) to 5 (least important) based on how important you think they are in motivating your organization's Absence and Disability Management efforts.

___ Controlling cost of employee benefits
___ Preventing absence
___ Maintaining health and productivity
___ Retaining employees in the organization
___ Legal compliance

25. How far along do you think your organization is in each of the following components of a comprehensive approach to Absence and Disability Management?

	Beginning Stages				Successfully Achieved
	1	2	3	4	5
(a) Preventing health/injury risks and disability from occurring	1	2	3	4	5
(b) Improving health and managing health conditions	1	2	3	4	5
(c) Resolving disability and bringing back to work	1	2	3	4	5

26. Please provide any comments regarding your organization's Absence and Disability Management efforts here:

_____

_____

_____

TOPIC III - Exploring Potential Connections between Absence & Disability Management Efforts and General Recruitment/Retention Efforts

In this section, we are interested in your opinions about the potential relationship between your organization's efforts in Absence and Disability Management and general recruitment and retention.

1. How effective do you think your organization's overall Absence and Disability Management effort is in delaying or preventing exits of employees from employment due to health conditions and other impairments (related to aging, injury, mental health, etc.)?

___ Not at all
___ Slightly
___ Moderately
___ Very
___ Don't know

2. Overall, how much do you think your organization's Absence and Disability Management efforts contribute to overall employee retention?

___ Not at all
___ Slightly
___ Moderately
___ Greatly
___ Don't know

3. To what extent do you think organizational leaders and HR recognize this contribution?

___ Not at all
___ Slightly
___ Moderately
___ Greatly
___ Don't know

4. To what extent do you think the general appeal of your organization, as an employer, impacts the incidence and outcomes of disability claims?

___ Not at all
___ Slightly
___ Moderately
___ Very much
___ Don't know

5. To what extent is the organization able to place employees who cannot be accommodated in their own jobs into another position within the organization?

___ Rarely
___ Sometimes
___ Usually
___ Don't know

6. To what extent do you think it would be effective for employers to be incentivized externally (e.g., tax credit) for successfully preventing job exits due to health conditions or disability?

___ Not at all
___ Slightly
___ Moderately
___ Very much
___ Don't know

7. To what extent is your organization involved in diversity efforts?

___ Not at all
___ Slightly
___ Moderately
___ Very much
___ Don't know

8. To what extent do your organization's diversity efforts include people with disabilities?

___ Not at all
___ Slightly
___ Moderately
___ Very much
___ Don't know

9. To what extent do you see people with disabilities as a viable source of labor for your organization?

___ Not at all
___ Slightly
___ Moderately
___ Very much
___ Don't know

10. To what extent does your organization hire people with known disabilities?

___ Never
___ Rarely
___ Sometimes
___ Frequently
___ Don't know

11. To what extent do you see hiring people with known disabilities as a benefit cost risk?

___ Not at all
___ Slightly
___ Moderately
___ Very much
___ Don't know

12. To what extent do you think Absence and Disability Management practices could be helpful in hiring and accommodating new employees who have disabilities?

___ Not at all
___ Slightly
___ Moderately
___ Very much
___ Don't know

13. If you have additional comments regarding your organization's Absence and Disability Management efforts and how they may relate to recruitment and retention efforts, please describe here:

_____

_____

_____

IV. Demographic Information

For demographic purposes, we would like to know a little more about you and your organization. Please remember that all responses will remain confidential and identifying information will be protected.

A. Respondent Information

1. What is your job title? _____

2. How many years have you been involved in absence and disability management work? _____ years

B. Organizational Information

1. Which best describes your organization's industry?

___ Healthcare
___ Education
___ Other Services
___ Finance, Insurance, And Real Estate
___ Manufacturing
___ Transportation, Communications, Electric, Gas, and Sanitary Services
___ Retail Trade
___ Wholesale Trade
___ Public Administration
___ Agriculture, Forestry, And Fishing
___ Construction
___ Mining
___ Other _____

2. How many people are employed by your organization?

___ Less than 15
___ 15 – 50
___ 50 – 100
___ 100 – 500
___ 500 – 1000
___ 1000 – 5000
___ 5000 – 10,000
___ 10,000 – 25,000
___ 25,000 – 50,000
___ Over 50,000

3. In how many locations does your organization operate?

___ 1
___ 2 - 10
___ 10 - 50
___ 50 - 100
___ Over 100

4. Where are your organization's operations located?

___ Locally
___ Within a single state
___ Regionally
___ Nationally
___ Internationally

Thank you very much for being a part of our study. We greatly appreciate your time and participation in this survey, and look forward to sharing the results with you very soon.

Appendix C

Letter to Participants

DISABILITY MANAGEMENT EMPLOYER COALITION

January 9, 2008

Dear Members,

As announced in our newsletter, DMEC is collaborating with the Rehabilitation Research and Training Center at Virginia Commonwealth University (VCU) in a member survey. The study is funded by the National Institute on Disability and Rehabilitation Research (NIDRR) of the U.S. Department of Education.

This joint project is entitled **The Workforce Retention, Absence and Disability Management Study**. The survey will identify employee retention and absence and disability management practices currently used by progressive employers. The study will explore how absence and disability management practices can impact retention, and how retention efforts for the general workforce can be optimized to include employees who have or are at risk for developing health conditions, injuries and disabilities.

You are invited to take part in this important project, and your help is needed to make the study successful. Please watch your email over the next few days for the survey announcement. The email message will include the link to the survey and provide contact information for any questions or concerns you may have.

The study findings can benefit all of us, in documenting how our efforts can add value and contribute to organizational goals of retaining skilled employees, supporting the health and productivity of all workers, and controlling benefit costs. Our Board participated in a focus group with the researchers last spring to help them develop the best possible survey that reflects current issues and needs for enhancing our absence and disability management efforts.

We expect participants to benefit personally from "self-auditing" their programs as they reply to these questions developed from best practices. All participants will receive a briefing paper soon after survey administration, listing the top rated practices that can be used as benchmarks for their own program development efforts. The findings will also be reported later in our newsletter and discussed at the DMEC conference in July.

Please be assured that no identifying information will be collected about your name or your company's name. Your participation is totally voluntary. There is no risk anticipated with participation. The data security methods being used have been approved for protecting the confidentiality of participants' responses. VCU will not share identifying information that can be linked to responses. Only the results of the survey as a whole will be shared.

We hope you will be a part of this tremendous opportunity and we thank you very much!

Cordially,

Marcia Carruthers
President and CEO
Disability Management Employer Coalition

Rochelle V. Habeck, Ph.D.
Project Director
VCU/RRTC

E-mail to Participants

Appendix D

Dear DMEC Colleague,

At this time we invite you to participate in the DMEC-VCU Workforce Retention, Absence and Disability Management Study, which was fully described in our previous correspondence. You may now click the following link to access the survey:

http://www.worksupport.com/dmec/index.cfm

The survey must be completed in one sitting. It should take you 20 minutes or less. Please complete the survey by Wednesday, January 23rd.

Your participation is totally voluntary, and no identifying information will be collected about your name or your company's name. If you have questions or concerns about any aspect of this survey, or about the study as a whole, please feel free to contact me by email at Habeck@chartermi.net or by phone at 269-373-1239.

Thank you very much for your participation! We hope you find the survey to be useful to your work. Preliminary results will be shared with you soon after the survey is closed.

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Appendix E

Research Results -- Tables and Figures

Table 1: Rank Order of Sum Ratings of Importance of General Retention Practices

General Retention Practice	Sum
Question 2 The organization has a compelling mission and clear vision	408
Question 1 Compensation is set fairly, in accordance with responsibility, performance and market competitiveness	404
Question 3 Employees are engaged with the organization and their jobs	401
Question 4 Managers are seen as credible, employees are respected, and fair and equitable treatment is expected	400
Question 10 Employees are made aware of all the benefits and services provided and available	399
Question 6 Leaders are open and communicate honestly and effectively	391
Question 5 Managers recognize the impact of employee job satisfaction on quality of performance, productivity, and health	389
Question 17 Physical work environment is safe and attractive	388
Question 13 Leadership and supervisor development is available	383
Question 7 Employees are made aware of how their job and performance fit into the organizations mission	377
Question 8 Employees are listened to, their ideas are sought out, and they are involved in decisions etc	375
Question 14 Tools and opportunities are provided for career advancement and personal development	369
Question 11 Employee benefit packages offer choice, flexibility, and customization	366
Question 12 Mentoring and support is available for new employees	349
Question 16 Longevity is rewarded	346
Question 9 Employee surveys are conducted regularly (e.g., annually) and the results are used to target change	338
Question 15 Managers use a flexible and supportive approach to work arrangements (e.g., working from home)	335

Table 2: Rank Order of Sum Ratings of Significance of Factors Affecting Retention

Factors Affecting Retention	SUM
Question 19b Benefits	396
Question 19a Wage levels	395
Question 19c Company culture	343
Question 19e Flexibility in work arrangements	331
Question 19d Productivity demands	322

Figure 4: Distribution of Effectiveness Ratings of Retention Efforts

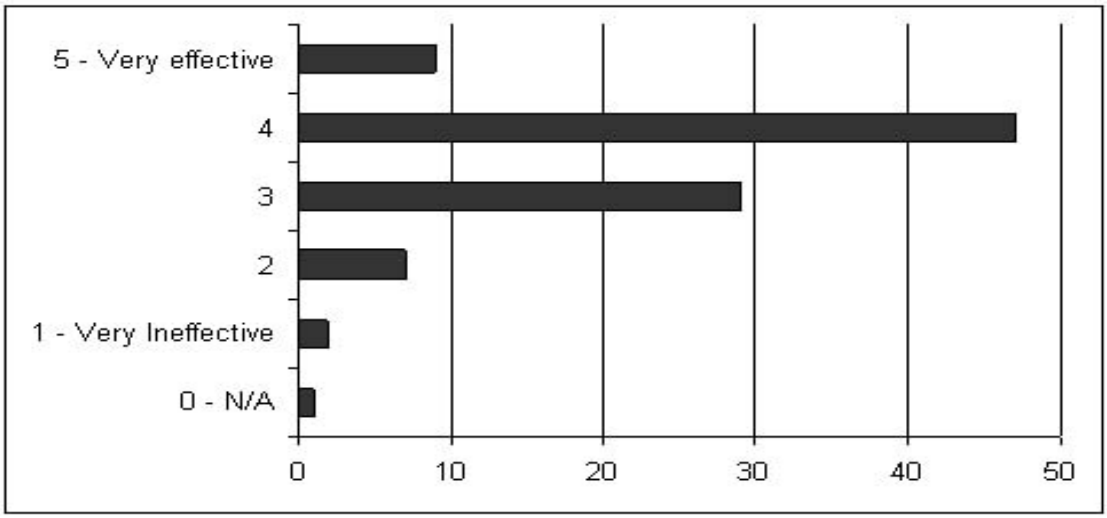


Table 3: Rank Order of Sum Ratings of Importance of Absence and Disability Management Practices to Overall Retention

Factors Affecting Retention	**SUM**
Question 20 Having consistently applied guidelines and procedures for the return to work process	400
Question 1 Achieving ownership (buy-in) with supervisors about the value of RTW (RTW)	395
Question 22 Having a company culture that is employee-oriented	395
Question 4 Coordinating with safety and risk prevention to target improvements upstream	389
Question 2 Using an integrated approach to benefits administration and claims/case management	386
Question 13 Providing direct assistance to supervisors at the job site, when needed, to work out accommodations etc	385
Question 16 Providing very early intervention for nonoccupational and occupational cases	381
Question 11 Providing workplace flexibility to develop creative and effective accommodations	362
Question 7 Training supervisors on the A&DM/RTW process, how to make accommodations and carry out their role	361
Question 21 Having cooperation and assistance from HR staffing personnel in placing workers etc	361
Question 17 Quantifying and managing all absences	358
Question 10 Having sufficient work tasks or jobs identified and available for transitional and etc	355
Question 3 Targeting wellness interventions to various worker group needs, including aging workers	351
Question 14 Having active involvement of an EAP in addressing needs and working out solutions for SAW/RTW etc	351
Question 15 Having the capacity to address and accommodate mental health issues	341
Question 18 Using a data system for case identification and monitoring	337
Question 12 Providing prioritized hiring of qualified employees into open positions when they are unable etc	330
Question 19 Connecting A&DM/RTW with overall health, productivity and absence management	327
Question 9 Having A&DM staff with professional training in A&DM and related fields	322
Question 8 Having a A&DM/RTW coordinator on site	314
Question 5 Incentives for health and safety behaviors	307
Question 6 Disincentives for health risk behaviors	241

Table 4: Rank Order of Sum Ratings of Importance of Factors Motivating Absence and Disability Management Efforts

Factors Motivating A&DM Practices	SUM
Question 24d Retaining employees in the organization	320
Question 24e Legal compliance	294
Question 24a Controlling cost of employee benefits	281
Question 24b Preventing absence	275
Question 24c Maintaining health and productivity	255

Table 5: Distribution of Sum Ratings of Progress Toward 3 Components of a Comprehensive Approach to Absence and Disability Management

Components of A&DM	SUM
Question 25c Resolving disability and bringing back to work	348
Question 25a Preventing health/injury risks and disability from occurring	309
Question 25b Improving health and managing health conditions	294

Figure 5: Distribution of Effectiveness Ratings of Absence and Disability Management Efforts in Delaying or Preventing Exits Due to Health Conditions and Other Impairments (related to aging, injury, mental health, etc.)

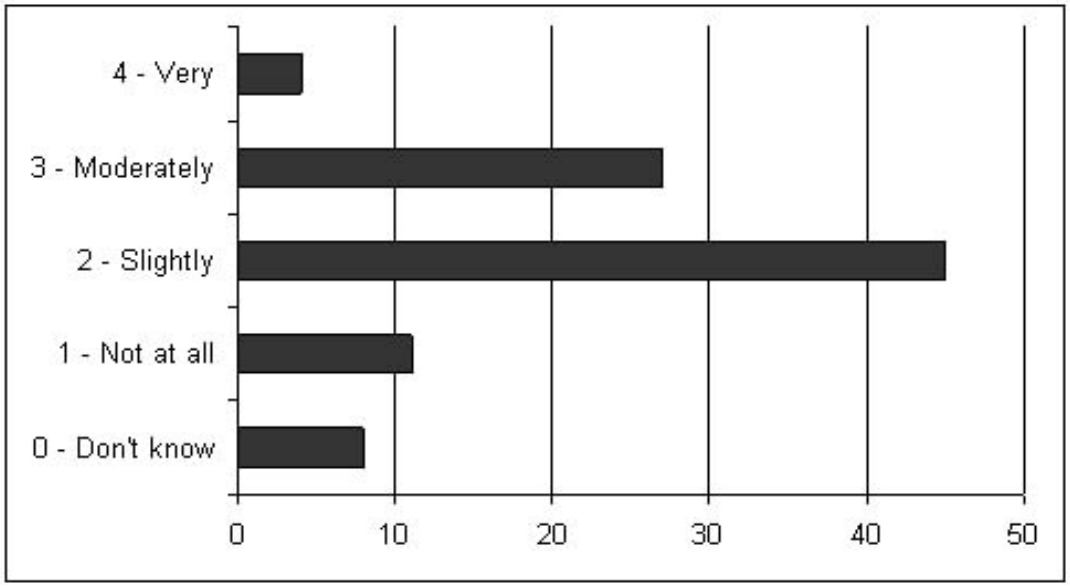


Figure 6: Distribution of Ratings of Absence and Disability Management Contribution to Overall Employee Retention

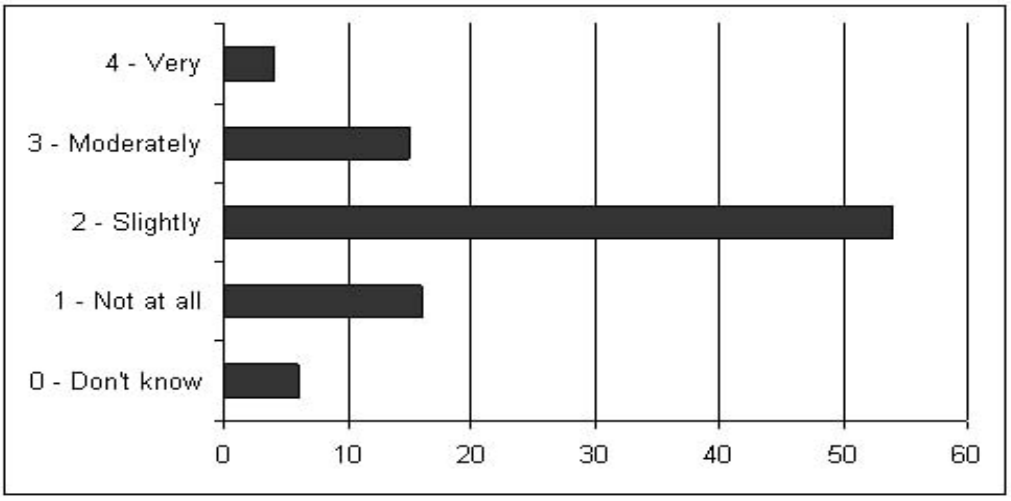


Figure 7: Distribution of Ratings of Leadership's Recognition of Absence and Disability Management's Contribution to Retention

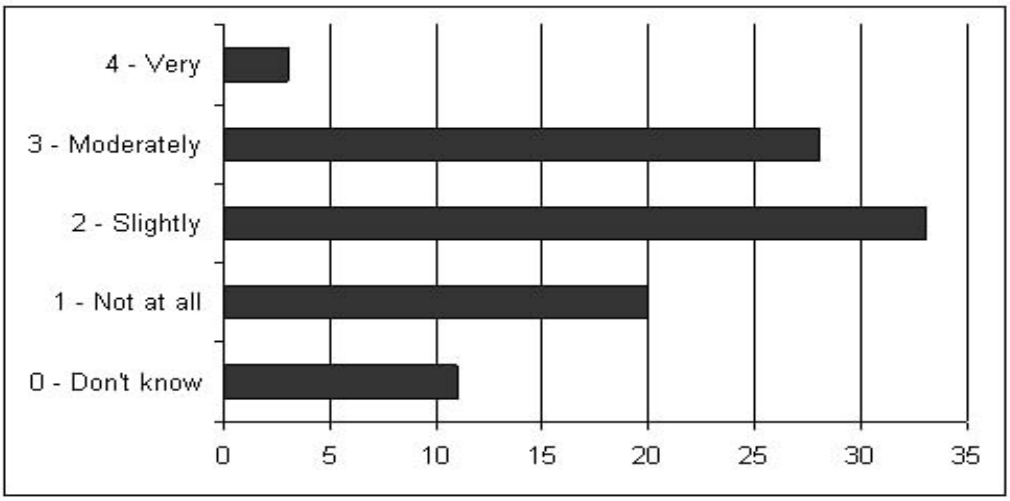


Figure 8: Distribution of Ratings of Organizations' Ability to Place Employees Who Cannot be Accommodated in Own Jobs into Another Position

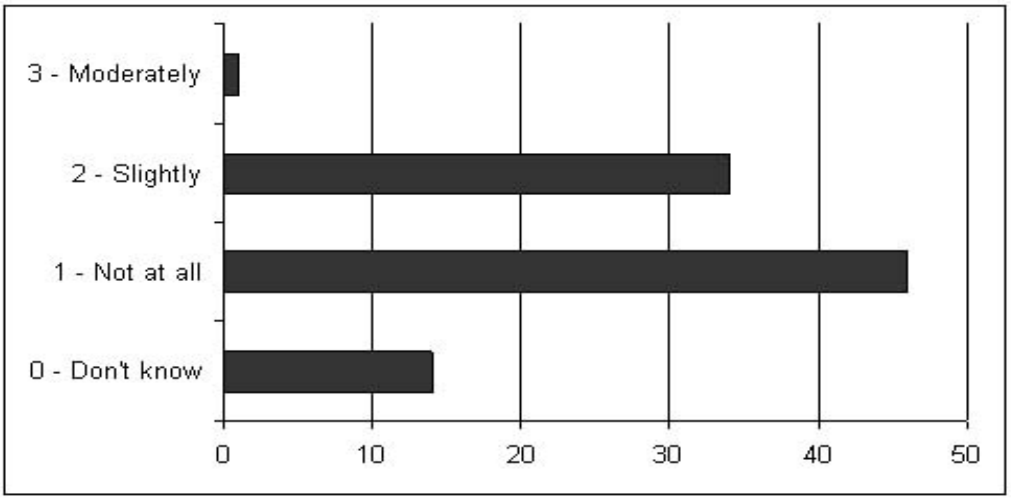


Figure 9: Distribution of Opinions Regarding Effectiveness of External Incentives for Preventing Job exits Due to Health Conditions or Disability

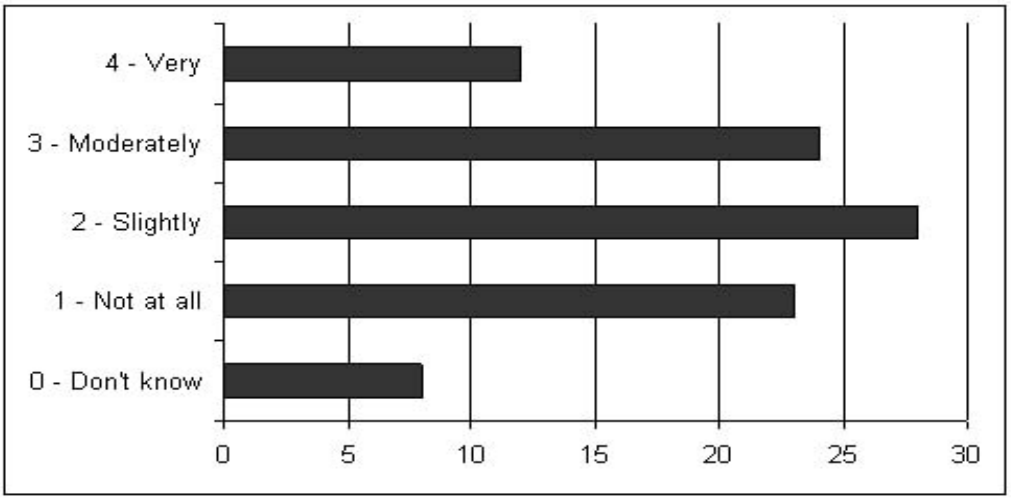


Figure 10: Distribution of Ratings of Involvement in Diversity Efforts

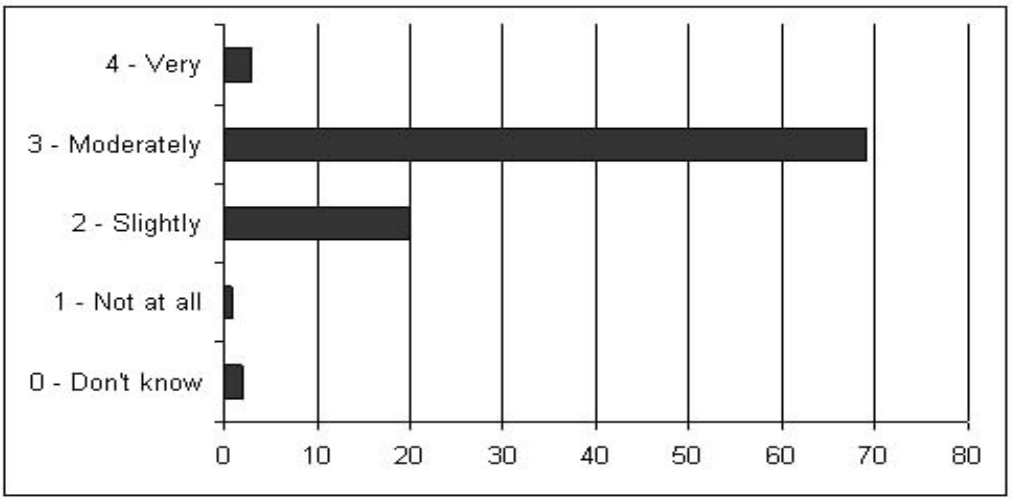


Figure 11: Distribution of Ratings of Inclusion of Disability in Diversity Efforts

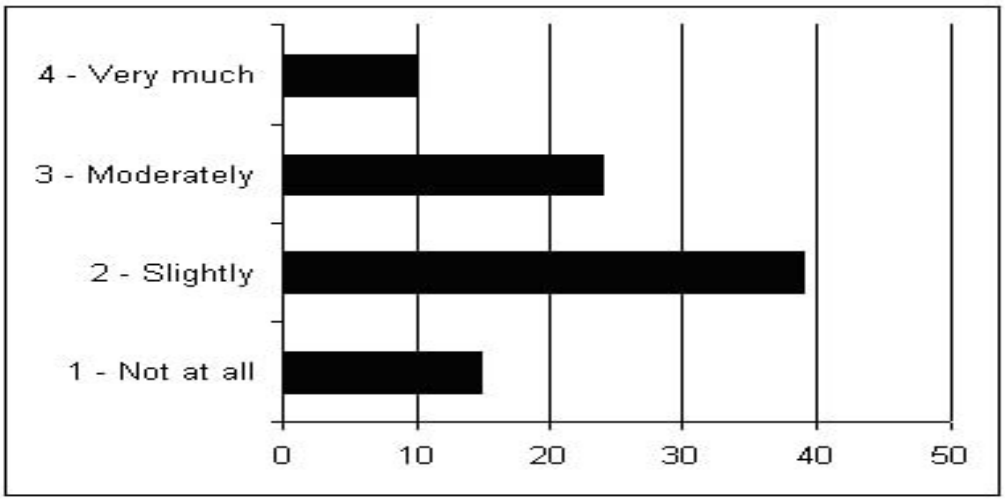


Figure 12: Distribution of Ratings of People with Disability as Viable Source of Labor

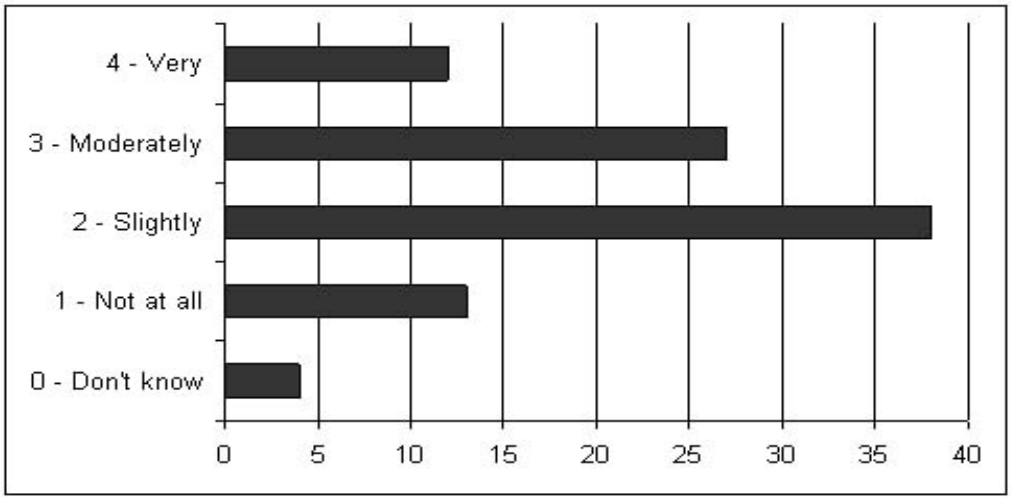


Figure 13: Distribution of Extent of Hiring of People with Known Disabilities

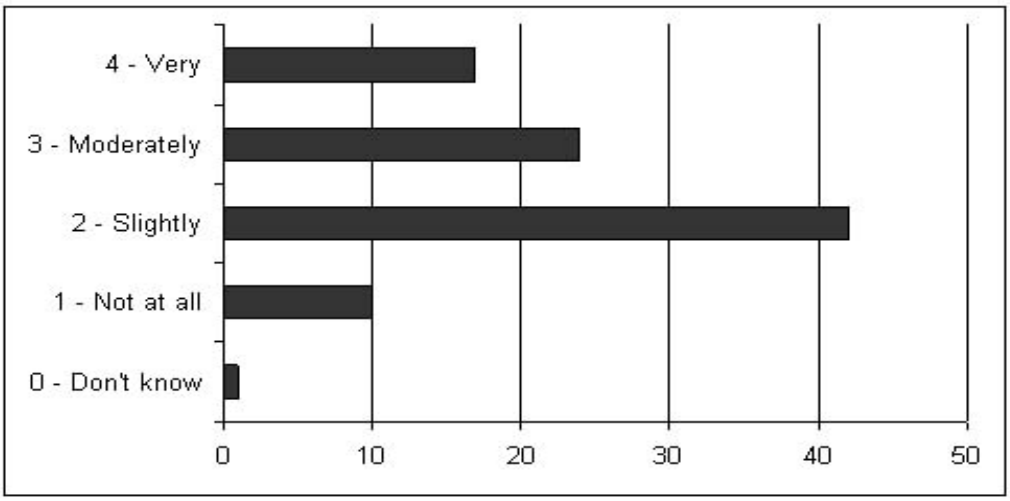


Figure 14: Distribution of Ratings of Hiring People with Known Disabilities as a Benefit Cost Risk

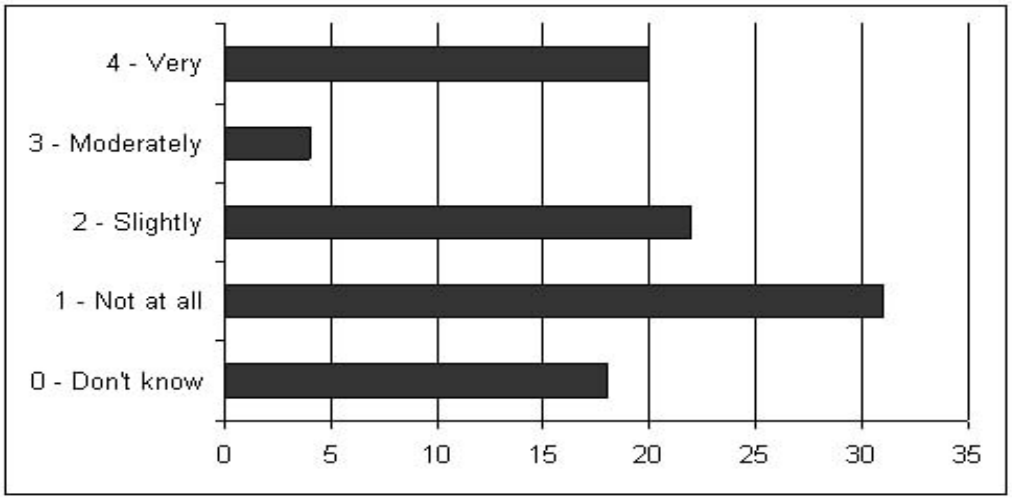
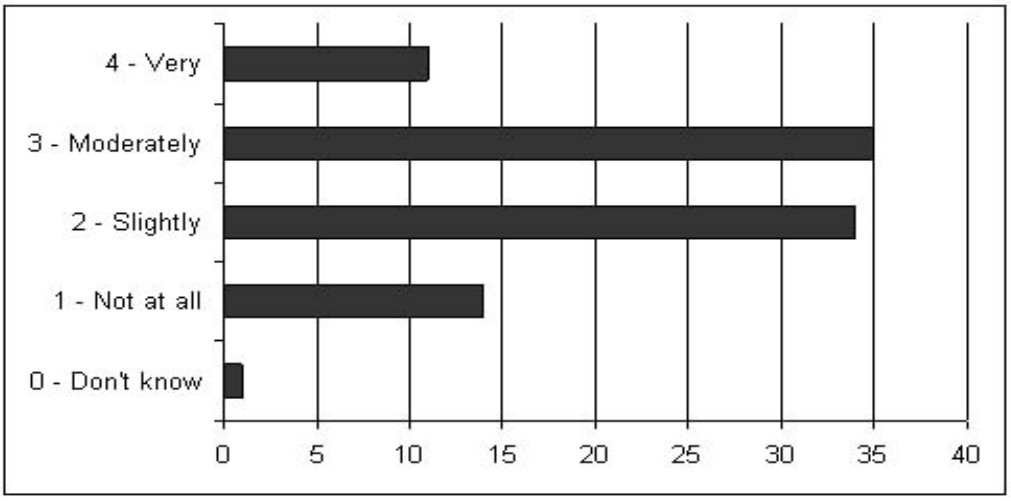


Figure 15: Distribution of Ratings of Extent that Absence and Disability Management Practices could be Helpful in Hiring and Accommodating New Employees who have Disabilities



Evaluation of the Benefits Planning, Assistance and Outreach Program: Employment Supports for Social Security Beneficiaries with Disabilities

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Abstract

Individuals with disabilities remain underemployed, despite the fact that many are willing and able to work. Perceived likelihood of losing Social Security disability benefits often persuades beneficiaries to severely limit their employment participation and earnings, or more commonly, to not enter the labor force at all. Although the Social Security Administration (SSA) has instituted a number of program changes and new initiatives to reduce the barriers to employment, such efforts have had little impact. Very few beneficiaries have an accurate understanding of the effects that SSA work incentives can have on their employment status and benefits eligibility.

I. Introduction

In response to the underutilization of potentially valuable employment support programs, SSA enacted the Benefits Planning, Assistance, and Outreach (BPAO) Program as directed by the Ticket to Work and Work Incentives Improvement Act of 1999. The mission of the BPAO Program was to enable SSA beneficiaries with disabilities to make more informed decisions regarding work, by disseminating accurate information to them regarding employment supports and the issues related to such work incentive programs. The Program consisted of a series of cooperative agreements to entities across the nation, whereby trained Benefits Specialists provided benefits counseling and assistance directly to beneficiaries while conducting ongoing outreach efforts.

There have been few comprehensive evaluation efforts related to the BPAO initiative, which was in place between 2001 and 2006. The present study seeks to assess the accomplishments of the BPAO Program in serving a diverse population of individuals with disabilities, and to examine service trends across different subsets of beneficiaries. The study will use data from the Virginia Commonwealth University (VCU) National BPAO Data Management System. Initial analyses will be primarily descriptive in nature, focusing on relationships among the type and level of services delivered, employment supports discussed by benefits specialists, reasons for seeking assistance, anticipated employment changes, and amount of contact time for groups of beneficiaries broken down by age, primary disability, and SSA benefits status. These comparisons will be used to examine trends in the implementation of BPAO services to the various subsets of beneficiaries, and to document variability across the BPAO projects over time.

The present evaluation will have important implications for future research and practice, by providing a thorough overview of the implementation of the BPAO Program and the range of individuals it served. Results will determine the extent to which BPAO fulfilled its mission of enabling informed work decisions for a diverse population of beneficiaries, documenting trends over the course of the program. Results will also form a basis for insuring that effective practices are replicated and appropriate improvements are made to subsequent benefits planning initiatives.

II. History of SSA Disability Program

The SSA disability programs evolved from the Social Security Act of 1935, which first established

a national plan to provide economic security for the nation's older workers. The Act created a social insurance program under which retired workers age 65 or older who had paid into the system became eligible for Social Security payments from the federal government. The amount of benefits received was dependent upon the worker's total wages covered by the program; however, the formula was weighted to give a greater return to low-wage earners. The 1939 amendments shifted the focus of Social Security from protecting only the individual worker to protecting the family, with the provision of monthly benefits to workers' dependents and survivors (Kollmann, 2000).

Even in the early stages of implementation of the Social Security Act there was a general acknowledgement that it did not offer adequate protection for people with disabilities. No consequent action was taken, due to concerns about the high costs and administrative difficulties involved in making disability determinations (SSA, 1986). In 1949, the House of Representatives passed a bill to allow for the payment of benefits to insured workers under Title II of the Social Security Act who were "permanently and totally disabled". However, the Senate version, which was ultimately reflected in the Amendments of 1950, contained no such provision (SSA, 1986).

The 1954 Amendments instituted a "freeze" on the earnings records of workers with disabilities who had worked recently and for a reasonable length of time in covered employment. This protected these individuals against the loss or reduction of the retirement and survivor benefits for which they were eligible. Disability was defined as "the inability to engage in any substantial gainful activity because of any medically determinable physical or mental impairment that could be expected to result in death or to be of long-continued and indefinite duration", and was limited to illnesses or injuries that had lasted six months or more (Kollmann, 2000).

Title II Disability Benefits

Social Security continued to evolve, and the capacity of the program was expanded to include disability. The Social Security Amendments of 1956 first established the concept of social insurance for persons with disabilities with the SSDI program. Beginning in July 1957, monthly disability benefits were provided to workers between the ages of 50 and 65 using the same criteria for determining disability that had been put in place for the freeze on earnings records instituted in 1954 (SSA, 1986). To qualify for these benefits, which could begin only after a waiting period of six consecutive months following the end of employment, the worker had to have been both currently and fully insured (Kollmann, 2000). The receipt of workers' compensation payments or other job unrelated public disability benefits paid by a federal, state, or local government (e.g., military disability benefits) would cause a reduction in the amount of an individual's SSDI benefits (SSA, 2004). Benefits could be withheld from any beneficiaries who refused to accept rehabilitation services offered by the state (House Ways and Means Committee, 1974). The 1956 amendments also allowed for the provision of Childhood Disability Benefits (CDB) to any dependent children of retired or deceased insured workers who had developed a disability before the age of 18 (SSA, 1986).

Subsequent legislation was enacted to make amendments to the SSDI program, many of which increased both eligibility for disability benefits and benefit levels. The 1958 amendments made SSDI benefits payable to the dependents of workers with disabilities. The Social Security Amendments of 1960 (PL 86-778) removed the minimum age requirement of 50 for beneficiaries, allowing workers to qualify for benefits at any age, and liberalized the earnings test and eligibility requirements (Kollmann, 2000).

Upon recommendation from the U.S. Government Accountability Office, these 1960 amendments also established various incentives for beneficiaries to return-to-work. A nine-month trial work period allowed beneficiaries to return to the workforce while temporarily maintaining their eligibility for benefits, and the six-month waiting period for benefits was removed for disabilities that recurred after an apparent recovery (House Ways and Means Committee, 1974). The Social Security Amendments of 1965 (PL 89-97) further increased eligibility by replacing the requirement that the impairment be of "long-continued and indefinite duration" with the condition that it was "expected to last for a continuous period of not less than 12 months" (SSA, 1986).

Such changes led to significant growth in both the size and complexity of SSDI, and brought the program to the forefront of public awareness. As a result, the Social Security Amendments of 1967 were passed to specify that a claimant could only be found to have a disability "if his physical or mental impairment or impairments are of such severity that he is not only unable to do his previous work but cannot, considering his age, education, and work experience, engage in any other kind of substantial gainful work which exists in the national economy" (SSA, 1986). Thus, an applicant had to prove a complete inability to work in any capacity in order to qualify for SSDI, a position inherently contradictory to return-to-work or rehabilitation efforts. The 1967 Amendments also allowed for the payment of Disabled Widow(er) Benefits (DWB) to widows and widowers age 50 or older who are unable to engage in any gainful activity on the basis of medical evidence alone (SSA, 1986).

Despite a more stringent definition of disability, Title II scope and expenditures continued to grow as the 1972 amendments increased benefit levels by 20%, reduced the waiting period to begin benefit payments from six to five months, and extended the definition of adult children with disabilities who could receive CDB to those whose condition developed before the age of 22 (House Ways and Means Committee, 1974).

Supplemental Security Income (SSI)

The 1972 amendments led to the creation of the Supplemental Security Income (SSI) program (PL 92-603) under Title XVI of the Social Security Act, which replaced the existing state programs of public assistance effective January 1, 1974 (House Ways and Means Committee, 1974). Unlike SSDI, eligibility for SSI payments was not based on an individual's work history. Rather, SSI was available to individuals with limited income and few resources who either had a disability or were age 65 or older. The purpose of the program was to ensure that its recipients were afforded a minimum level of monthly income to meet expenses (SSA, 1986). SSI was financed by general funds of the U.S. Treasury, including personal income and corporation taxes, rather than Social Security taxes withheld under the Federal Insurance Contributions Act.

SSI eligibility operates under the same definition of disability used for SSDI benefits for individuals 18 or older, with the inclusion of a separate definition for younger SSI claimants. It is possible that an individual who qualifies for SSI could receive both Title II and SSI benefits concurrently. For this individual, the SSI income would be in an amount necessary to bring his or her income up to the SSI limit. The situations of concurrent beneficiaries can be very complex, for both sets of program rules (Title II and SSI) are operating at the same time.

III. Health Care Programs for SSA Beneficiaries

After lengthy national debate, the Medicare and Medicaid programs were signed into law by President Lyndon Johnson in 1965 as Title XVIII and Title XIX of the Social Security Act. Medicare was originally established in response to the specific medical care needs of older adults, with coverage added in 1973 for persons with disabilities. Medicaid was established in response to the widely perceived inadequacy of welfare medical care under public assistance. Both programs continue to be critical for many SSA beneficiaries with disabilities; this population often has serious medical conditions requiring services that are not easily afforded otherwise. However, like the disability cash benefits programs, eligibility for these programs has historically been tied to an inability to work.

Responsibility for administering the Medicare/Medicaid programs was entrusted to the Department of Health, Education, and Welfare, the forerunner of the current Department of Health and Human Services (DHHS). Until 1977, SSA managed the Medicare program, and the Social and Rehabilitation Service (SRS) managed the Medicaid program. Both duties were transferred to the newly formed Health Care Financing Administration (HCFA), which became the Centers for Medicare & Medicaid Services (CMS) in 2001.

Medicare

Medicare provides medical insurance coverage to Title II beneficiaries. Approximately 6 million persons with disabilities of working age receive Medicare coverage (Williams, Claypool, & Crowley, 2005). Individuals with disabilities must undergo a five-month waiting period starting at the onset of the disability before their Social Security benefits begin. An additional Medicare Qualifying Period of 24-months (not necessarily consecutive) is required after disability cash benefits begin before they are entitled to Medicare coverage (Golden, O'Mara, Ferrell, & Sheldon, 2001).

Medicare has two parts: hospital insurance (Part A) and medical insurance (Part B). Hospital insurance is financed through part of the FICA payroll tax and helps pay for inpatient hospital care and certain follow-up care. This part of the Medicare program is automatic for Social Security beneficiaries upon completion of the 24-month waiting period (CMS, 2006).

Medical insurance, on the other hand, helps pay for doctors' services and a variety of other medical services and supplies that are not covered by hospital insurance. Unlike hospital insurance, it is voluntary and is financed in part by the monthly premiums of individuals who enroll. Those choosing to buy medical insurance coverage will have their monthly premiums deducted from their monthly Social Security cash benefits (CMS, 2006).

The Medicare Modernization Act of 2003 (MMA) added a new outpatient prescription drug benefit known as Part D to the Medicare program. The drug benefit is provided by private entities, both stand-alone prescription drug plans and comprehensive managed care plans known as Medicare Advantage (MA) plans. The MMA also contains safeguards for ensuring the availability of plans and sufficient choice. All beneficiaries eligible for Medicare Part A or enrolled in Part B are entitled to enroll in the new Part D drug benefit (CMS, 2006).

Medicaid

Medicaid is the single largest source of health and long-term care financing, public or private, for people with disabilities, covering over 8 million people under age 65 with disabilities (Kaiser, 2005). It is a means tested program under which people qualify based on financial need, jointly financed by the federal and state governments. Eligibility for Medicaid follows an extensive set of criteria that include income and asset requirements. While the federal government sets minimum standards, states have a great deal of flexibility in how the program is implemented; however, state Medicaid programs generally must cover SSI beneficiaries or some subset of them (Wiener, 2003). About 78 percent of Medicaid beneficiaries with disabilities qualify on the basis of receiving SSI. Thus, the vast majority of Medicaid's beneficiaries with disabilities have incomes below the poverty level (Crowley & Elias, 2003).

A very broad range of services is available to Medicaid recipients with nominal cost sharing that reflects the low-income of the covered population. Medicaid is obligated to cover certain services, including inpatient and outpatient hospital services; lab and x-ray services; nursing home and home health care; early and periodic screening, diagnosis, and treatment for children under age 21; family planning; and rural health clinics and qualified health centers. Depending on the state, a variety of additional services may be covered, such as prescription drugs; prosthetic devices; hearing aids; dental care; and nonmedical home and community-based services through waivers (Wiener, 2003). Unlike Medicare, Medicaid is a major source of financing for long-term care services (Bruen, Wiener, & Thomas, 2003).

Medicare beneficiaries with low incomes and limited assets may also receive help from the Medicaid program. For those who are eligible for full Medicaid coverage, the Medicare health care coverage is supplemented by services that are available under the state Medicaid program, according to eligibility category (Williams, Claypool, & Crowley, 2005). CMS refers to this assistance, available to Medicare beneficiaries with little income and few resources, as Medicare/Medicaid Dual Eligible programs or Medicare Savings Programs. This coverage may help pay for all or part of the Medicare premiums, deductibles and coinsurance, however it will not pay for services or items that Medicare does not cover such as prescription medications (VCU, 2003). Approximately 36% of younger people with disabilities who are eligible for Medicare as a result of their SSDI status are also eligible for Medicaid (Wiener, 2003).

IV. Problems with the SSA Disability Programs

There are a number of key problems with the SSA disability programs as they currently exist, which pose a threat both to efforts to include more persons with disabilities in the workforce and to the solvency of these programs in the future. Perhaps the most pressing of these issues are the underutilization of available SSA employment supports aimed at helping beneficiaries decrease their dependence on disability benefits, the growing number of working age individuals who receive SSI and/or Title II benefits, and the increasing financial burden these programs pose to national resources.

Underutilization of SSA Employment Supports

In the past two decades, continued progress has gradually been made toward increasing the availability of work incentives and return-to-work services for beneficiaries, carried out within the context of the broader disability policy climate aimed at expanding the vocational and social prospects of persons with disabilities. The ultimate effectiveness of such employment focused endeavors within the current Social Security system is frequently regarded with skepticism, however, given the contradictions inherent in providing vocational services to a population of individuals who have already been required to demonstrate an inability to work in order to qualify for disability insurance in the first place (GAO, 2004).

The overall goals of employment supports are to assist individuals to achieve gainful employment, increase independence, facilitate empowerment, and acquire self support. Tables 1-3 describe a number of the supports available to SSI and Title II beneficiaries prior to 2001, which are delineated in the SSA Red Book (SSA, 2001). Employment supports are designed to be beneficial to SSA beneficiaries in several significant ways. First, they can help individuals retain, or even increase, their access to cash benefits until they are stable in employment. Second, they can enable beneficiaries to exclude specific resources or deduct expenses they incur from the calculation of their cash benefits while working towards greater economic self-sufficiency. Finally, they can assist beneficiaries in accessing the health care coverage they need to enter or reenter the workforce.

Access to Cash Benefits. Many beneficiaries who are interested in joining or reentering the workforce are concerned about the possibility that they will lose their access to critical cash benefits due to earnings, but become unable to continue working as a result of their disability at a later date. In response to this issue, SSA developed a number of employment supports that allow beneficiaries to maintain their access to cash benefits until they become established in employment. These supports are described below in Table 1.

Resource Exclusion. Resource limits under SSA program rules present another barrier to beneficiaries, particularly SSI recipients. SSA benefit amounts allow beneficiaries to live at a basic subsistence level, and there has traditionally been no mechanism to allow beneficiaries to reduce their long-term

Table 1: SSA Employment Supports: Access to Cash Benefits (SSA, 2001)

Access to Cash Benefits	Eligible Beneficiaries	Description
Trial Work Period (TWP)	Title II	The TWP allows SSDI beneficiaries to test their ability to work for at least nine months within a rolling 60 consecutive month period. During this time they will continue to receive full benefits, regardless of how much they earn. Once the TWP is over, SSDI benefits will continue if SSA decides that the individual is not capable of working at the SGA level. If the individual is deemed able to work at this level, he or she will receive SSDI benefits for the month SGA level was achieved plus the next two months. After this "grace period", benefits will cease.

Access to Cash Benefits	Eligible Beneficiaries	Description
Extended Period of Eligibility	Title II	Once an SSDI beneficiary completes a TWP, an extended period of eligibility begins, as long as the original impairment is not considered medically improved. If SSDI benefits have ceased due to employment at the SGA level, they can automatically resume without the requirement of a new application and/or disability determination.
1916 (a)	SSI	Section 1619 of the Social Security Act was enacted as a 3-year demonstration project effective January 1, 1981, to remove work disincentives for recipients of SSI disability benefits. Under a special program, 1619(a), an individual can remain eligible for SSI cash payments even when earned income is at the SGA level, as long as he or she meets the basic eligibility requirements and the income and resources tests. This eliminates the need for the trial work period or extended period of eligibility under SSI.
Unsuccessful Work Attempt (UWA)	SSI Title II	The UWA provision allows an SSDI or SSI beneficiary an attempt to do substantial work that must be stopped or reduced to below the SGA level within six months or less due to impairment related issues. Earnings from this effort are not counted in making an SGA decision for benefits eligibility.
Subsidy and Special Conditions	SSI Title II	Support provided to SSI or SSDI beneficiaries by their employer that may result in pay that is greater than the actual value of the services they perform is known as subsidy. Extra supervision and simpler or fewer tasks could be counted as subsidies. SSA considers the existence of such supports in determining whether an individual is engaging in employment at the SGA level; only earnings representing the true value of the work performed are counted. For SSI recipients, subsidy is not taken into consideration in calculating benefits.
Section 301	SSI Title II	Section 301 is a Social Security provision that allows for the continuation of SSI and Title II cash benefits while beneficiaries complete an approved Vocational Rehabilitation Program, even though SSA has determined that they have "medically recovered" or no longer meet the medical qualifications through a Continuing Disability Review.

dependence on public benefits and become truly self-sufficient (NCD, 2005). SSA therefore designed various employment supports, described in Table 2 on the following page, that allow beneficiaries to exclude specific resources and income from use in determining eligibility or benefits amount.

Access to Health Care. Many beneficiaries have been faced with the difficult decision of choosing between increased employment and maintaining critical health insurance coverage (Clinton, 1999). SSA has attempted to reduce this disincentive through the development of several employment supports that allow beneficiaries who work to retain their access to Medicaid or Medicare, even after they are no longer entitled to receive cash benefits. These supports are described in Table 3 on the following page.

Despite such well-intended efforts to produce more favorable conditions for returning to work, the majority of SSA beneficiaries continued to stay on the disability rolls. The employment supports offered by SSA went largely underutilized, and consequently have had little impact on employment or reduced dependency on disability benefits (Newcomb, Payne, & Waid, 2003). In March, 2000, just 0.3% of eligible working beneficiaries were using PASS, 2.8% were using IRWEs, 7.5 % were receiving 1619(a) cash benefits and 20.4% were receiving 1619(b) extended Medicaid coverage (SSA, 2000).

The primary reason for such vast underutilization of SSA employment supports is that relatively few beneficiaries knew that they existed. Those who were aware of these work incentives often had the negative perception that they were overly complex, difficult to understand, and of limited use when entering low-paying employment (GAO, 1999).

V. Low Likelihood of Leaving the SSA Rolls

A number of regulatory and programmatic barriers to employment remain for people with disabilities. There is a shortage of options for temporary cash support, health care, and rehabilitation within the SSA disability programs, making it very difficult for beneficiaries to gain financial security on their own. Despite the fact that many SSA beneficiaries are willing and able to join or return to the workforce, very few Title II and SSI beneficiaries ever leave the SSA rolls to return to work (GAO, 2003; SSAB, 2005).

Beneficiaries' decisions about working can be extremely complex, due to the interactions of multiple programs from which they may be receiving benefits. These individuals not only face potential reductions of their SSA benefits, but also possible loss of critical medical coverage under Medicaid or Medicare,

Table 2: SSA Employment Supports: Resource Exclusion (SSA, 2001)

Resource Exclusion	Eligible Beneficiaries	Description
Plan to Achieve Self-Support (PASS)	SSI	A PASS allows SSI recipients to set aside income and/or resources toward a specific work goal (e.g., money to pay for education or vocational training) for a specified time. The resources that are put aside for this purpose are not considered in calculating SSI payment amount or determining eligibility for SSI.
Impairment Related Work Expenses (IRWE)	SSI Title II	IRWE allows the cost of certain impairment-related items and services that are needed to work (e.g., attendant care services, transportation costs) to be deducted when determining whether Title II or SSI beneficiaries' countable earnings demonstrate performance of SGA. They are also excluded from earned income in calculating monthly payment amounts for SSI recipients.
Blind Work Expenses (BWE)	SSI	In determining SSI eligibility and payment amount, SSA does not count any earned income used to meet expenses to earn that income for individuals receiving SSI payments due to blindness. Blind Work Expense items are not required to be related to recipients' blindness. Examples include service animal expenses, transportation to and from work, attendant care services, visual and sensory aids, and translation of materials into an accessible format.
Student Earned Income Exclusion	SSI	SSI recipients under the age of 22 who are regularly attending school may have $1,290 of earned income per month (up to a maximum of $5,200 per year in 2001) excluded in determining the amount of their payments from SSA. These dollar amounts are adjusted each year based on cost of living; the current monthly limit is $1,510 (SSA, 2007).
Property Essential to Self-Support	SSI	SSA excludes certain resources that are essential to an SSI recipient's self-support when determining initial and continuing eligibility for benefits. Property is not counted if it is used in a trade or business, and up to $6,000 of equity value of non-business property is excluded if it is used to produce goods or services essential to daily activities.

Table 3: SSA Employment Supports: Access to Health Care (SSA, 2001)

Access to Health Care	Eligible Beneficiaries	Description
1619 (b)	SSI	Under Section 1619(b) of the Social Security Act, an individual's Medicaid coverage can continue even if his or her income becomes too high for an SSI cash payment. A "threshold amount", based on the amount of earnings necessary for SSI cash benefits to cease in the individual's state and the annual per capita Medicaid expenditure for that state, is used to decide whether earnings are high enough to replace SSI and Medicaid benefits. SSI recipients may still be eligible for Medicaid coverage after exceeding this threshold in certain situations, such as if they have IRWE or PASS.
Medicaid Buy-In	SSI	Congress first included a Medicaid Buy-In option in Section 4733 of the Balanced Budget Act of 1997, whereby individuals with incomes over some specified amount could pay a premium and/or deductible in order to continue their Medicaid coverage.
Extended Medicare	Title II	Title II beneficiaries who lose benefit entitlement due to earnings exceeding the level of SGA, but continue to be disabled, are eligible for extended Medicare coverage. The extended coverage is for a minimum of 39 months following the conclusion of a nine-month trial work period (TWP), an SSA incentive that provides opportunities to test work skills while maintaining full benefit checks regardless of income earned.

loss or reduction of benefits from other transfer programs, plus the regular assortment of federal, state, and local taxes (SSAB, 2005). A reluctance to lose these benefits may persuade beneficiaries to limit their employment participation and earnings or stay out of the workforce altogether.

Less than 1% of SSDI enrollees leave the Social Security rolls each year to return-to-work, and about one third of those who do are back on the rolls within three years (GAO, 2003). For the last 15 years, the proportion of all SSI recipients with disabilities who work has remained fairly stable at under 6%, with younger beneficiaries more likely to work than older ones. However, even among those who work, less than 20% have earnings levels above substantial gainful activity (SGA), with a quarter making below $65 per month (SSAB, 2005).

Despite repeated efforts to improve and expand the SSA disability programs, they inadequately reflect the shift in societal perception of impairment and employment opportunities that have occurred since their inception (GAO, 2004). Therefore,

rather than empowering individuals with disabilities to become self-sufficient, they may actually lead capable beneficiaries to internalize the perception that they are unable to work.

VI. Continued Program Expansion and Escalating Costs

It is clear that the Social Security system is in need of significant modifications if it is to remain financially sound in the future, highlighting the importance of removing such barriers to the employment of people with disabilities (Kollmann, 2000). Over the past few decades, the numbers of people with disabilities of working age (18-64) who receive Title II and SSI disability benefits have grown dramatically. The categories of recipients eligible for benefits have expanded over the years, and benefit levels have sporadically increased. As a result, the cost of the Title II and SSI programs for people with disabilities has soared, with more people applying and less beneficiaries leaving the benefits rolls due to recovery from disability or return-to-work (Thomason, 1997; SSA, 2006b).

There were four million SSI and SSDI beneficiaries in 1985, increasing to 6.3 million by 1994 (GAO, 1996b). By 1999, approximately 3.7 million working age adults were receiving SSI and 4.9 million workers were receiving SSDI payments (SSA, 1999b). In 2002, approximately 5.5 million workers were receiving SSDI payments and an additional 3.9 million individuals of working age were receiving SSI, at a total expenditure of over $60 billion (GAO, 2003). Currently, over 8 million workers with disabilities and their dependents receive income support under Title II, and nearly 4 million additional persons with disabilities of working age receive monthly benefits from SSI (SSA, 2006b). The total cost of these disability benefits is over $100 billion a year, and administrative costs exceed $5 billion a year (SSAB, 2005).

The average age of SSI and Title II beneficiaries has gradually declined in recent decades, which contributes to the growth of the programs and their subsequent expenditures (SSA, 1999; GAO, 1996b). This is, in part, due to the revised regulations for the determination of certain mental impairments that has resulted in more individuals with psychiatric disabilities receiving Social Security benefits. Individuals with psychiatric disabilities tend to be younger compared to those with other types of disabilities, and are therefore anticipated to stay on the rolls longer resulting in increased overall expenditures (SSA, 1999c).

Total annual benefits paid under the SSI program rose from about $5.2 billion in 1974 to $34.6 billion in 2002 (Ways and Means, 2004). Of the $88.0 billion in total SSDI expenditures at the end of 2005, $85.4 billion was for net benefit payments, increasing 9.2% from 2004. These expenditures are projected to continue to escalate, in part due to increases in average benefit levels from automatic benefit increases and anticipated increases in the amounts of average earnings on which benefits are based (SSA, 2006b).

The costs associated with Medicare and Medicaid, which many SSA beneficiaries rely upon, have exhibited parallel increases. Congressional Budget Office Director Douglas Holtz-Eakin noted that Medicare and Medicaid currently consume 4% of the U.S. gross domestic product. He projects that this proportion could increase to an "unsustainable" 20% over the next 50 years if significant changes are not made (House Committee on Ways and Means, 2005; Holtz-Eakin, 2006).

The number of Medicaid beneficiaries with disabilities increases at a significantly faster pace than the growth in total enrollment, with costs per recipient in this demographic population growing even more rapidly (CBO, 2006). Between 1997 and 1998, spending growth for people with disabilities was 9.7%, compared to 6.2% for all Medicaid beneficiaries (Crowley & Elias, 2003). Federal Medicaid costs continue to increase substantially, and are projected to increase at an average annual rate of 8% through 2013, substantially more than the corresponding annual increase of 4.9% from 1995 to 1999 (Crowley & Elias, 2003).

At the 2005 World Health Care Congress, Urban Institute President and former CBO director Robert Reischauer indicated that without restructuring, the Medicare trust fund will become insolvent in 2019 (Kaiser, 2005). Net federal spending on Medicare is expected to grow from $331 billion in 2006 to $524 billion in 2011 (Kaiser, 2006). The presence of chronic health conditions, which typically require ongoing care and treatment, is strongly linked to high Medicare expenditures (CBO, 2005).

VII. Implications for Beneficiaries

Even more troubling than the broad challenges faced by the SSA disability programs are the frequent negative experiences of beneficiaries who are in the process of deciding whether to increase their employment status. Despite repeated efforts by Congress and SSA to improve the system through increased employment supports (see Tables 1-3), many inherent contradictions remain due to the original foundation for the Title II and SSI benefits programs, which were each historically tied to an inability to work.

Under the current system of eligibility for SSA disability benefits, an individual is considered to have a disability only if he or she is unable to work. Thus, there is an inherent contradiction both in determining that a person meets this requirement while the individual is working, and by encouraging beneficiaries to use work incentives to achieve earnings after they have already demonstrated their inability to work (Social Security Handbook, 2005). Despite the ever changing political

and social view of people with disabilities and their role in the workforce, beneficiaries still face a number of specific barriers under the current system.

Lack of Access to Health Care

The risk of losing the critical health care benefits provided through Medicare and Medicaid is a major disincentive for many beneficiaries who want to be a part of the workforce (Jensen, Silverstein, Folkemer, & Straw, 2002). High premiums and preexisting condition exclusions are often barriers to private health insurance for this population. When insurance is available, the long-term care and other support services required by many individuals with disabilities are rarely covered (Wiener, 2003), highlighting the important role filled by Medicare and Medicaid.

Medicare is not immediately available to newly eligible Title II beneficiaries. Rather, they must wait a total of 29 months after meeting the standard for disability before they are entitled to Medicare. This gap in medical supports makes it very difficult for many beneficiaries to manage their disabilities effectively, and therefore further detaches beneficiaries from the workforce (NCD, 2005).

On average, Medicaid beneficiaries with disabilities require more extensive health care services than most other beneficiaries. Beneficiaries with disabilities represented only 16% of Medicaid enrollees in 2002, yet they accounted for 43% of expenditures (Crowley & Elias, 2003), illustrating just how critical Medicaid is for this population. Medicaid covers a broad range of medical and long-term care services that are required for many persons with disabilities in order to work or retain their independence (Wiener, 2003). Indeed, individuals with disabilities often have chronic medical conditions that require more physician and hospital visits, more frequent use of prescription drugs, and greater need for long-term care (Crowley & Elias, 2003).

It is therefore not surprising that the complex, confusing system of determining whether one will remain eligible for these health care benefits may serve as a deterrent to individuals with disabilities who might otherwise be interested in obtaining or increasing employment, and possibly achieving greater independence. Provisions put in place to extend health care coverage for SSA beneficiaries with the intent of increasing their opportunities to work tend to be difficult for consumers to understand and for eligibility workers to implement (Wiener, 2003).

VIII. Financial Disincentives

In addition to concerns about losing health care coverage, Title II and SSI beneficiaries also cite financial disincentives to work and earn income as major barriers to employment (Jensen et al., 2002).

Lack of Gradual Reduction for Title II Beneficiaries. One of the most significant barriers to employment for Title II beneficiaries is what is known as the "earnings cliff", where cash benefits and ultimately health care coverage are completely stopped once an individual consistently exceeds SGA, which is set at $900 per month for FY 2007 (SSA, 2007). This all or nothing approach varies sharply from the gradual reduction in cash benefits that is allowed for SSI recipients, whereby their monthly checks are progressively reduced in relation to their income.

It has been demonstrated that far less than one percent of SSDI beneficiaries return-to-work and earn substantial income (Gerry, 2005), in part because of the disincentive created by the earnings cliff (GAO, 1996; Sheldon & Trach, 1998; National Council on Disability, 1997; O'Day, 1999). SSA beneficiaries and their advocates argue that Congress should enact a gradual reduction in SSDI benefits as earnings increase, similar to the current program rules for SSI, in order to eliminate the precipitous earnings cliff (NCD, 2005).

As described earlier, a complex set of work incentive phases was designed to ameliorate the manner in which Title II benefits abruptly cease. Beneficiaries can test their ability to work for at least nine months while receiving full Title II benefits regardless of the level of their earnings during a Trial Work Period (TWP), as long as they continue to have a disability. The 1980 Social Security Disability Amendments created an extended period of eligibility (EPE) for cash benefits and Medicare coverage. During this phase, Title II benefits may resume without a new application, disability determination, or waiting period during the 36 consecutive months following the trial work period. Beneficiaries are also permitted a "grace period", during which they may retain full benefits for the first month in which their income is above the SGA level and the following two months. Once the EPE and subsequent grace period are over, a single month of SGA level work can lead to complete termination of cash benefits. Despite these efforts, the benefits of increasing employment fail to outweigh the anticipated costs of such endeavors for many Title II beneficiaries (LaPlante, Kennedy, Kaye, & Wenger, 1996).

SSA has made various attempts to help beneficiaries overcome the earnings cliff by annually indexing the SGA level for inflation, averaging earnings over multiple months, and permitting short-term unsuccessful work attempts (UWA). The UWA policy allows SSA to disregard short-term work that is at or above the SGA dollar level, and to treat that work as non-SGA. Furthermore, the cost of impairment related items and services required for work can be deducted from an individual's gross earnings when determining whether he/she is gainfully employed due to the Impairment Related Work Expenses (IRWE) incentive. Unfortunately, such attempts by Congress

and SSA to address employment disincentives within the current programs may have the unintended effect of adding to the complexity of the system and confusing beneficiaries further, rather than encouraging them to work.

Insufficient Opportunities for Asset Development for SSI Recipients. A major financial disincentive for SSI recipients is their inability to accumulate unlimited assets or resources without adverse impact on eligibility, as is the case for Title II beneficiaries. Rather, SSI recipients risk loss of both their cash benefits and their Medicaid if countable unearned income exceeds the current Federal Benefit Rate, and/or countable resources exceed $2,000. True autonomy and full community participation for persons with disabilities will not be possible without more focused effort on the barriers or facilitators in public policy, services, and programs to advance economic independence. Current policies send conflicting messages by encouraging SSI recipients to enter or return to the workforce, yet not allowing them to maintain assets above $2,000. Likewise, access to critical health care benefits requires these individuals to maintain limited assets, preventing them from advancing their economic status (Asset Accumulation and Tax Policy Project, 2004).

Lack of Access to Employment Supports

There are a number of employment supports available to both SSI and Title II beneficiaries, which ironically, may have helped these individuals remain off the disability rolls by entering or reentering the workforce had they been available to them earlier (NCD, 2005). Under the current system, the only way to access such supports is by going through the lengthy determination process to become eligible for disability benefits. Once this occurs, these individuals have essentially proven an inability to work, and furthermore, may now be reluctant to attempt to work and risk losing the benefits they have worked so hard to receive (NCD, 2005).

Even among those who are already in the system, there is a perceived lack of access to employment supports. Beneficiaries cite a shortage of adequate employment training, an insufficient availability of accurate and easy to understand information about their employment options, and a lack of an integrated system of short and long-term services and supports to address their overall needs (e.g., education, training, health care, housing, food, and transportation) as major disincentives to work (Jensen et al., 2002). This highlights the importance of a system that recognizes the interplay between SSI and Title II, health entitlement programs, and other programs.

Complexity of SSA Program Rules

Another major barrier to employment for SSA beneficiaries is the impossibly intricate web of program rules that characterize both the Title II and SSI programs (Jensen et al., 2002). Indeed, an average person has little or no chance of understanding or applying SSA rules without expert assistance. The variety of employment supports described earlier (see Tables 1-3) were designed to increase the employment of persons with disabilities, thereby reducing or eliminating their dependency on cash assistance programs. However, each of these supports has a complex set of rules and requirements, which are described in detail in SSA's Red Book (2006). As a result of such a convoluted system, beneficiaries often worry that any attempt to return to work will result in a total loss of their cash benefit and Medicaid or Medicare coverage (Kregel, O'Mara, & West, 2003). Such complexity is a significant disincentive to employment, because it prevents beneficiaries from understanding the true effect that increasing employment will have on their life situations.

The process that an individual currently has to go through to receive benefits in the first place is also complex and fragmented, with multiple organizations involved in determining eligibility. This process consists of an initial decision and up to three levels of administrative appeals if the claimant is not satisfied with the outcome. Each appeal requires a multiple step process for evidence collection, review, and decision-making (GAO, 2002). This often takes years, and causes significant levels of effort and stress (GAO, 2004). Thus, many beneficiaries are very reluctant to do anything that might jeopardize the benefits they have struggled for so long to obtain. This lack of realistic knowledge about SSA work incentives, and the difficulties of many beneficiaries in navigating the system, led to a number of additional initiatives by SSA to enable individuals to understand SSA program rules and provisions in order to make informed choices about work.

IX. Congress and SSA's Response to the Problem

Congress and SSA have long recognized the vast set of disincentives faced by beneficiaries who are interested in seeking or increasing their employment. As described earlier, Congress and SSA have made repeated attempts to respond to these barriers within the current structure of SSI and the Title II benefits programs over the years in an effort to encourage work, as evidenced by the numerous additions and expansions to the various employment supports available to beneficiaries.

Such efforts were not effective, largely due to beneficiaries' lack of information about the available supports and subsequent low utilization (GAO, 1999). Congress and SSA responded to this realization by proposing a structure through which information about these incentives would be more readily available to beneficiaries. To that end, the multifaceted Ticket to Work and Work Incentives Improvement Act (PL 106-170) was enacted in 1999.

The Ticket to Work and Work Incentives Act (TWWIIA)

The Ticket to Work and Work Incentives Improvement Act of 1999 was intended to remove many of the barriers and disincentives to employment for persons with disabilities, while increasing consumer control over the delivery of their employment and rehabilitation services and supports. The ultimate purpose of TWWIIA was to provide Americans with disabilities more opportunities to take on employment and obtain increased financial well-being, while at the same time decreasing their dependence on public benefits. Its implementation led to a number of additional and extended employment supports for both SSI and Title II beneficiaries (SSA, 2006), outlined in Tables 4 and 5.

Expanded Access to Health Care under TWWIIA. One of the major goals of TWWIIA was to further reduce the disincentives associated with having to choose between employment and maintenance of health care coverage (NCD, 2005). To that end, a Medicaid buy-in and an additional extension of Medicare coverage were implemented (see Table 4 below).

Additional Employment Supports under TWWIIA. In addition to expanded access to health care coverage, TWWIIA also led to the establishment of a number of other employment supports for both SSI recipients and Title II beneficiaries, including the Ticket to Work and Self-Sufficiency Program, continuing disability review protections, and expedited reinstatement of benefits (NCD, 2005). These are described below in detail in Table 5 below.

Table 4: Expanded Access to Health Care Under TWWIIA

Expanded Access to Health Care Under TWWIIA	Eligible Beneficiaries	Description
Section 201: Medicaid Buy-In	N/A	States may cover individuals with disabilities (aged 16-64) who, except for earnings, would be eligible for SSI. In other words, states would be allowed to permit working individuals with disabilities and incomes above 250% of the Federal poverty level to buy into the Medicaid program. They will be required to pay premiums or other cost-sharing charges on a sliding-fee scale based on income. If a state uses this option, it will also have the option of providing coverage to employed persons with disabilities (aged 16-64) whose medical condition has improved (and as a result are no longer eligible for Title II, SSI or Medicaid, but who continue to have a severe medically determinable impairment (SSA, 2003).
Section 202: Extended Period of Medicare Coverage (EPMC)	Title II	Section 202 further extends Medicare coverage for most Title II beneficiaries who work; beneficiaries can get an additional 4.5 years coverage beyond the current limit, for a total of 8.5 years including the TWP. Furthermore, it is possible for individuals with disabilities who are under the age of 65 and continue to have a disabling impairment to buy into the Medicare program once the extended Medicare coverage is exhausted. Such individuals must no longer be entitled to Medicare because of having earnings in excess of the amount and time permitted after their extended period of Medicare eligibility (SSA, 2003).

Table 5: Additional Employment Supports Under TWWIIA

Additional Employment Supports Under TWWIIA	Eligible Beneficiaries	Description
Seciton 101: Ticket to Work and Self-Sufficiency Program (TTW)	SSI Title II	The Ticket to Work and Self-Sufficiency Program is a voluntary program to help SSI and Title II beneficiaries obtain and maintain employment to reduce their dependence on SSA cash benefits. Under the Ticket Program, beneficiaries have opportunity for greater choice in accessing the services they need to go to work or to earn more money. They can receive employment services, vocational services or other services provided through the Employment Network (EN) of their choice, which are private organizations or government agencies that have agreed to work with SSA (SSA, 2003).
Section 111: Continuing Disability Review Protection	SSI Title II	Title II beneficiaries can be protected from unscheduled continuing disability reviews (CDRs) that would otherwise be triggered by their employment. CDRs for long-term SSDI beneficiaries (i.e., those receiving disability benefits for at least 24 months) will be limited to periodic CDRs. Although SSA will continue to evaluate work activity to determine continued eligibility for cash benefits, a return-to-work alone will not trigger a review of the beneficiary's impairment (SSA, 2003).

Additional Employment Supports Under TWWIIA	Eligible Beneficiaries	Description
Section 112: Expedited Reinstatement of Benefits	SSI Title II	An individual who loses entitlement to Title II benefits on the basis of work activity following an extended period of eligibility, or who loses eligibility for SSI benefits on account of excess income resulting from work activity, may request reinstatement of these benefits without filing a new application. The individual must be unable to continue working due to his or her medical condition, and must file a reinstatement request within the 60-month period following the month of such termination (SSA, 2003).

Benefits Planning, Assistance and Outreach (BPAO)

Also under TWWIIA, SSA was directed by Congress to establish a community-based benefits planning and assistance program designed to provide accurate and timely information on work incentives and related issues to SSA beneficiaries. SSA enacted a program of cooperative agreements to entities across the nation to provide benefits counseling and assistance, and conduct ongoing outreach efforts to inform beneficiaries of available employment supports, such as those described in Tables 1-5. That program, the Benefits Planning, Assistance, and Outreach Program (BPAO), was intended to increase opportunities for beneficiaries to receive information and services needed to become employed and perhaps attain self-sufficiency.

A total of 116 cooperative agreements were awarded during the program's implementation, covering every state, territory, and the District of Columbia. Due to its broad national scope, the BPAO Program required considerable training, technical assistance, and ongoing follow-up for those who provided assistance to beneficiaries, to insure that each beneficiary received accurate and timely information regardless of his or her individual circumstances. To meet these critical requirements, SSA contracted with three different entities on September 19, 2000: Virginia Commonwealth University, Cornell University, and the University of Missouri-Columbia. These contractors were responsible for providing technical assistance and training to all BPAO Benefits Specialists on the SSA disability programs and employment supports, the Medicare and Medicaid programs, and other Federal work incentives programs. As part of SSA's contract with VCU, a National BPAO Data Management System was created to gather information from BPAO contractors about the implementation of the Program via web-based forms.

Benefits Specialist Training Curriculum. In addition, Cornell University received a separate contract to develop the Benefits Specialist training curriculum, with assistance from the other two contractors. This curriculum was compiled and edited to provide comprehensive continuing education and print materials for BPAO personnel on the interplay of SSA work incentives and other federal benefit programs and employment. The initial set of associated knowledge areas and job functions identified by Cornell included outreach, information and referral, data collection and profiling, benefits analysis, scenario advisement and counsel, support planning, and benefits management. Benefits planning and assistance was defined as "a set of benefits counseling strategies, services, and supports that seek to promote work preparation, attachment, and advancement focusing on the enhancement of self-sufficiency and independence of SSA beneficiaries and recipients with informed choice, which may result in decreased reliance on public benefit programs and increased financial well being" (Golden, O'Mara, Ferrell, & Sheldon, 2001).

The curriculum was driven by the values of individualized BPAO services and consumer choice. Indeed, to fulfill the intended purpose of the program, benefits specialists had to recognize the unique preferences and goals of each beneficiary, and customize the services planned for and delivered based on these characteristics. Furthermore, it was imperative that benefits specialists be able to provide consumers with the information necessary to make informed choices, including explanations of the outcomes of various paths, while allowing each consumer to make the ultimate decisions about which actions to pursue.

BPAO Year 2 Consumer Satisfaction Survey. In addition to the data that was continuously collected through the National BPAO Data System during the course of the Program, SSA conducted a consumer satisfaction survey in late 2002 to obtain feedback from participants about their experiences with the BPAO Program at the request of the Office of Employment Support Programs. A total of 1,764 individuals who had received intensive levels of services offered by BPAO participated in a telephone interview. Respondents were asked to evaluate their overall satisfaction with the information and services provided, as well as the convenience, accessibility, and other logistical aspects of these services on a Likert-type scale (SSA, 2002). Survey respondents were sampled from the National BPAO Data System.

Overall, those who participated in the survey had very positive feedback about the benefits counseling they received through the program, with nearly 90% rating it as excellent, very good, or good. In particular, the courtesy and helpfulness of the benefits specialists and the amount of time spent were consistently rated highly. In terms of face-to-face meetings with benefits specialists, participants especially appreciated

the privacy and accessibility of meeting locations, but were slightly less satisfied overall with the long distances they had to travel to get there, insufficient transportation, and inadequate parking.

Although more than half of respondents indicated the highest level of confidence that they understood the next steps to be taken after talking with the benefits specialist, others were left feeling confused and uncertain about what was supposed to happen next in the process. Three-fourths of participants felt that their decision about whether or not to pursue employment was affected by issues in their lives not addressed in the information they obtained through benefits counseling.

The results of this survey highlight the utility of the BPAO Program in providing beneficiaries with the tools they need to make informed choices with regard to their employment and benefit situations. However, the findings also illustrated areas of the program in need of improvement in order to optimize its intended impact.

X. Study Purpose

Despite the extensive implementation of services through the BPAO Program, quantitative analyses on BPAO and benefits counseling services in general have been minimal, as evidenced by the current paucity of published studies in this area (Tremblay, Smith, Xie, & Drake, 2006). The present study seeks to assess the accomplishments of the BPAO Program during its five year implementation in serving a diverse population of individuals with disabilities, and to examine trends in implementation across different subsets of beneficiaries. Results will provide a greater understanding of the extent to which BPAO fulfilled its mission of enabling informed work decisions for beneficiaries interested in increasing their employment status. Results will also form a basis for insuring that effective practices are replicated and appropriate improvements are made to future initiatives.

Analyses will focus on relationships among the type and level of services delivered, employment supports discussed with beneficiaries by benefits specialists, reasons beneficiaries seek assistance from the Program, anticipated employment changes, and amount of contact time for subsets of beneficiaries broken down by age, primary disability, and SSA benefits status. Specifically, three primary goals have been identified as broad areas of study based on the results of preliminary analyses and the gaps in existing research on the BPAO Program.

Goal #1: To evaluate the extent to which the BPAO initiative served a diverse population of individuals with disabilities at both national and regional levels.

Data collected early in the BPAO Program's implementation suggested that the Program was indeed serving a diverse array of people with disabilities at all service levels (Kregel & Head, 2003; Kregel & Head, 2004). However, 2002 data indicated that the number of beneficiaries served by the BPAO Program and the intensity of services provided varied greatly by state (Ways and Means, 2002b). Anecdotal evidence from BPAO projects revealed that the initiative may have lacked sufficient capacity to adequately meet demand, with the number of beneficiaries requesting services overwhelming many local BPAOs. This challenge appeared to be particularly pronounced in more rural regions, where extensive travel reduced potential service time (Ways and Means, 2002b). The proposed research will carefully interpret the state-by-state data reported to the VCU database to provide a thorough analysis of the individuals and regions served by the Program.

The motivations of the different types of agencies providing BPAO services (e.g., Independent Living Centers, state VR agencies) were presumably very diverse, due to inherent differences in their nature and structure. The present study will critically examine relationships between agency type, beneficiary characteristics, and service delivery to determine whether these differences had an impact on program implementation, as suggested by anecdotal evidence (Ways and Means, 2002).

Goal #2: To examine trends in the implementation of BPAO services to various subsets of beneficiaries.

There was early evidence that some populations of beneficiaries may have been underserved by the BPAO Program. For example, specific work incentives have been developed to assist transition-aged beneficiaries with the unique challenges they face in their employment efforts. Yet, preliminary analyses suggested that youth were not significantly represented in the population served by the BPAO Program despite its potential to help this subset of beneficiaries (Ways and Means, 2002b; Kregel & Head, 2003). The present study will provide an in depth look at the differences in the experiences of various subsets of beneficiaries on the basis of demographic variables throughout the entire implementation of BPAO to evaluate any patterns that emerge.

One of the goals of the BPAO initiative was to help individuals take charge of their lives and enhance their economic self-sufficiency, rather than being reliant on SSA benefits (Kregel & Head, 2004). Although the current data cannot determine the effect of BPAO services on beneficiary employment and earnings, it can be used to determine participants' anticipated employment outcomes and whether they are related to the type and amount of BPAO services received.

Goal #3: To document service patterns/variability for the BPAO projects over time.

Data collected through April 2004 revealed distinct patterns in BPAO enrollment over the course of a calendar year (Kregel & Head, 2004). The present analysis will take this a step further by examining BPAO service patterns based on month of operation rather than calendar month, to allow for more meaningful comparisons. Gaining a more complete view of the evolution of BPAO projects over time will be valuable in understanding and evaluating the structure of BPAO and planning future initiatives.

XI. Study Limitations

Despite the anticipated benefits of a comprehensive examination of the BPAO initiative and the beneficiaries it has served, there are a number of key limitations in the VCU National BPAO Data System that warrant consideration, and which place constraints on the knowledge gained from the study. It is important to recognize that the BPAO Data System was intended to be a program management and reporting tool for the BPAO projects and was not designed for program evaluation, therefore it is limited in the extent to which it can be used for this purpose.

Service Time. Benefits specialists were only required to report the first time a new beneficiary was served by the program. Although they were encouraged to update their records when a beneficiary received subsequent services, the extent to which such additional reporting actually occurred is not known. Therefore, the database may underestimate the amount of service time beneficiaries received.

Benefit Status. Due to the structure of the BPAO database, a small number of cases contain missing background information for those individuals who received only very basic informational services through the Program. As a result, the data may underreport the extent to which SSA and other major benefits programs were utilized by those beneficiaries who did not receive more intensive benefits support through the Program.

Utilization of Employment Supports. While data was collected on the employment supports that had been presented to beneficiaries as options, there is no information about whether these incentives and provisions were subsequently used. Benefit specialists were not responsible for recommending a specific course of action to beneficiaries; rather, they described the supports that were available to a particular individual, fully discussing the requirements of and possible ramifications of each.

Outcomes Data. This report is intended to provide a snapshot of the BPAO Program, rather than information about specific outcomes. The results reflect the career status, benefits status, and anticipated career change of beneficiaries at their time of participation in the Program, but provide no data about how these factors evolved throughout the course of their interaction with benefits specialists and beyond. While the availability of true outcomes data would be very valuable in drawing conclusions regarding the effectiveness of the BPAO Program, it is simply beyond the scope of this study.

Such caveats are unavoidable due to the design and original intent of the VCU BPAO database. While the data yielded in the present study are indeed useful in advancing our understanding of the BPAO Program, these inherent limitations must be taken into account.

XII. Summary

It is clear that many SSA disability beneficiaries who are willing and able to join or return to the workforce decide not to do so for a variety of complex reasons. Frequently considered to be the most significant disability legislation since the ADA, TWWIIA was intended to create opportunities for beneficiaries to get off the Social Security benefits rolls and into the workforce. Congress implemented the BPAO Program as a major component of TWWIIA, in recognition of the values of consumer choice and control. Yet despite its significant role in this major legislation, very little empirical research has been conducted on the BPAO initiative and its achievements. Although the VCU National BPAO Data System was not designed with a formal program evaluation in mind, it is by far the most comprehensive data set available on the initiative, and the best source for answering research questions regarding BPAO service implementation and its progress over time.

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Supporting SSA Beneficiaries to Pursue Their Employment Goals: A Retrospective Analysis of the Benefits Planning Assistance, and Outreach (BPAO) Program

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Abstract

This report contains a summary of SSA's Benefits Planning, Assistance, and Outreach (BPAO) Program, using archival data reports based on the complete set of data collected by the VCU BPAO Data Management System during the Program's five-year implementation. The report documents the program's activities and accomplishments in serving a diverse population of recipients with disabilities, while examining trends in Program implementation across different subsets of beneficiaries. Results help to provide a greater understanding of the strengths and weaknesses of the BPAO Program, forming the basis for ensuring that effective practices are replicated and appropriate improvements are made to future initiatives.

I. Introduction

This report documents the activities, accomplishments, and trends that emerged during the implementation of the SSA Benefits Planning, Assistance and Outreach (BPAO) Program between March, 2001 and September, 2006. Data was obtained from the 116 organizations, 197 sites, 620 benefit specialists, and 244,848 SSA recipients who participated in the Program, using the VCU BPAO Data Management System.

II. Research Questions

An archival data analysis based on previously developed data reports from the VCU BPAO Data Management System was used to address the following goals and corresponding research questions.

Goal #1

To provide a detailed summary of BPAO recipient characteristics such as age, primary disability, and type of benefits received.

Research Questions:

1.1. What are the demographic characteristics of individuals served by the BPAO Program?

1.2. Did different types of BPAO provider agencies (e.g., CIL, State VR) serve beneficiaries with different demographic characteristics (age, primary disability, employment status, benefits status)?

Goal #2

To provide a detailed analysis of the services provided and work incentives recommended to BPAO participants.

Research Questions:

2.1. What was the overall pattern of intakes per month upon start-up of new BPAO projects?

2.2. What are the characteristics of services provided to BPAO participants (service time, level of services, types of employment supports discussed)?

2.3. Were there differences in the service patterns of beneficiaries who participated in the BPAO Program (service time, level of service provided, types of employment supports discussed with beneficiaries) based on factors such as age, sex, primary disability, benefits status, and employment status?

Goal #3

To document the goals and anticipated employment related outcomes indicated by BPAO participants.

Research Questions:

3.1. Why did BPAO participants seek services from the BPAO Program?

3.2. What anticipated changes in employment status were indicated by BPAO participants?

3.3. Were those beneficiaries who received the most service time more likely to indicate an anticipated increase in their employment activities? Is this mediated by whether the service time was used for intensive benefits support (benefits analysis/advisement; benefits support planning; benefits management) or more basic support (information/referral; problem solving and advocacy)?

III. Data Collection

As part of SSA's Regional Training Center contract with VCU, the BPAO Data Management System was developed to allow BPAO contractors to submit, revise, and aggregate information on their clientele via web-based forms. This national reporting effort was intended to gather information that documented the degree to which the BPAO Program was achieving the outcomes intended by Congress and SSA when the Program was established as a key component of the Ticket to Work and Work Incentives Improvement Act. The National BPAO Data System consists of the following forms, which provided the data used in the previously completed analyses:

- **Project Site Form** – Individual BPAO projects were registered into the system and given a unique identifying number. This form requested demographic information from each project and the date on which services were initiated.
- **Benefit Specialist Form** – Individual benefits specialists within the BPAO projects were also registered into the system and given a unique identifier. This form requested contact information and the date on which the benefits specialist began providing services.
- **BPAO Beneficiary/Recipient Form** – After a benefits specialist interacted with a BPAO consumer, the benefits-specialist completed this form. The form requested identifying information such as name, Social Security number and address; key demographic information such as age, sex, and primary disability; current benefits they receive; current employment status; reasons why BPAO services were sought; the types of services delivered and employment supports that were recommended; the amount of time required for the contact; and whether or not the beneficiary anticipated an employment change as a result of the services and assistance provided through the Program.

The VCU Regional Training Center suspended operations in September, 2006. During that month, VCU generated a complete set of data reports, including frequency data, a lengthy series of cross-tabulations, and a large series of basic statistical analyses. These reports contain no personal identifying information, only report aggregate data, and do not identify any individual BPAO project.

While there are limitations to using an analysis off a set of existing reports, VCU believes this information was sufficient to address the proposed goals and research questions in a comprehensive manner.

IV. Participants

The report is based on a set of previously completed data reports that covered the time period between March 2001 and September, 2006, covering the entire implementation of the BPAO Program. The data reflect information obtained from the 116 organizations, 197 sites, 620 benefit specialists, and 244,848 SSA recipients who participated in the BPAO Program. An organization, defined as the primary BPAO awardee, is an entity or agency that directly entered into a cooperative agreement with SSA to provide benefits planning, assistance, and outreach services to beneficiaries. Some organizations provided all BPAO services directly, while others established agreements with subcontractors to assist with service delivery. Community-based agencies such as independent living centers, advocacy groups, VR offices, and rehabilitation centers could all function in this capacity. Each organization had one or multiple sites.

At each BPAO site there were a number of benefits specialists, trained to work with individual SSA recipients in a confidential setting, explaining the regulations, provisions, work incentives, and special programs that often complicate the decision about whether to enter or reenter the workforce. The benefits specialist collected data on an individual's current benefit status, and provided a critical analysis of the impact of work and earnings on these benefits. Once this had been done, the benefits specialist provided information to the recipient regarding the safety nets and benefit management strategies that should be put into place as he or she developed a plan for employment.

V. Key Variables of the Study

The BPAO Beneficiary/Recipient form yielded all of the variables at the individual level that were used for analysis, and the other two forms provided data at the project level. Key study variables are operationally defined in Tables 1-3 which can be found on the following pages.

Table 1: Beneficiary Demographic Variables

Variable	Levels / Categories
Age	Under 22 22 to 39 40 to 59 60 and over
Sex	Male Female
Primary Disability	Mental and Emotional Disorders System Diseases (e.g., nervous, endocrine, cardiac, etc.) Non-Spinal Orthopedic Disabilities/Amputations Cognitive Disabilities (Mental Retardation) Spinal Cord Injury Blind or Visual Impairment Traumatic Brain Injury Hearing, Speech, and other Sensory Impairments Infectious Diseases
Employment Status	Full-time Part-time Not employed, seeking employment Not employed, not seeking employment
Benefits Received	Medicaid Medicare Food Stamps Subsidized Housing Private Health Insurance TANF Veterans Benefit Workers Compensation Unemployment Insurance Other Benefits
SSA Benefit Status	Title II only SSI only Concurrent SSI/Title II
Reason for Service Request	Not working, considering going back to work Working, considering change in employment status Result of losing job Result of starting new job Result of salary increase/decrease Anticipated or actual change in other financial or life factors Other reasons
Anticipated Employment Status Change	No intent to change Intent to seek new or supplemental job Intent to increase work hours in current job Intent to decrease work hours in current job Intent to cease employment No decision Intent to use Ticket to Work to seek employment Intent to pursue education or training

Table 2: Individual Service Delivery Study Variables

Variable	Levels / Categories
Service Time Received Through BPAO	Less than 1 hour 1 hour 2 hours 3 hours 4 hours 5-9 hours 10 or more hours
Level of Services Received	Information and Referral Problem Solving and Advocacy Benefits Analysis and Advisement Benefits Support Planning Benefits Management
Employment Supports Discussed with Beneficiary	Men Trial Work Period Extended Period of Eligibility Impairment Related Work Expenses 1619(a) 1619(b) Extended Medicare Plan for Achieving Self-Sufficiency Medicaid Buy-In Subsidy Development Student Earned Income Exclusion Blind Work Expense Ticket to Work Program Expedited Reinstatement of Benefits Continuing Disability Review Protections Unsuccessful Work Attempt Section 301 Property Essential to Self Support

Table 3: Agency Variables

Variable	Levels / Categories
Region	Region 1 – Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont Region 2 – New Jersey, New York, Puerto Rico, Virgin Islands Region 3 – Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia Region 4 – Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee Region 5 – Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin Region 6 – Arkansas, Louisiana, New Mexico, Oklahoma, Texas Region 7 – Iowa, Kansas, Nebraska, Missouri Region 8 – Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming Region 9 – Arizona, California, Hawaii, Nevada, American Samoa, Guam, Saipan Region 10 – Alaska, Idaho, Oregon, Washington
Type of Provider Agency	Information and Referral Problem Solving and Advocacy Benefits Analysis and Advisement Benefits Support Planning Benefits Management

VI. Results

Goal #1

To provide a detailed summary of BPAO recipient characteristics such as age, primary disability, and type of benefits received.

Research Question 1.1:

What are the demographic characteristics of individuals served by the BPAO Program?

The vast majority of the 244,848 SSA beneficiaries who participated in the BPAO Program were reported to be between the ages of 22 and 59 (86.3%). Less than 10% were age 60 or older. Youth were not significantly represented among BPAO participants, with less than 5% of beneficiaries reported to be under the age of 22. Males (49.8%) and females (50.2%) were equally represented among total participants.

The BPAO Program consistently served individuals with a broad variety of both physical and mental disabilities throughout its five-year implementation. The most commonly indicated disabilities were mental and emotional disorders and system diseases, which jointly accounted for over half of BPAO participants, reflecting the extent to which individuals received SSDI benefits and were served by Centers for Independent Living (CILs) and state VR agencies. The primary disabilities indicated least often by participants were traumatic brain injuries, visual and other sensory impairments, and infectious diseases, collectively accounting for less than 10% of participants. Over 16% of participants had primary disabilities that were either unknown, or did not fit into any of the other categories. Beneficiaries were not required to disclose the nature of their disability in order to be served through the BPAO program.

Nearly two thirds of BPAO participants were not employed, but seeking employment when they sought BPAO services. About one fourth were already employed either full-time or part-time (less than 30 hours a week). Only 12% indicated that they were not currently employed and not seeking employment.

Over half of BPAO participants were solely SSDI beneficiaries, and nearly 30% were solely SSI recipients. The remaining 16% of participants received SSI and SSDI concurrently. BPAO participants received a broad range of additional benefits. Over half of the participants received Medicare (51.7%), with similar numbers receiving Medicaid (50.8%). In terms of other benefits, food stamps (15.6%) and subsidized housing (9.0%) were most commonly reported, while Workers' Compensation and unemployment insurance were consistently the least commonly reported benefits over the five-year implementation of BPAO. Only 5% reported receiving private health insurance and less than 2% received Veterans benefits.

Research Question 1.2:

Did different types of BPAO provider agencies serve beneficiaries with different demographic characteristics?

Many different types of organizations provided BPAO services. Centers for Independent Living (CILs) provided services in 53 communities, accounting for nearly half of all BPAO organizations. Non-profit community organizations, ranging from Goodwill Industries to mental health centers, provided services in 21 locations. State Vocational Rehabilitation (VR) agencies operated BPAO programs in 18 states. Other BPAO organizations included advocacy organizations (e.g. United Cerebral Palsy), universities, and legal aid agencies (including Protection and Advocacy organizations).

Chi-square tests of independence were initially used to determine the relationship between type of provider agency and the demographic characteristics of participants they served, including age, sex, primary disability, employment status, and SSA benefit status. As expected due to the extremely large sample size (N=244,848) and corresponding power, the p-value was significant at <.0001 for all tests. However, such differences are not necessarily meaningful in any true sense; therefore, Phi coefficients were used instead of p-values to evaluate the results of the tests.

The Phi coefficient is a measure of the strength of the association between the two variables being compared. Results indicated that the type of provider agency had no bearing on any specific demographic characteristic of the individuals.

Goal #2

To provide a detailed analysis of the services provided and work incentives recommended to BPAO participants.

Research Question 2.1:

What was the overall pattern of intakes per month upon start-up of new BPAO projects? .

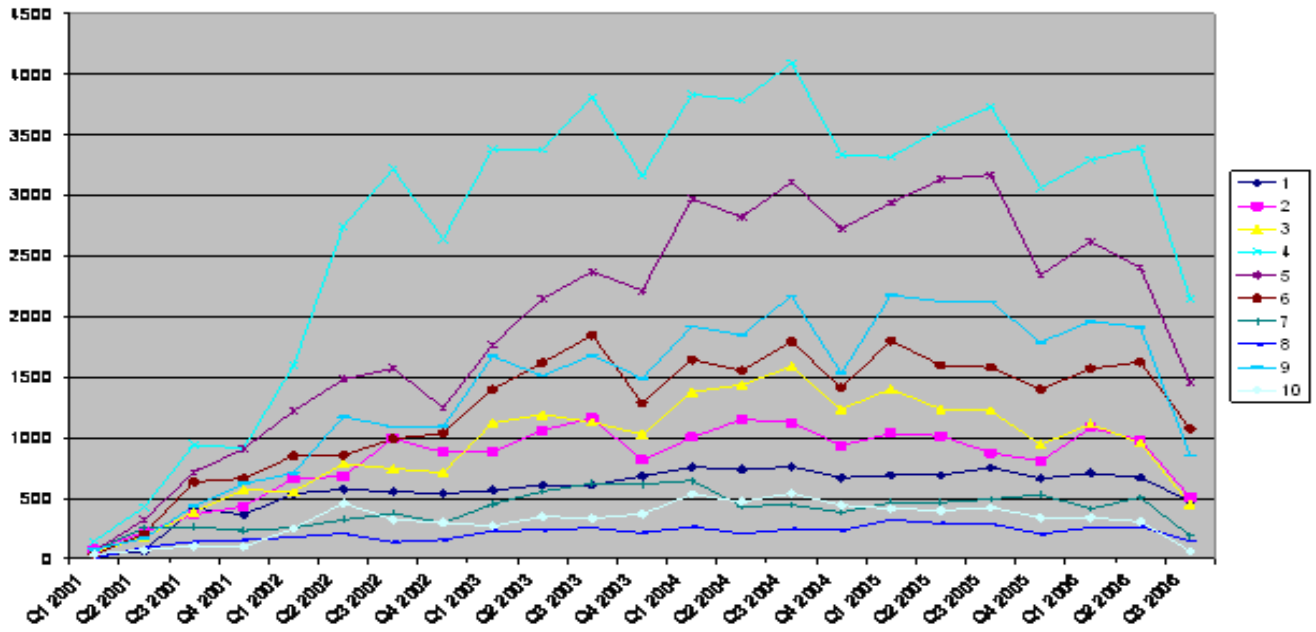
The average number of intakes per month throughout the entire implementation of the BPAO Program was 3,549. Figure 1 on the following page depicts the pattern of intakes per quarter by SSA region; Regions 4 and 5 consistently had the largest number of intakes.

Research Question 2.2:

What are the characteristics of services provided to BPAO participants (service time, leve of services, types of employment supports discussed)?

The average amount of service time for BPAO participants was a mean of 2.3 hours and a median of 1 hour. Approximately one third of the total participants received less than one hour of service time (32.2%), and nearly one fifth of participants received four or more hours (19.2%).

Figure 1: Intakes per Quarter by Region



The services that were offered by the BPAO Program during its five-year implementation fell into five major categories, which varied greatly in terms of function and intensity.

- **Information and Referral** involved providing basic written and verbal information in response to inquiries about all Federal and State benefit programs, and/or referral to government agencies and other community resources. This level of service typically involved one to several contacts over a relatively short period of time.
- **Problem Solving and Advocacy,** which generally occurred over a period of several weeks to several months, involved providing time-limited, intensive assistance to recipients in solving specific federal and state benefit and work incentive problems, and possibly advocating on behalf of the recipient with other agencies and programs.
- **Benefits Analysis and Advisement** required the specialist to assess real or potential effects that employment or other such changes would have on the recipients' overall financial well-being, and inform recipients of the various options available and the projected outcomes for each.
- **Benefits Support Planning** involved time-limited services aimed at directly assisting recipients in constructing plans to promote effective monitoring and management of their benefit programs and work incentives.
- **Benefits Management,** which generally occurred on a scheduled basis over an extended period of time, involved providing ongoing, comprehensive, benefits monitoring and management assistance to recipients who were likely to experience employment, benefits, or other changes that would dramatically affect their benefits status, health care, or overall financial well-being.

Over 90% of the individuals who participated in the BPAO Program received Information and Referral services, while nearly one third received Problem Solving and Advocacy. Over 40% of total participants received Benefits Analysis and Advisement, 14% received Benefits Support Planning, and just 5% received Benefits Management.

The first two levels of service, Information and Referral, and Problem Solving and Advocacy, were grouped together for the purpose of analysis and are referred to as Basic Benefit Support. Contacts of this type involved individuals who had received a communication from SSA related to the Ticket to Work and were requesting basic information about the program, persons who had a specific question about a communication they received from SSA, individuals requesting confirmation of specific SSA regulations, and persons requesting referral to a local employment support or other benefit program.

Beneficiaries who received Benefits Analysis and Advisement, Benefits Support Planning, and Benefits Management were grouped for analysis as recipients of Intensive Benefits Support. These individuals received comprehensive benefits analyses based on their employment and benefits history, a plan for future employment based on applicable regulations and available work incentives, and long-term follow-up and support. Thus, BPAO programs provided two distinct types of services, each of which required a different level of communication and interaction with the beneficiary/recipient. Over 54% of beneficiaries only received the more Basic Benefits Support, while the other 46% received more Intensive Benefits Support. SSDI and concurrent beneficiaries were somewhat more likely to receive Intensive Benefit Support services than SSI recipients.

Almost all of those BPAO participants who received Intensive Benefit Support received Benefits Analysis and Advisement, and nearly a third received Benefits Support Planning. Participants who required Intensive Benefit Support were less likely to receive Benefits Management, although the nature of this category made its services critical to those individuals who did receive them.

Table 4: Percentage of BPAO Participants Receiving Specific Services

Service	Basic Benefits Support (N = 132,982)	Intensive Benefit Support (N = 111,701)
Information and Referral	98.2	82.2
Problem Solving and Advocacy	22.7	42.8
Benefits Analysis and Advisement	0.0	94.4
Benefits Support Planning	0.0	30.5
Benefits Management	0.0	11.4

Relationship Between Employment Status and Type of Services Provided to Beneficiaries – There were considerable differences between individuals who received Basic Support Services and Intensive Benefits Support in terms of their employment status at the time of contact with the BPAO program. A total of 94.4% of those individuals who received Intensive Benefit Support through the BPAO Program were either employed or in the process of seeking employment, as were over three quarters of those who received Basic Benefit Support. Over 60% of beneficiaries in both groups were currently not working but were actively seeking employment, particularly those receiving the more Intensive Benefit Support. Over a quarter of those who received Intensive Benefit Support and over 20% of those who received Basic Benefit Support were currently employed full or part-time, working less than 30 hours a week. In contrast to 5.6% of intensive benefit support beneficiaries, 18.3% beneficiaries in the Basic Benefit Support category indicated that they were not currently employed and were not seeking employment.

Employment Supports Discussed with Beneficiaries – A wide range of employment supports were presented to BPAO beneficiaries by benefits specialists, and discussed as possible options to pursue in the future. The incentives presented most often were the Trial Work Period (53.5%) and subsequent Extended Period of Eligibility (49.8%), followed by Impairment Related Work Expenses (43.9%) and the Ticket to Work Program (40.1%). Those presented least often were Student Earned Income Exclusion (2.6%) and Blind Work Expense (1.4%), a finding that seemscorresponds to the relatively low numbers of total BPAO participants who were blind or under the age of 22.

Table 5: Employment at Time of Initial Contact by Type of Services Received

Employment Status	Basic Benefits Support	Intensive Benefit Support
Employed Full-Time	4.1	4.4
Employed Part-Time	16.6	23.4
Not Employed, Seeking Employment	61.00	66.6
Not Employed, Not Seeking Employment	18.3	5.6
TOTAL	100	100

Research Question 2.3:

Were there differences in the service patterns of beneficiaries who participated in the BPAO Program based on factors such as age, sex, primary disability, benefits status, and employment status?.

Another set of Chi-square tests of independence were used to determine the relationship between service patterns (service time, level of services provided, and types of employment supports discussed with beneficiaries) and the demographic characteristics of participants, including age, sex, primary disability, SSA benefit status, and employment status. As before, Phi coefficients were examined rather than p-values due to excessive power and inflated significance.

Results indicated that there was no significant association between participant age or gender and receipt of services, provisions and incentives. However, a number of significant findings did emerge. Primary disability indicated by participants had a slight association with both the amount of time they spent with a benefits specialist, and the level of services received. Individuals with spinal cord injuries, non-spinal cord orthopedic disabilities, and psychiatric disabilities received significantly more hours of service than beneficiaries with other primary disabilities. In addition, individuals with psychiatric disabilities and cognitive disabilities were more likely to receive intensive support services (Benefits Analysis and Advisement, Benefits Support Planning, and Benefits Management).

As expected, a number of significant associations could be found between SSA benefit status and the specific employment supports discussed with BPAO participants by benefits specialists. Specifically, Trial Work Period, Extended Period of Eligibility, and Extended Medicare were discussed significantly more often with SSDI and Concurrent beneficiaries, while 1619(a) and 1619(b) were discussed significantly more frequently with SSI and Concurrent beneficiaries. This is consistent with the eligibility requirements for these particular employment supports.

There was a small but significant association between the employment status of participants and amount and intensity of the services they received. Individuals who were employed or indicated an interest in obtaining employment at the time they contacted the BPAO received more hours of service than other individuals. In addition, these beneficiaries were more likely to receive intensive benefits analysis and advisement, benefits support planning, and benefits management services.

Goal #3

To document the goals and anticipated employment related outcomes indicated by BPAO participants.

Research Question 3.1:

Why did BPAO participants seek services from the BPAO Program? .

Analyses indicated that the BPAO projects were very active in conducting outreach to beneficiaries and supporting the Ticket to Work program. Over 60% of BPAO participants sought services in response to BPAO outreach. More than one fourth responded to Ticket to Work communication from SSA, and nearly 9% responded to other communication from SSA. Contacts related to the Ticket to Work program were highest during the FY 02 through FY 05 time period, peaking at 33.4% of all referrals in FY 04.

At the time of initial contact with the BPAO program, 63.4% of beneficiaries indicated that they were not employed, but considering returning to work (45.6%) or obtaining employment for the first time (17.8%). This reinforces previously reported data indicating that a sizable majority of beneficiaries served through the BPAO program are individuals who are actively seeking employment or considering the possibility of pursuing employment.

Nearly one in five beneficiaries (18.5%) contacting a BPAO program were currently employed and experiencing or anticipating a change in their employment situation. Factors such as obtaining a better job, increasing the number of hours worked, or starting a new job were cited by 14.6% of beneficiaries. Salary changes and lost jobs were the least frequent reasons for requesting BPAO services, collectively accounting for 2.4% of participants. Another 7.4% indicated an anticipated change in the financial or other life circumstances, such as marriage, completion of a Trial Work Period, entry into Extended Period of Eligibility, or other similar factors.

Nearly half of all BPAO participants indicated that they requested BPAO services because they were not working, but considering employment. Less commonly, participants sought services because they were working and considering a change in employment status, anticipating a change in other financial or life factors, or starting a new job.

Research Question 3.2:

What anticipated changes in employment status were indicated by BPAO participants?

After receiving services from the BPAO program, beneficiary expectations changed in a small but significant manner. Over half (52.1%) still indicated an intention to seek employment. This represented an 11.3% drop in the number of individuals intending to seek employment at the time of initial contact with the BPAO program.

A total of 17.6% of individuals who were currently employed anticipated an upcoming change to their employment situation. The large majority of these individuals (12.9% of all beneficiaries) anticipated no change to their employment situation, 3.8% anticipated increasing work hours, and less than 1.0% of participants intended to decrease their hours or cease employment. In addition, 17.2% of beneficiaries indicated that they intended to pursue additional education or training in the near future. Analyses revealed that these individuals were more likely to be employed at the time of contact with the BPAO program (38% compared to 24% for all participants), and more like to be individuals with spinal cord injuries, non-spinal cord orthopedic disabilities, and sensory impairments.

Research Question 3.3:

Were those beneficiaries who received the most service time more likely to indicate an anticipated increase in their employment activities? Is this mediated by whether the service time was used for intensive benefits support or more basic support?

As expected, individuals receiving Basic Benefit Support received significantly less service time than those receiving Intensive Benefit Support, primarily due to the nature of the various services included in each category. Over 75% of individuals receiving Basic Benefit Support received one hour or less of total service, whereas over half of those receiving Intensive Benefit Support received three hours or more.

A greater proportion of individuals in the Intensive Benefit Support group were employed (27.7%) than was true for the Basic Benefit Support group (22.6%). This was true for both full and part-time work. The proportion of individuals who were not employed and not seeking employment in the Basic Benefit Support group (19.0%) was more than twice that of the Intensive Benefit Support group (6.6%).

Individuals in the Basic Benefit Support group were less likely to be seeking employment when they contacted the BPAO Program. They were far more likely to not have made a decision regarding their future employment status. Generally, these individuals were requesting assistance regarding communication from SSA, seeking information about the Ticket to Work program, or asking a specific question about their benefit status.

Table 6: Anticipated Employment Status Change by Level of Service

Status Change	Basic Benefits Support (N = 132,982)	Intensive Benefit Support (N = 111,701)
Intends to seek new job or supplemental job	44.5	61.1
Intends to increase work hours in current job	2.1	5.7
Intends to cease employment	0.5	0.3
Intends to decrease work hours in current job	0.3	0.7
Does not intend to change current employment status	11.5	14.4
Made no decision	40.0	17.7

VII. Limitations of the Data

Though this is the most complete examination to date of the BPAO initiative and the individuals it served, there are a number of key limitations that warrant consideration, and which place constraints on the interpretation of study findings. First, the report is completely based on archival data. It summarizes a series of analyses that were conducted in September, 2006 in response to data requests from BPAO programs and technical assistance providers.

Second, it is also important to recognize that the BPAO Data System, which provided all the data to be used in this archival analysis, was intended to be a program management and reporting tool for the BPAO projects. While data was collected on the work incentives and employment supports that had been presented to beneficiaries as options, there is no information about whether these incentives and provisions were subsequently lack of long-term follow-up data prevents the completion of a rigorous net outcome analysis.

Despite these limitations, the BPAO Data System possessed a number of strengths that add validity to the findings and provide a foundation for the recommendations presented below. First, the data system used a single data collection form operations manual that remained unchanged from March, 2001 through September, 2006. This consistency allows an analysis of long-term trends and changes in the program over its five-year history.

Second, consistent training procedures were used over the course of the initiative to orient benefits specialists to the system. Technical assistance liaisons used conference calls to clarify the definitions of each of the required data elements. VCU data management staff conducted quality assurance reports each month to identify missing or out of range data. These procedures increased the validity and reliability of data.

Third, many of the benefits specialists used the BPAO Data System as a caseload management tool. They used the system to record beneficiaries' employment aspirations and the work incentives and program provisions that were discussed during the benefits analysis. This information was frequently used as the basis of follow-up contacts with beneficiaries as their employment situations changed. The fact that benefits specialists used the data system during the delivery of clinical services increased that likelihood they would report complete and accurate data.

Finally, Regional Training Center personnel and OESP Project Officers frequently reviewed data submitted by benefits specialists. Regional Training Center staff used monthly data reports to plan future training and technical assistance activities. OESP Project Officers used the data system as a component of their program monitoring and evaluation activities. These monthly reviews provided an external check on the accuracy of data submitted by the benefits specialists.

In summary, the BPAO Data System provides a consistent long-term account of the demographic characteristics, employment status, and employment goals of beneficiaries who sought assistance from the BPAO program, as well as the work incentive and other program provisions recommended for consideration by the benefit specialists. Lack of follow-up data precludes the completion of a net outcome analysis. However, the consistent data collection approach and the external review provided by the Regional Training Centers and OESP allow the data system to be used accurately describe program trends and document the services provided to over 250,000 beneficiaries. The implications of the data analyses for future program implementation are discussed in the next section.

VIII. Summary of Findings

The purpose of the national BPAO program was to provide accurate and timely information to beneficiaries about SSA work incentives and other federal efforts to remove regulatory and programmatic barriers to employment for persons with disabilities. The program encompassed 116 BPAO projects that provided services to over 244,000 beneficiaries in all 50 states and five territories. BPAO projects were located in independent living centers, advocacy agencies, state Vocational Rehabilitation agencies, community rehabilitation providers, legal aid agencies, universities, and other diverse settings.

Over 400 benefits specialists, many of whom were themselves individuals with disabilities, worked with individual beneficiaries to explain the SSA regulations, provisions, work incentives and special programs that affect an individual's decision to enter or reenter the workforce.

The BPAO initiative was rapidly launched in FY 01 with the development of 116 Cooperative Agreements to establish nationwide coverage, creation of a comprehensive training curriculum to train 400 benefits specialists, the establishment of three Regional Training Centers to provide technical assistance, and the implementation of a program management database. The program grew quickly, serving over 6,000 beneficiaries in its first year and increasing to over 60,000 each year from FY 04–06, with over 3,000 new beneficiaries receiving service each month.

This report has summarized the demographic characteristics, benefits status, and employment status and aspirations of the beneficiaries served by the BPAO program, as well as the amount and type of services provided by benefits specialists. This section identifies a number of trends that emerged throughout program implementation and offers recommendations for the future direction of the initiative.

Finding #1

The BPAO program was a large, SSA operated employment support program, which provided assistance to over 200,000 SSA beneficiaries who are currently employed, or interested in pursuing employment.

Nearly 90% of all individuals who contacted a BPAO were either employed, actively seeking employment, or interested in obtaining employment in the near future. These latter individuals were attempting to obtain information about work incentives, the Ticket to Work, and other programs that will help them decide whether to pursue employment. Less than 1% of individuals contacting BPAOs were in the process of terminating employment or reducing their work hours.

The national BPAO program played a major role in the decision making process of beneficiaries deciding whether or not to participate in the Ticket to Work program. From FY 03 – FY 05, over one quarter of all participants indicated that they were contacting the BPAO program in response to communication from SSA regarding the Ticket to Work program, peaking at 32% of all contacts in FY 04. The Ticket Program Manager, Employment Networks, local SSA offices, Protection and Advocacy agencies, and State Vocational Rehabilitation agencies all refer ticket holders to BPAOs for information and support. After receiving services from the BPAO, 20% of participants consistently indicated an intention to use the Ticket to Work program to pursue their employment goals.

Finding #2

The BPAO program lacked sufficient capacity to meet the needs of all beneficiaries requesting services.

The national BPAO initiative began during a time of significant change in the disability benefit programs. The launch of the Ticket to Work program, the creation of Medicaid buy-in programs, the implementation of enhanced work incentives in the Ticket to Work and Work Incentives Improvement Act (TWWIIA), and the establishment of the Area Work Incentive Coordinator (AWIC) position all contributed to a spirit of innovation and reform.

Beginning in FY 02 (the first full year of the program) the BPAOs served an average of 422 individuals per program per year. Service totals were highest in FY 05, when the mean number of beneficiaries served by the programs reached 561 individuals per program per year. The speed at which the program grew created significant challenges for the BPAO agencies.

Foremost among these challenges was an inability on the part of many programs to effectively meet the demand for services by the beneficiaries. The number of beneficiaries requesting services overwhelmed a large number of local BPAOs. The problem was particularly acute for BPAO programs in rural areas where extensive travel reduces service time, and among BPAO programs targeting specialized populations such as transition age youth or English Language Learners (ELL). As a result, a significant number of BPAOs curtailed outreach efforts, so that they did not create a demand that could not be met. For example, during the initial years of the program, the 67-77% of beneficiaries contacted the BPAO program in response to BPAO outreach. By FY 03 the number of individuals making initial contact in response to BPAO program outreach had decreased to less than 60% of beneficiaries and remained at that level throughout the course of the program.

Finding #3

After receiving services from the BPAO program, the large majority of beneficiaries remained interested in securing or maintaining employment.

During the implementation of the BPAO program, concerns were occasionally expressed that benefits specialists did not aggressively encourage beneficiaries to pursue employment goals and access employment supports. The data reported above do not corroborate this concern.

After receiving services from the BPAO program, 52.1% of beneficiaries continued to indicate a desire to secure employment. This represented an 11.3% drop in the number of individuals intending to seek employment in comparison to the aspirations expressed by beneficiaries at the time of initial

contact with the BPAO program. Based on anecdotal reports from technical assistance liaisons, a wide variety of factors including remaining disincentives to employment in the SSA benefit programs and lack of access to necessary employment supports affected this small but significant reduction in employment aspirations.

It is important to note that after receiving services from BPAO programs, over 75% of beneficiaries continued to express an interest in securing employment or maintaining current employment. This finding further documents the role of the BPAO program in providing employment supports to beneficiaries weighing the effects of employment on their long-term independence and self-sufficiency. Future research and program evaluation efforts should identify the factors that cause individuals to modify or reduce their employment aspirations after receiving detailed information on the impact of increased earnings on benefits status and health care coverage. These factors may form the basis of future program reform efforts.

The fact that a beneficiary who initially expressed an interest in employment remains uncertain regarding their employment goals after receiving accurate information from a BPAO program, does not mean that the individual will not pursue employment at a later date. After obtaining a full understanding of the total value of all federal and state level benefits they currently receive, as well as their available health care coverage options, individuals may decide to approach future employment cautiously. However, after investigating the availability of employment supports and the potential applicability of various work incentives, large numbers of individuals returned to the BPAO at a later date to seek assistance with pursuing employment. The implication is that the initial information provided by the BPAO may have been crucial to allowing the individual to carefully assess his or her situation and make an appropriate long-term career choice.

Finding #4

The BPAO program encompassed a wide array of different types of provider agencies that delivered multiple services to a highly diverse population of beneficiaries.

As described above, many different types of organizations provided BPAO services. Centers for Independent Living (CILs) accounted for 45% of all BPAO programs. Non-profit community organizations (e.g. Goodwill Industries) and state VR agencies each accounted for over 15% of the programs. Other BPAO programs included advocacy organizations (e.g. United Cerebral Palsy), universities, Protection and Advocacy organizations, and legal aid agencies.

The wide range of BPAO provider agencies allowed the program to serve a diverse beneficiary population. The primary disability of beneficiaries served was generally consistent with the working age SSA beneficiary population. Individuals with psychiatric disabilities and systems diseases represented half of the individuals served, but persons with spinal cord injuries, non-spinal cord orthopedic disabilities, mental retardation, traumatic brain injury, and other disabilities were significantly represented.

Similarly, over half of the individuals served (54%) were SSDI beneficiaries, with SSI recipients and concurrent beneficiaries accounting for 29% and 16% of the persons served respectively. The type of benefit received was directly correlated with the amount of services provided to beneficiaries, with individuals receiving SSDI and concurrent beneficiaries receiving a significantly larger number of service hours.

Statistical analyses revealed that the type of organization operating a BPAO program was not correlated with the primary disability or benefit status of the individuals served. In other words, CILs, non-profit organizations, VR agencies and other BPAOs all served a wide array of SSDI, SSI, and concurrent beneficiaries. Despite concerns that CILs, mental health agencies, and other programs would only serve a specific segment of beneficiaries in their catchment areas, analyses indicated that overall BPAO projects responded to the informational and support needs of most segments of the SSA beneficiary population.

Finally, it should be noted that individuals with disabilities were actively involved in the delivery of benefits planning and assistance services. Over one-third of the 400 benefits specialists that worked in BPAO programs were individuals with disabilities. Many of these individuals had personal experience with SSA disability programs. Individuals with disabilities, serving in paid professional positions, used their knowledge, skills, and personal experiences to assist other persons with disabilities to establish employment goals and access SSA work incentives.

Finding #5

The intensity of services received by beneficiaries varied widely between individuals who receive Basic Benefit Support and Intensive Benefit Services.

Individuals receiving Intensive Benefits Services generally received a significant amount of service, with 52% of individuals in this category receiving over three hours of service. Individuals in this category were far more likely to be employed and much more likely to be actively seeking employment compared to the individuals in the Basic Support Services category.

At the same time, individuals receiving Basic Support Services often received far more than a simple ten minute telephone conference. One-fourth of these individuals received over two hours of service, obtaining support from the BPAO pro-

gram related to problems in earning reporting, dealing with overpayments, accessing an employment network, and other related topics.

Anecdotal reports from benefits specialists and technical assistance providers indicated a need to develop more efficient outreach and communication strategies with beneficiaries to reduce the number of hours devoted to explaining basic program provisions to beneficiaries on a repeated basis. Over time, many BPAO programs began to engage in collaborative outreach with Employment Networks and community partners in their local catchment area to increase the efficiency of outreach and communication activities.

Finding #6

While individuals served by the BPAO program appeared to access Medicare, Medicaid, and Food Stamp benefits, other benefit programs such as private health insurance and Veterans benefits are only accessed by a small number of beneficiaries.

Only 5% of persons served reported receiving private health insurance and less than 2% received Veterans benefits. Increasing beneficiary access to private health insurance benefits would enhance their opportunities for independence and self-sufficiency, and reduce their dependence on federal benefit programs. In terms of Veterans benefits, outreach efforts should be modified to make certain that individuals receiving one or more of the Veterans benefit programs (e.g. Disability Compensation and Disability Pension) are aware of the regulations and procedures relating to eligibility for the SSDI program, the effect of employment on SSA and Veterans benefits, and the interaction of the two programs.

Finding #7

Transition age youth were underrepresented in the population of beneficiaries served by the Program.

Only 4.6% of beneficiaries receiving services from local BPAOs were under the age of 22 at the time of service. In addition, only 2.6% of participants received information on the Student Earned Income Exclusion, a valuable work incentive for transition age youth. There are a host of specific SSA benefits issues that may affect school age youth with disabilities; some of these issues are related to employment or post secondary education, while others are not. However, all of these issues are important from the perspective of special education transition planning and work incentive planning and assistance.

In addition, it is important to note that 18% of the individuals served by BPAO programs indicated a desire to pursue future education and training. SSI beneficiaries face unique challenges in their efforts to save for and fund post-secondary education and training. Program provisions related to excess assets and parental deeming may complicate the use of Plans for Achieving Self-Support as an educational funding vehicle for transition aged SSI beneficiaries. Future work incentive planning and assistance outreach activities should focus on contacting transition aged youth, providing effective services to this subset of the SSA population, and collaborating effectively with secondary and post-secondary educational programs.

The data presented in this report suggest that the BPAO Initiative played an important role in supporting the employment objectives of a diverse population of beneficiaries, allowing them to obtain the information and support needed to pursue their goals of employment and economic self-sufficiency. The program assisted individuals to comply with SSA regulations and reporting requirements while simultaneously raising the employment aspirations of many beneficiaries who had previously believed that their receipt of SSA benefits precluded any opportunity of pursuing meaningful employment.

IX. Recommendations

The capacity of the national work incentive planning and assistance network should be expanded to meet the demand for high quality services that adequately serve beneficiaries attempting to pursue their employment goals.

The BPAO program lacked sufficient capacity to respond to the overwhelming demand for services over the six years of the program. In some instances, beneficiaries faced sizeable waiting periods before being able to make initial appointments with the BPAO provider agency. In other communities, BPAOs curtailed outreach activities to avoid creating a demand for services that could not be met. Enhanced program capacity would allow BPAOs to increase the intensity of services provided to individuals and target outreach activities to previously underrepresented groups.

The national work incentive planning and assistance network should be encouraged to engage in coordinated outreach activities with Employment Networks, state VR agencies, and other community partners.

Under the BPAO program benefits specialists devoted extensive resources to the delivery of information and referral services to beneficiaries on topics such as the Ticket to Work program and basic requirements for earnings reporting. While these activities were extremely valuable, many BPAO programs viewed the delivery of these services as highly inefficient. Future outreach activities should be conducted collaboratively with local agencies that provide employment supports to beneficiaries.

The national work incentive planning and assistance network should devise and implement specialized outreach and service delivery approaches targeted toward underrepresented subpopulations of beneficiaries, including transition aged youth and veterans.

The work incentive planning and assistance needs of transition age youth and veterans are unique and require specialized knowledge on the part of benefits specialists. Neither population was adequately represented in the BPAO program, perhaps in large part due to the lack of specialized outreach programs targeted directly to them. To adequately serve these populations, future work incentive planning and assistance activities must ensure that benefits specialists are fully prepared to serve these populations and that local programs work collaboratively with secondary schools, post-secondary educational programs, and vocational rehabilitation and employment programs operated by the Department of Veterans Affairs.

Future research should focus on identifying the factors that prevent SSA beneficiaries from pursuing employment goals after receiving services from a BPAO program.

Approximately 10% of beneficiaries served by BPAO programs initially expressed an interest in obtaining employment or returning to work, but were no longer interested in pursuing employment after receiving services from the BPAO. Future research and program evaluation activities should focus on the factors that caused this decline, including remaining disincentives to employment in the SSA disability programs, the availability and quality of community-based employment supports, and strengths and weaknesses in the delivery of BPAO services. These findings could form the basis for future efforts at improved service delivery and overall SSA policy reform.

Benefits Planninng for Individuals with Traumatic Brain Injury: First Step on the Road to Employment

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Abstract

Advancements in modern medicine have improved survival rates of individuals with traumatic brain injury (TBI). Young working age individuals, age 22-39, comprise 44% of the TBI sample. Integration into competitive employment is necessary to improve their self-esteem, self-sufficiency, and quality of life. The most daunting impediment to gaining successful employment is the potential loss of government-supplied benefits. Programs have been enacted to offset the risk of losing benefits. With the proper advisement of federal work incentives and provisions, individuals with TBI who are motivated to seek self-sufficiency by gaining and retaining competitive employment can do so with less perceived financial and health risk. We examine the demographics of individuals with TBI and discuss the plethora of benefits counseling conducted under the Benefits Assistance Resource Center using the National Benefits Planning Assistance and Outreach database compiled by Virginia Commonwealth University. The authors examine trends in employment status at intake of individuals with TBI and discuss how they compare to individuals with other disabilities. Persons with TBI receive a lower percentage of Supplemental Security Income (SSI) and a higher percentage of Social Security Disability Insurance (SSDI) than persons with other disabilities. Social Security disability status is one of the primary determinants of which incentives and provisions a client receives.

I. Introduction and Review of Literature

The Centers for Disease Control reports an average incidence of 1.4 million traumatic brain injuries, or TBI, per year (Langlois, Rutland-Brown, & Thomas, 2004). At least 5.3 million Americans are living with disabilities acquired from TBI (Thurman, Alverson, Dunn, et al., 1999). Young adult males have the highest risk in sustaining TBI (Abrams, Barker, Haffey, et al., 1993). Because survival rates after injury have dramatically increased due to medical advancements, patients are anticipated to have long life expectancies, giving rise to concerns of employability after recovery.

Employment has many positive effects on individuals with disabilities. These include rehabilitation (Melamed, Groswasser, & Stern, 1992), quality of life ((O'Neill, Hibbard, Brown, et al., 1998), and social integration, home and leisure, and financial status (Abrams, et al., 1993). Being unemployed has negative effects for individuals with disabilities, as well as on society. Not only does lack of success in returning to work affect the lives of these individuals, but the high unemployment rate also becomes a significant social burden. It increases the expenditures associated with Social Security disability benefits such as Supplemental Security Income (SSI) and Social Security Disability Insurance (SSDI).

High post-injury unemployment rates are persistently being reported. The post-injury employment rates vary widely, ranging from 10% to 70%, whereas the pre-injury employment rates range from 61% to 75% (Ben-Yishay, Silver, Piasetsky, et al., 1987; Fraser, Dikmen, McLean, et al., 1988; Ip, Dornan, & Schentag, 1995; McMordie, Barker, & Paolo, 1990).

Traumatic brain injury (TBI) can result in a variety of cognitive deficits, impaired psychosocial functioning, and impaired physical or sensory functioning (Horn, & Sherer, 1999). As a result, individuals with TBI often experience difficulty becoming competitively employed post-injury and maintaining

employment for extended periods of time (Asikainen, Kaste, & Sarna, 1998; Curl, Fraser, Cook, et al., 1996; Keyser-Marcus, Bricout, Wehman, et al., 2002; Kreutzer & Morton, 1988; McMordie & Barker, 1988).

Much of the prior research has focused on the symptoms and conditions of the individuals that influence returning to work – the measurable, functional deficits that persist in the patient after recovery. It is becoming increasingly important to examine returning to work after TBI as an interaction between the needs and motivations of the individuals with TBI and the supports available within vocational, social and economic environments (Kowalske, Plenger, Lusby, et al., 2000; Ruffalo, Friedland, Dawson, et al., 1999; West, 1995). Factors that lead to successful employment include socially inclusive work environments and availability of health insurance (West, 1995), level of social interaction on the job and return to jobs with greater decision-making latitude (Ruffalo, et al., 1999), and environmental modifications and focusing on vocational strengths of the individual (Kowalske, et al., 2000).

Despite the numerous ways in which employment enhances the quality of life, probably the biggest barrier on the road to employment is the fear of losing disability benefits. An individual is deemed to be engaging in "substantial gainful activity" (SGA) if his or her income exceeds $830 per month (Social Security Administration, 2005). Once a beneficiary has demonstrated a pattern of countable earnings that exceed the current SGA guideline, cash benefits may cease. Even modest gains in employment can put the individual at risk for losing their health care benefits. When the choice is between living in poverty without health care, or being unemployed and receiving federal income assistance and health care, it is rational that the psychosocial rewards of employment will be outweighed by the economic losses that will follow from employment.

To alleviate this concern, Congress has enacted a number of work incentives for SSI and SSDI beneficiaries (Social Security Administration, 2000). These work incentives would allow them to keep more of their earnings while retaining their benefits. Some of the most commonly used work incentives include:

- 1619(a) and (b) Impairments,
- Impairment Related Work Expenses (IRWE),
- Trial Work Period (TWP),
- Plan for Achieving Self-Support (PASS),
- Extended Period of Eligibility (EPE), and
- continued payment under a vocational rehabilitation program.

However, the Social Security Administration (SSA) reported that these work incentives were underutilized by SSI and SSDI beneficiaries (U.S. GAO, March 1999). The reasons cited for

1. few beneficiaries knew that the work incentives existed; and
2. those who were aware of the incentives thought that they were complex, difficult to understand, and of limited use when entering low-paying employment (U.S. GAO, March 1999).

National BPAO Program

The National Benefits Planning Assistance and Outreach (BPAO) program, funded by SSA, was established by the Benefits Assistance Resource Center of Virginia Commonwealth University to provide training and technical support to 117 organizations nationwide. Each project presides over one or more "sites" under which one or more Benefits Specialists advise individuals with disabilities on benefit programs (e.g., Medicare), work incentives (e.g., TWP), and provisions (e.g., Ticket-to-Work), and the federal rules that govern them. The mission of BPAO is to promote and improve self-sufficiency for individuals with disabilities.

In this article, the authors focus on employment as one of the primary objectives of BPAO. Characteristics of individuals with TBI who sought services from the BPAO projects are presented, as well as a summary of the services, incentives, and recommended provisions. Finally, the authors discuss how an individual's employment status at intake might impact how, and in what proportion, those services were delivered.

The majority of beneficiaries enrolled in the BPAO program seek either to enter the workforce or improve the jobs they currently have. Only 11% of individuals with TBI were unemployed and not seeking employment at the time of enrollment. Nearly all of the individuals with TBI in the BPAO program are of working age; 48% are between age 22 and 39, and 43% are between ages 40 and 59. A fundamental goal of BPAO is to reach out to those individuals with disabilities and provide them with as much assistance, encouragement, and support as possible so that they will be motivated to return to the work force. To illustrate the issues an individual with TBI faces on the road to employment, the authors present a case study of one participant from the New Mexico Work Incentives Now (WIN) BPAO.

II. Case Study

Joseph Miller lives alone in Public Housing in a rural New Mexico community, population 9,500. He is 48, unmarried, and employed at the time enrollment. He did not earn a lot of money at his job prior to the car accident that caused his brain injury, so he was receiving concurrent Supplemental Security Income (SSI) and Disability Insurance (SSDI) benefits at the

time of self-referral. Two of Joseph's sisters were helping him; they were suspicious of the New Mexico WIN BPAO program, because they feared that Joseph would lose his benefits if he talked to the project personnel. Joseph worked at a convenience store at the time of referral. He was concerned about the amount of money he could earn and still retain his benefits.

TWP is a work incentive that individuals who receive Social Security benefits can use to test their work skills while maintaining full benefits, despite how much income they earn. There are nine TWP months, and they can occur any time during a rolling period of 60 consecutive months. The only months that count toward the TWP are either those for which the individual earns more than $590, or works more than 80 hours in self-employment. Joseph's sisters had pressured him to remain under-employed so that he would not use any of those TWP months or put his social security benefits in jeopardy. Joseph's potential success in obtaining and retaining employment and self-sufficiency required that his sisters be involved in his benefits counseling and that their misconceptions be corrected.

A certified specialist, or Benefits Advisor, was dispatched to the community to meet with Joseph and one of his sisters. TWP was explained, and it was emphasized that Joseph did not need to hoard the qualified months. The Benefits Advisor educated the family on countable income, the extended period of eligibility, impairment-related work expenses and subsidy as the means to protect Joseph until he became more self-sufficient. The advisor also taught them about Title XVI benefits, including threshold for that year, but this was not the concern for the family.

Joseph's sister refused to let him sign a benefits planning query (BPQY), because she feared that this would arouse the attention of SSA. They were advised that there was a limited amount of help that the Benefits Advisor could provide if they could not verify Joseph's benefits.

During the following year, Joseph called frequently to ask questions about TWP, IRWE, Subsidized Housing, and most importantly, threshold. It is common for those who have TBI to forget what they have been told, and to require many repeated explanations.

Last year, Joseph stopped working, due to having surgery for other conditions deriving from his accident, but since his recovery, he has been looking for work. Joseph will go months without calling the Benefits Advisor, then will call daily, asking again and again what the threshold amount for the year is, or if the rules for Subsidized Housing still stand at his Housing and Urban Development agency.

Attempts were made to connect Joseph with the brain injury agency in the state. With no local TBI service provider, Joseph

Ongoing Concerns

Forgetting

Joseph will frequently not remember what has been told to him, and if information is sent in writing, he will lose it. The Benefits Advisor must have patience in repeating and resending information. Consequently, Joseph finally signed a benefits planning query, because he felt he had someone on whom he could rely and who would give him accurate information.

Decision-Making

Joseph remembers that he was able to work at a higher level than he has achieved post-injury. He tends to look for jobs as a substitute teacher or manager of a kitchen, which may be out of his ability level. The Benefits Advisor always has to make the referral to the appropriate agency to help with vocational goals, and focus on what happens to his benefits, but not make the decision on what work he can or cannot do.

Communication

Communication with the Employment Network (EN) is essential. In Joseph's case, it was suggested that a PASS be written so that Joseph could obtain a thorough vocational assessment and receive job development, as there are not many EN choices available to him.

Family Involvement

Generally, the family will either draw away from or overprotect the person with TBI. The Benefits Advisor might want to involve the family as much as possible while trying to avoid becoming entangled in family dynamics.

Anger/Affect Management

Joseph has not displayed problems in this area, but several other individuals with TBI find it a problem. Referrals to the mental health or primary care provider can help if this becomes a problem. Sometimes, a Benefits Advisor can find herself at cross-purposes with other care providers. Education of providers or practitioners is necessary to help them understand that Joseph can work and has safety nets as he attempts self-sufficiency.

III. Individuals with TBI Enrolled in BPAO

This case study illustrates the need for effective benefits counseling. Many individuals with TBI desire competitive employment, but fear they would lose most, if not all, of their disability benefits, such as income assistance and health care. Prior to the federal Ticket to Work and Work Incentives Improvement Act (TTWWIIA) of 1999, which established work incentives to address and counteract this vicious cycle, individuals with disabilities were forced to choose between employment and

health care. This Act implemented incentives for the individual to attempt to enter, or re-enter, competitive employment, without the fear of losing income assistance or health care benefits. A primary function of BPAO is to 'get the word out' about these incentives and to debunk the prevailing myth that employment equals loss of benefits.

The National BPAO database contains records for 190,801 individuals with disabilities, 6155 (3%) of which declared TBI as the primary disability. The data presented in this article are current through August 19, 2005. For this discussion, the authors differentiate between the employment status of the individual at intake: employed (part-time or full-time), not employed but seeking employment, and unemployed and not seeking employment. By comparing the group of individuals with TBI to the group having other disabilities, and by examining their demographic, and discussing the incentives and provisions recommended to them upon intake, we hope to gain insight about the current vocational interventions, and perhaps more importantly, how best to serve these individuals as they seek competitive employment.

Demographics

In the TBI group, individuals seeking services from BPAO projects are largely of working age; nearly 90% are between the ages of 22 and 59, with 44% age 22-39. Of the 3816 individuals with TBI who are unemployed and seeking employment, 43% are under the age of 40 (see Table 1 below). There are 673 individuals with TBI who were both unemployed and not seeking employment at intake; half of them are under the age of 39. This compares unfavorably with the group of individuals with other disabilities, where 43% of those age 39 and under are not seeking employment.

The national average rate of TBI incidence among males is 1.5 times higher than the rate of TBI among females (Langlois, et al., 2004). For BPAO data, TBI incidence among males is 1.7 times higher than the rate for females. Table 2 below shows that the gender distribution of individuals with TBI reflects that of the national average of males with TBI. Males comprise 63% of the TBI group. The proportion of males that are either employed, or unemployed but seeking employment, reflect the overall percentages of males in the TBI group.

However, the percentage of males with TBI that are unemployed and not seeking employment is somewhat lower (59%). A similar trend is seen among those having other disabilities, where 52% of those unemployed and not seeking employment are female, when the overall percentage of females with disabilities is 50%.

Unemployed females not seeking employment do so at a higher rate than average compared to males regardless of disability, but this is more marked in the TBI group. The reason for this may be explained by cultural norms, where there is less expectation for women to work. They may either be married and supported by a spouse or are being cared for by their parents.

Table 1: Age Distribution of Individuals by Employment Status at Intake

Age	Employed	Seeking Employment	Not Seeking Employment	Total
TBI	(N = 1529)	(N = 3816)	(N = 673)	(N = 6018)
Under 22	6.34	6.16	9.81	6.61
22-39	48.07	42.82	39.08	43.74
40-59	42.71	48.66	47.99	47.08
Over 60	2.88	2.36	3.12	2.58
Other	(N = 40995)	(N = 110736)	(N = 23147)	(N = 174878)
Under 22	9.28	8.24	14.84	9.36
22-39	37.79	32.07	27.89	32.85
40-59	48.19	53.94	49.86	52.05
Over 60	4.74	5.75	7.41	5.73

Table 2: Gender Distribution of Individuals by Employment Status at Intake

Gender	Employed	Seeking Employment	Not Seeking Employment	Total
TBI	(N = 1534)	(N = 3835)	(N = 675)	(N = 6044)
Male	64.93	63.65	58.52	63.40
Female	35.07	36.35	41.48	36.60
Other	(N = 41169)	(N = 111128)	(N = 23356)	(N = 175653)
Male	49.71	49.90	47.67	49.56
Female	50.29	50.10	52.33	50.44

Social Security and Other Benefits

The most prevalent Social Security benefit received by all individuals is SSDI. Table 3 below shows that SSDI is more common in the TBI group (60% vs. 53%), and Social Security Income (SSI) is less common for individuals with TBI (24% vs. 30%, respectively). Unemployed individuals with TBI that are not seeking employment receive a lower percentage of SSDI and a higher percentage of concurrent benefits. Benefits specialists speculate that the complex nature of concurrent benefits may itself be the disincentive to obtain employment. When the impact of employment is explained to concurrent beneficiaries, they become confused, wary, and ultimately, disinterested.

Employed individuals with TBI receive more Medicare and less Medicaid than their counterparts with other disabilities (Tables 4 below and 5 on the following page). Medicaid is available immediately upon receipt of SSI. Medicare requires the beneficiary to fulfill a two-year Medicare Qualifying Period (MPQ) before health benefits begin. If beneficiaries with TBI are seeing benefits specialists soon after injury, or soon after receiving benefits, they would not have Medicare yet, since the MPQ was not yet served. While the person is waiting to qualify for Medicare, he or she can get Medicaid if he or she is financially eligible for some category of coverage. Presumably, an individual with TBI is referred to benefits counseling early in the disability process, such as immediately after his or her initial rehabilitation program. If this is the trend, then the MPQ would not be served, which means the incidence of Medicare coverage would be lower among persons with TBI.

Table 3: Social Security Benefits Received by Employment at Intake

SS Benefit	Employed	Seeking Employment	Not Seeking Employment	Total
TBI	(N = 1510)	(N = 3764)	(N = 603)	(N = 5877)
SSI	21.26	24.50	25.54	23.77
SSDI	61.59	59.46	56.05	59.66
Concurrent	17.15	16.05	18.41	16.57
Other	(N = 39413)	(N = 106893)	(N = 20507)	(N = 166813)
SSI	27.68	30.22	35.99	30.33
SSDI	55.05	53.37	48.75	53.20
Concurrent	17.27	16.41	15.26	16.47

Table 4: Distribution of Other Benefits Received by Individuals with TBI by Employment Status at Intake

Other Benefit	Employed	Seeking Employment	Not Seeking Employment	Total
Medicare	62.32	57.55	48.30	57.75
Medicaid	50.65	51.11	44.15	50.22
Private Health Insurance	10.37	7.30	5.19	7.84
Subsidized Housing	8.15	9.52	8.15	9.02
Food Stamps	10.82	16.56	12.74	14.68
TANF	0.59	0.83	1.33	0.83
Workers Compensation	0.33	0.76	1.33	0.71
Unemployment Insurance	0.33	0.47	0.30	0.41
Veterans Benefit	0.65	1.56	1.63	1.34
Other Benefit	9.78	9.00	16.74	10.06

Table 5: Distribution of Other Benefits Received by Individuals with Other Disabilities by Employment Status at Intake

Other Benefit	Employed	Seeking Employment	Not Seeking Employment	Total
Medicare	56.74	53.13	40.37	52.29
Medicaid	54.88	52.59	47.32	52.42
Private Health Insurance	7.30	5.07	4.40	5.50
Subsidized Housing	11.08	9.61	7.61	9.59
Food Stamps	12.75	18.34	13.06	16.33
TANF	0.79	1.13	0.98	1.03
Workers Compensation	0.31	0.53	1.00	0.54
Unemployment Insurance	0.19	0.37	0.27	0.31
Veterans Benefit	0.80	1.39	1.25	1.23
Other Benefit	10.94	9.56	16.70	10.83

Recommended Incentives and Positions

Tables 6 below and 7 on the following page show that benefits counselors recommend the following incentives more frequently to individuals with TBI regardless of employment status at intake: TWP, EPE, PASS, IRWE, Subsidy Development, and Extended Medicare. These work incentives are referred only to SSDI recipients. Persons with TBI receive more SSDI (60% vs. 53%, respectively), so those incentives are recommended more often. The incentives less commonly referred to individuals with TBI, regardless of employment status at intake, are 1619(a) and 1619(b). The 1619(a) and 1619(b) work incentives are recommended only to SSI recipients, and persons with TBI receive a lower percentage of SSI benefits than do those with other disabilities (24% vs. 30%, respectively).

Table 6: Distribution of Recommended Incentives for Individuals with TBI Employment Status at Intake

Recommended Incentive	Employed	Seeking Employment	Not Seeking Employment	Total
TWP	60.69	65.11	46.07	61.89
EPE	58.87	60.89	41.63	58.22
PASS	20.47	21.77	16.15	20.81
IRWE	49.48	52.20	29.04	48.92
1619(a)	16.17	17.78	10.67	16.58
1619(b)	31.23	31.76	22.07	30.54
Medicaid Buy-In	24.84	21.43	17.48	21.86
Blind Work Expense	0.26	0.23	0.15	0.23
Student Earned Income Exclusion	2.09	1.62	1.93	1.77
Subsidy Development	19.56	18.90	11.11	18.20
Extended Medicare	32.01	36.25	22.07	33.59

Table 7: Recommended Incentives for Individuals with Other Disabilities by Employment Status at Intake

Recommended Incentive	Employed	Seeking Employment	Not Seeking Employment	Total
TWP	54.52	57.49	36.58	54.01
EPE	52.46	53.35	32.50	50.37
PASS	18.42	20.29	13.97	19.01
IRWE	46.19	47.71	25.52	44.40
1619(a)	17.73	18.32	11.45	17.27
1619(b)	33.96	34.53	23.59	32.94
Medicaid Buy-In	24.00	19.37	12.46	19.53
Blind Work Expense	2.04	1.48	1.09	1.56
Student Earned Income Exclusion	2.62	2.33	4.04	2.63
Subsidy Development	15.32	13.02	7.70	12.85
Extended Medicare	29.68	30.91	17.60	28.85

Provisions are recommended to beneficiaries in roughly equal proportions regardless of disability, but there are some exceptions. Individuals who are not seeking employment receive fewer referrals to all of the provisions than beneficiaries who are either employed or unemployed and seeking employment. Benefits counselors tend to discuss Ticket to Work benefits only with those individuals with TBI who are employed or express interest in becoming employed.

Individuals with TBI who are employed or seeking employment receive more recommendations for Section 301 and Unsuccessful Work Attempt (UWA). Section 301 allows a beneficiary to retain benefits while completing an approved vocational program. To receive the Section 301 provision, medical recovery must be a possibility. It is possible that clients receiving Section 301 are in the process of being re-trained, or attending school while working, and run a higher risk of SSA finding them no longer disabled upon review. Section 301 protects them from loss of benefits if this happen. Persons with TBI get referred to UWA more frequently because they might be expected to try to return to work. Benefits Specialists may assume that these individuals' attempts to work will be short in duration and unsuccessful. Perhaps TBI beneficiaries tell the specialists that they have tried to work in the past, and it was unsuccessful.

Individuals with TBI who are seeking employment receive fewer referrals for the Ticket-to-Work (TTW) than those with other disabilities. Perhaps TBI beneficiaries are saying they do not plan to work at a substantial level which would result in the loss of benefits. If a person only wishes to work part-time and is not willing to give up cash benefits, they are not considered a good TTW candidate.

Table 8: Distribution of Recommended Provisions for Individuals with TBI by Employment Status at Intake

Recommended Provision	Employed	Seeking Employment	Not Seeking Employment	Total
Property Essential to Self Support	5.28	4.56	2.22	4.48
Expedited Reinstatement of Benefits	28.75	29.86	18.37	28.29
Ticket-to-Work	30.51	42.89	27.70	38.05
Continuing Disability Review Pro-tections	17.14	21.51	14.96	19.67
Section 30	7.76	8.34	9.33	8.31
Unsuccessful Work Attempt Provision	9.97	12.54	6.52	11.22

Table 9: Distribution of Recommended Provisions for Individuals with Other Disabilities by Employment Status at Intake

Recommended Provision	Employed	Seeking Employment	Not Seeking Employment	Total
Property Essential to Self Support	4.65	4.39	2.65	4.22
Expedited Reinstatement of Benefits	26.17	26.89	15.73	25.24
Ticket-to-Work	30.51	46.60	26.88	40.21
Continuing Disability Review Protections	16.53	20.87	14.70	19.03
Section 30	5.35	6.58	5.94	6.21
Unsuccessful Work Attempt Provision	8.40	9.91	6.64	9.13

Limitations and Conclusion

Researchers are just beginning to look at retention, and few studies currently exist. BPAO would help folks determine the best way to get prolonged job tenure without jeopardizing their benefits such as Medicaid. The cohort that does not wish to work should be studied in more detail to ensure the barriers they perceive are not imaginary. A followup analysis on the BPAO TBI cohort would be extremely beneficial. An empirical analysis of the link between benefits counseling and successful employment outcomes might provide a useful starting point to design more effective approaches to counsel persons with TBI, or to provide employment counseling to persons with TBI.

Over 60% of individuals with TBI enrolled in BPAO are unemployed and want to work. A mere 11% of them are unemployed and not seeking jobs. The disincentives for individuals with TBI to return to work are slowly crumbling as benefits counseling becomes more prevalent.

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Service Intensity and Job Tenure in Supported Employment

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Abstract

The principle of ongoing support for individuals with psychiatric disabilities remains underspecified. Specifically, what supports are needed, for how long, and at what intensity, for which kinds of clients, has not been empirically established. The current study aims to provide descriptive and correlational information on a variety of questions, such as what is the typical intensity of services for clients with psychiatric disabilities enrolled in evidence-based supported employment after they obtain a competitive job? Where and how is this support given? What is the time course of this support? Does the intensity decline over time? and three, what is the relationship between intensity of support and job retention?

I. Introduction

Within the vocational rehabilitation field, one success story has been the emergence of the Individual Placement and Support model of support employment for clients with psychiatric disabilities (Becker & Drake, 2003). The core principles of this model are:

1. a focus on competitive employment (which refer to regular community jobs, with nondisabled coworkers, paying minimum wage or higher),
2. eligibility based on consumer choice,
3. rapid job search,
4. integration of mental health and employment services,
5. attention to consumer preference in the job search,
6. individualized job supports, and
7. personalized benefits counseling (Bond, 2004).

Because of the superior competitive employment outcomes for clients enrolled in these programs compared to other vocational services (Bond, Drake, & Becker, in press), this model has been identified as evidence-based supported employment. However, despite consistently strong findings, it has been frequently observed that the strongest findings have been for job acquisition, and that the findings for job retention have been less consistent (Wallace & Tauber, 2004). In other words, the challenge for people with severe mental illness is not so much in finding jobs as in keeping them (Bond, Drake, Mueser, & Becker, 1997).

Ongoing support from a supported employment team has been hypothesized as a key to enhancing job retention of individuals with disabilities after they obtain competitive work. Tracing supported employment back to its roots, one of the original formulations was the job coach model in which the traditional "train-place" vocational rehabilitation approach was replaced with the "place-train" approach, which recognized the need for intensive assistance to clients after they obtained competitive employment (Wehman, 1986).

Regarding the first question (intensity of support), several early studies attempted to establish baseline data about the frequency of employment specialist contact in supported employment programs (Bond, Miller, & Dietzen, 1992; Bybee, Mowbray, & McCrohan, 1996; MacDonald-Wilson, Revell, Nguyen, & Peterson, 1991; Rogers, MacDonald-Wilson, Danley, Martin, & Anthony, 1997). These studies yielded widely varying estimates of service intensity, with hours of contact per month ranging from

1.7 (Bybee et al., 1996) to 14.8 (MacDonald-Wilson et al., 1991). Moreover, because these studies were conducted before the advent of evidence-based supported employment, they may have little relevance to current practice.

Regarding the second question (the pattern of support over time), the scant evidence on this issue suggests that service intensity typically declines rapidly after job placement. In the original job coach model, designed for clients requiring intensive training at the job site, services were intended to be "faded" once clients obtained the skills necessary to perform job duties (Wehman, 1986). It has never been clearly established – theoretically or empirically – whether the same pattern of service intensity should hold for people with psychiatric disabilities, most of whom have different service needs. Clearly, the generally accepted view of job support differs for people with psychiatric disabilities, with the bulk of the support provided outside the work place (Becker & Drake, 2003). Thus, the rationale in the job coach model for tapering off support as the client learns the job is not directly relevant to evidence-based supported employment for people with psychiatric disabilities. MacDonald-Wilson and colleagues (1991) found that clients with non-psychiatric disabilities received the bulk of their service hours at the start of services with a gradual tapering off, whereas consumers with psychiatric disabilities showed a rapid decrease in service hours followed by periodic spikes of increased hours. Two other studies have also found a sharp decline in the intensity of service shortly after job acquisition (Anderson, 1999; McGuire, 2005). Of course, another factor influencing the intensity of services is likely to be funding considerations. Since the state vocational rehabilitation system provides short-term funding for clients, it has always been problematic securing long-term funding to pay for ongoing support for clients once they attain a successful closure, ordinarily 90 days after start work (Fraser et al., in press).

Regarding the third question (the relationship between ongoing support and job retention), there is surprisingly little direct evidence demonstrating a positive link. McHugo and colleagues (1998) found that clients who continued to receive professional support 3.5 years after entering a supported employment program were far more likely to be working than those who no longer had that support. In two long-term studies, clients who maintained relatively stable employment over an 8 to 12 year period indicated that ongoing professional support was a primary factor in their continued success (Becker, Whitley, Bailey, & Drake, 2007; Salyers, Becker, Drake, Torrey, & Wyzik, 2004). These two long-term studies, however, were based on retrospective self-reports.

Prospective quantitative studies generally have failed to show a relationship between service intensity obtaining a job and job retention. Leff and colleagues (2005) found a positive correlation between job support and job retention in a multi-site study with 1,340 clients receiving either supported employment or services as usual. However, their statistical model did not show a temporal relationship between receipt of job support and subsequent job retention. Their data were also complicated by the inclusion of control subjects who received little job support and may have distorted the study findings. Bond and colleagues (1992) found positive correlations between service intensity and job retention; however, intensity of service provided after job placement was not related to job retention. McGuire (2005) also failed to uncover any strong relationships between service intensity and work outcome once program dropouts were removed. Thus, in all three of these studies, the service intensity-job retention relationship appears to have been shown only when the analyses included clients who never worked at all. In other words, these studies may have shown the role of employment specialist assistance in finding work, but all failed to show any influence of ongoing support.

Using a large administrative data set, Jones and colleagues (2001) examined service time recorded by employment specialists for billing purposes, including categories such as travel, training clients, job-related advocacy, non-job advocacy, and evaluation. Similar to the preceding studies, the authors found that clients who obtained employment received more hours of service contacts than their non-working counterparts, thus supporting the hypothesis that service intensity increases the chances of a client obtaining a job. Their more detailed findings were puzzling, however, in that travel, non-job advocacy, and training emerged as the strongest predictors of this association.

Anecdotal evidence suggests that there may not be a simple linear relationship between intensity of job support and job tenure for clients who obtain work. For example, among clients who are employed, some maintain employment over a long period of time with apparently little assistance from the supported employment team, whereas others, even though they continue working, are in constant demand for the team's assistance. Accordingly, some researchers have hypothesized that clients with greater cognitive impairments and more severe psychiatric symptoms require more employment specialist time to compensate for these impairments. The findings from two small studies are consistent with this compensatory hypothesis. McGurk and colleagues (2003) found an association between cognitive impairments and both the number of hours of on-job support and the total number of employment specialist contacts. However, higher level of support did not fully compensate for the higher levels of impairment, because cognitive deficits and negative symptoms were negative correlated with employment outcomes. In a second study, Zito, Greig, Wexler, and Bell (2007) identified a subgroup of "socially inattentive or avoidant" clients "require more specialist contact because of failure to adequately engage natural supports at work." Also consistent with the view that increased service intensity may be associated with poorer job outcomes is an analysis of a large administrative data set that found "…among individuals who lost employment, service utilization was found to increase prior to the loss of employment" (Han-

nah & Hall, 2006, p. 287). Interpreting these results, it seems plausible to conclude that contacts may increase at the time when clients are in more need of intervention.

Many other factors also are hypothesized to influence job tenure. For example, in addition to support from the supported employment team, clients typically receive help from other professionals, such as mental health case managers. No studies have directly examined the role of the treatment team, although the indirect evidence is strong that their role is important (Drake, Becker, Bond, & Mueser, 2003). Support from nonprofessionals, such as supervisors, coworkers, and family members – called natural supports (Test & Wood, 1996) – is also believed to be instrumental in helping clients maintain employment. One influence on job retention that has been researched is job match. Clients who obtain jobs suited to their preferences stay in their jobs longer (Becker, Drake, Farabaugh, & Bond, 1996; Gervey & Kowal, 1995; Huff, Rapp, & Campbell, 2008).

In summary, even though it is one of the pillars of the supported employment model, we have little direct evidence for the hypothesis that ongoing support contributes to job retention. In fact, the scant evidence available is confusing and contradictory. The current study, aimed at addressing this question systematically, by focusing on clients after they obtain a competitive job, thereby clarifying one of the ambiguities in the literature.

A secondary goal of this study was to assess the feasibility of a web-based data collection procedure, with monthly data collection, with the intent of enhancing the quality of service data. The reliability and validity of service data collected in many prior studies have been suspect, due to a variety of issues. One has been the credibility of large administrative data sets (Drake & McHugo, 2003). Anecdotal evidence confirmed that employment specialists did not consistently enter service in one project because of their unfamiliarity with the electronic record system (McGuire, 2005). Recording of data through paper reports for research purposes has its own pitfalls, especially when the data collection is not closely monitored. Thus we sought to develop a simple, cost-effective method of data collection that would capitalize on the growing innovation in web-based surveys, pairing this with a reminder system to prompt frequent recording of service contacts (Grimshaw et al., 2001; Solberg, 2000).

II. Methods

Resesarch Design Overview

This preliminary report is based on data from an ongoing prospective longitudinal study of 144 individuals with severe mental illness who obtained competitive employment after enrollment in moderately high fidelity supported employment programs located 4 sites in the Midwest United States. Because data collection is ongoing, only a subset of the full sample enrolled is examined and only a portion of the entire set of variables is reported below.

At study enrollment, baseline data were collected on employment history, demographic variables, diagnosis, Social Security entitlements, and information about the client's current job. Clients are being tracked over a two-year period using monthly reports completed by their employment specialists, using either web-based surveys or paper versions of these surveys. Monthly data collection includes information on employment outcomes (i.e., hours worked per week, days worked, wage rate), employment changes (i.e., job starts, job losses, and changes within jobs) and follow-along support (i.e., type, intensity, and context of support) provided by employment specialists.

The date of enrollment for the last client was June 2007; hence, data collection will end in June 2009. This study was reviewed by the Indiana University Purdue University Indianapolis Institutional Review Board and was deemed an exempt study.

Study Sites

Four provider agencies (three community mental health centers (CMHCs) and one free-standing psychiatric rehabilitation center) identified through the professional network of the first author, agreed to participate in this project. Each of the 3 CMHCs had a single supported employment team from which the sample was obtained, while the psychiatric rehabilitation center had three different supported employment teams from which study participants were drawn. We had several site inclusion criteria related to type of clients served and quality of services. To be eligible, sites were required to serve individuals with psychiatric disabilities and to provide both evidence-based supported employment and comprehensive mental health treatment, including residential services, medication management, and case management.

To ensure evidence-based supported employment, we used a 15-item Supported Employment Fidelity Scale (SE Fidelity Scale; formerly known as the IPS Fidelity Scale) (Bond, Becker, Drake, & Vogler, 1997). This scale is consistent with the principles of evidence-based supported employment. These principles have substantial empirical support (Bond, 2004). The SE Fidelity Scale is rated by one or more independent assessors who conduct a day-long fidelity site visit. Items are rated on a 5-point behaviorally anchored scale ranging from 1 (not implemented) to 5 (fully implemented). The 15 items are summed to give a total score ranging from 15 to 75. A score greater than 65 is regarded as high fidelity, while a score between 56 and 65 is considered moderate to low fidelity. Any score below 56 is an absence of fidelity, that is, very low fidelity (Bond, Becker et al., 1997). This is a well-validated scale that

has excellent interrater reliability and discriminates between programs adhering to evidence-based supported employment and other vocational models (Bond, Becker et al., 1997). Its predictive validity is suggested by several correlational studies showing that programs that score higher on the supported employment fidelity had higher competitive employment rates (Becker, Smith, Tanzman, Drake, & Tremblay, 2001; Becker, Xie, McHugo, Halliday, & Martinez, 2006; McGrew, 2007).

In the current study, fidelity was assessed by the first author at one site, by internal evaluators at a second site, and by a consultant from the state technical assistance center for the remaining two sites. For this study, we used a fidelity score of 60 or higher as the cut-off for study inclusion.

In November 2005, we began data collection, piloting our procedures at a local CMHC with a supported employment program with a fidelity score of 70. Establishing the feasibility of the methods, we expanded data collection to the remaining three sites. The fidelity scores from the remaining sites were: 61, 64, 64 at Site 2, 67 at Site 3, and 70 at Site 4. Thus 5 of the 6 programs had fidelity scores of 64 or higher.

Sample Characteristics

Participants were clients with severe mental illness over the age of 17 receiving supported employment services at one of the four participating sites. To be eligible, a client had to be identified by their employment specialist as meeting the study criteria:

1. currently working at least 10 hours per week in competitive employment and
2. having begun the competitive employment position within the preceding six months.

Procedure

At each site prior to study enrollment, the authors provided a project overview to the supported employment team consisting of the team leader and employment specialists. This overview was made in person at the first two sites and by teleconference at the remaining two sites. The project overview included detailed information on procedures such as study inclusion criteria and data collection procedures. Upon formal agreement to participate in the study, each site generated an initial list of clients who were eligible for the study. We relied on employment specialists to provide data; the exempt status of the study did not require client or employment specialist consent to provide employment or service data. Thus participation depended on employment specialist cooperation. Their participation was voluntary.

After the initial cohort was enrolled at each site, the team leader and employment specialist contacted the authors when a new client became eligible for the study (i.e., when a client obtained a competitive job working at least 10 hours per week). The client was then enrolled into the study and baseline information was completed by the employment specialist.

To date, 27 different employment specialists have assisted the research team by compiling and reporting the needed data: 12, 6, 6, and 3, respectively, at the four sites. These totals include staff turnover; there have been 8 staff resignations and 3 new staff hires during the study period.

The primary method of data collection was via the web at three of the four study sites. Specifically, employment specialists completed the baseline survey and monthly surveys ("Monthly Employment Update") via an online survey. The second author trained the employment specialists and their team leaders on using the online survey tool and completing the survey through this web based technology. Employment specialists receive a monthly email from the second author containing an electronic link to the survey, "Monthly Employment Update." The employment specialists then completed the online survey (via this link) for each client enrolled in the study. The same procedure was implemented for the baseline survey, with the exception it being a one-time survey filled out by the employment specialist upon client enrollment into the study. Employment specialists receive $15 for participating in the study and $5 per month per client enrolled in the study for filling out the monthly surveys. When employment specialist turnover occurs, new employment specialists are approached about the study and if they agree to participate in the study (all new employment specialists have agreed to participate), they are oriented to the study and trained in completing online surveys by the authors.

Data collection at the fourth site (the psychiatric rehabilitation center) was managed by a research assistant employed at the site. Employment specialists are required by the CMHC to fill out monthly logs on paper containing updated employment information and follow-along contacts for all the clients on their caseload, regardless of study participation. The research assistant then enters the data into an electronic database for each client in the study and forwards the completed database to the second author. For this site, quality control is assured by the second author, by cross-checking paper logs with the information entered into the electronic database. For all sites, quality control is also exercised via inspecting the data monthly for possible data entry errors. If a data entry error is suspected, the second author contacts the employment specialist serving a given client and confirms the data as entered, making corrections if necessary. The study investigators also have made periodic calls to the team leaders at each site to review the procedures to assess whether the data collection procedures are proceeding as planned.

Finally, we did have one self-report instrument we requested on a voluntary basis from clients enrolled in the study; a job

satisfaction survey administered by employment specialists during the first 8 weeks of a client's enrollment. Informed consent is obtained from clients who wish to participate. Clients are paid $10 for filling out this one-time survey.

Measures

Baseline information. At study entry, demographic, work history, and clinical information was collected.

Job satisfaction. We used a 16-item job satisfaction checklist developed by Huff (2005). (This measure is not included in the current report.)

Monthly Employment Update. The Monthly Employment Update includes a service log form developed after examining service logs used in prior supported employment studies (Bond et al., 1992; MacDonald-Wilson et al., 1991; Rogers et al., 1997). Each contact is coded for type, intensity, and context. Categories for type of contact are face-to-face, telephone, and email. Intensity of contact is measured by number and duration of contacts. Context is coded according to location of contacts on behalf of each specific client, and who is present. The Monthly Employment Update also assesses employment status (employed, unemployed), job losses, job starts, type of new job (job category, i.e., retail), days worked during last month, changes in hours worked per week, changes in wage rate, and any other relevant changes (i.e., the client did not work that month due to psychiatric hospitalization; client's job duties have significantly changed). The "Monthly Employment Update" is completed by employment specialists for each month at the start of the following month on behalf of each client enrolled in the study.

Statistical Analysis

Data were analyzed using SPSS 15.0. Frequencies and descriptive statistics were used to characterize the data, including demographics of the sample, job tenure outcomes, employment outcomes (i.e., hours worked per week, total days worked in the month), types of jobs worked, and the intensity, duration, and nature of follow-along contacts across time. In regards to job tenure, this study addressed three primary outcomes: the number of months worked at initial job, the average number of months spent at any one job, and the number of months between the end of the first job and the start of the second job. In order to investigate the relationship between intensity of job support and job tenure, Pearson correlations and t tests were used. Finally, we compared three subgroups: clients who worked a single job for the entire 12-month period, clients who left their first job before the end of 12 months, and not start another job within the follow-up period, and clients who held two or more jobs. We used one-way analysis of variance to compare these three groups, with post hoc comparisons (Tukey's Honestly Significant Differences).

III. Findings

Sample Characteristics

A total of 143 clients were enrolled in the study between November 2005 and July 2007 (53, 46, 18, and 26 clients, respectively from the 4 sites). In this report we examine data for the initial cohort of 52 clients, for which 12 months of data collection has been completed; 38 from the initial pilot site (Site 1) and 14 from the psychiatric rehabilitation center site (Site 2). The current analyses excluded 5 dropouts whose cases were closed at their respective sites prior to the 12-month mark.

The sample included 41 (80.4%) Caucasians, 6 (11.8%) African Americans, 1 (2.0%) Hispanic, 2 (3.9%) Native Americans, and 1 (2.0%) Asian American (missing = 1). There were 29 (55.8%) men and 23 (44.2%) women and the mean age of the sample was 40.3 years. Twenty-three clients (44.2%) had a diagnosis of schizophrenia, 13 clients (25.0%) had bipolar disorder, 10 clients (19.2%) had schizoaffective disorder, 3 clients (5.8%) had major depressive disorder, and 3 clients (5.8%) had diagnoses that fit into the "other" category. Twenty-three clients (44.2%) had reached an education level of completing high school or GED, 11 had completed some college (21.2%), 5 had a bachelor's degree (9.6%), 5 had attended vocational school (9.6%), 4 had completed some high school (7.7%), and 2 had completed some elementary school (3.8%) (missing = 2). Prior to entering supported employment, 35 clients (67.3%) had worked in competitive employment, whereas 12 (23.1%) had never held a competitive job (missing = 5). The majority of clients were working less than two months at study entry (N=32; 74.4%), although 11 (25.6%) had been working more than two months (missing start date for 9 clients). Clients at Site 1 were working an average of 1.92 months at the point of study entry (SD = 3.05) whereas clients at Site 2 were working an average of 0.57 months at the point of study entry (SD = 0.91).

Employment Outcomes

Across 12 months, the total sample (N = 52) worked an average of 17 hours per week (SD = 11.1) and 11.7 days per month (SD = 7). Limiting the statistics to time periods in which clients were employed, clients worked an average of 23.5 hours per week (SD = 8.3) in weeks in which they were working and 16.6 days per month (SD = 4.2) in months in which they were working. Average wage rate for working clients was $7.60 per hour (SD = 1.84).

Type of initial job. Clients held a variety of jobs, as seen below in Table 1. The most common type of initial job was in retail, followed by food service and janitorial work. Other initial jobs commonly held by clients were in the fields of clerical work, technical work, customer service, jobs in the professional realm (non-clerical), and childcare.

Table 1: Job Types for Initial Job (N = 46)

Job Type	N (%)
Child Care	1 (2.2%)
Clerical	4 (8.7)
Customer Service	3 (6.5%)
Food Service	9 (19.6%)
Janitorial	6 (13.0%)
Professional (non-clerical)	2 (4.3%)
Retail	14 (30.4%)
Technical	4 (8.7%)
Other	3 (6.5%)

Note: Type of job unknown in 6 cases.

Job tenure. Clients averaged 8.53 months (SD = 5.04) in the job at which they were employed at study entry (including months worked prior to study entry). Overall, clients worked an average of 1.57 jobs (SD = .87) over the 12-month period. Seventeen clients (32.7%) remained employed at the same job for 12 months. Of the 35 clients (67.3%) changing jobs, 15 (42.9%) did not obtain another during the study period. Of the remainder who had multiple jobs, 12 (34.3%) had two jobs, 7 (20.0%) had 3 jobs, and 1 (2.8%) had 5 jobs over the 12-month period. During the 12-month period, clients averaged 6.95 months at any one job (SD = 4.40), and they averaged 7.81 months of employment across all jobs (SD = 3.77). Clients who had multiple jobs averaged 1.65 months (SD = 2.29) between the end of the initial job and the start of the second job.

We found some sites differences in job tenure favoring Site 2. Clients from Site 2 worked significantly longer at any one job, as compared with Site 1 (M = 9.29 months, SD = 4.06 for Site 1; M = 5.82 months, SD = 4.13 for Site 2), t (41) = -2.60, p = .01. Clients from Site 2 also worked fewer jobs overall (Site 1: M = 1.76, SD = 0.83; Site 2: M = 1.14, SD = 0.36), t (41) = 2.64, p = .01. There were no site differences in the number of months between the end of the initial job and the start of the second job (Site 1: M = 1.80, SD = 2.40; Site 2: M = 0.50, SD = 0.71), t (15) = 0.74, p = .50. Importantly, no differences were found between the sites on the number of months worked at the initial job (Site 1: M = 8.07, SD = 5.48; Site 2: M = 9.50, SD = 3.98), t (41) = -0.87, p = .39.

Job Support

Over the 12-month period, clients received a monthly average of 1.57 follow-along contacts (SD = 0.91) from employment specialists. Nearly 75% of contacts were face-to-face (M = 1.17, SD = 0.84), rather than via telephone or email, and took place at a variety of locations, including the job site, in the community, and at the agency office.

Employment specialists averaged slightly more brief contacts (< 30 minutes in duration) each month (M = 0.83, SD = 0.48) than long duration contacts (M = 0.71, SD = 0.73). Over 87% of the monthly employment specialist contacts were with the client present (M = 1.39, SD = 0.85). Nonclient contacts included meetings with job supervisors and family members. Because of the low frequency of contact with others, these data were not reported below.

As seen in Table 2 below, across the 12-month period, Site 1 averaged marginally significantly more monthly contacts (M = 1.85, SD = 1.04) than did Site 2 (M = 1.25, SD = 0.63), t (50) = 1.81, p = .08. The rate of monthly contacts was almost 50% greater at Site 1 than Site 2. Site 1 also averaged significantly more short-duration contacts (M = 0.95, SD = 0.46) than Site 2 (M = 0.50, SD = 0.37), t (50) = 3.28, p = .002. As seen in

Table 2: Mean Monthly Rates of Job Support Over 12-Month Period by Site

	Site 1 (N = 38)		Site 2 (N = 14)			
Variable	M	SD	M	SD	t	p
Total Contacts	1.72	0.95	1.17	0.64	1.99	.05
Type of Contact						
Face-to-Face Contacts	1.29	0.88	0.83	0.62	1.77	.08
Telephone Contacts	0.42	0.36	0.34	0.32	0.73	.47
Email Contacts	0.25	0.23	0.00	0.00	4.73	<.01
Location of Contact						
Agency Office	0.67	0.47	0.46	0.34	1.50	.14
Job Site	0.41	0.47	0.23	0.17	1.33	.19
Other Community Sites	0.65	0.73	0.36	0.47	1.36	.18
Duration of Contact						
Short Duration[1]	0.95	0.46	0.50	0.37	3.28	<.01
Long Duration[2]	0.75	0.76	0.62	0.68	0.56	.58

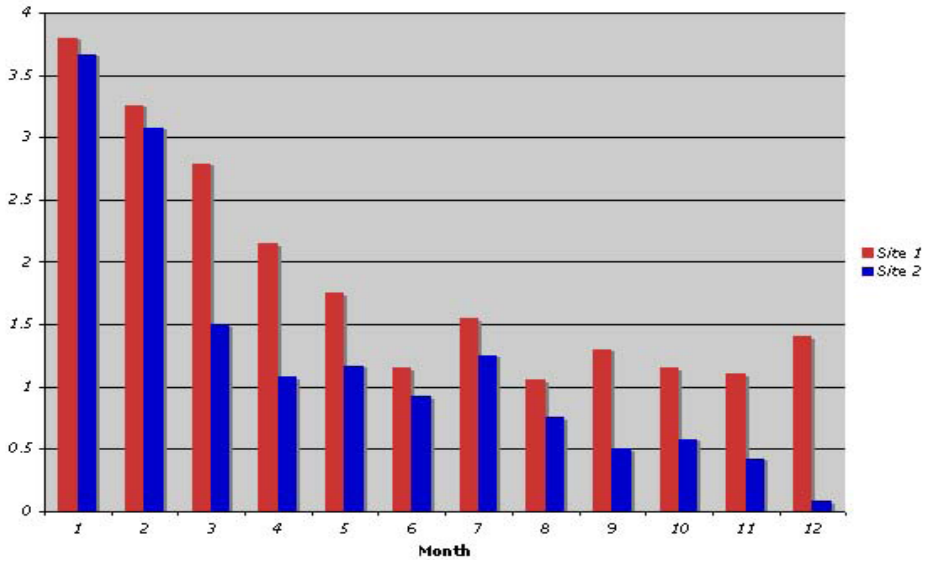
[1] 30 minutes or less [2] Greater than 30 minutes

Table 3 and Figure 1 below, the temporal pattern of monthly contacts suggests that the number of employment specialist contact tapered off over time. The pattern at Site 1 was a clear linear decline in mean monthly contacts from the first to the sixth month, showing a plateauing over the final six months hovering just above an average of one contact per month. The pattern at Site 2 was a more rapid decline by the third month, with a continuing linear decline over the 12 month period. By 12 months, employment specialist contacts had essentially ended. In the total sample there was an inverse relationship between the month in the study and the number of follow-along support contacts, $r = -.32$, $p < .01$. This relationship was more pronounced for Site 2 ($r = -.51$, $p < .01$) than Site 1 ($r = -.32$, $p < .01$).

Table 3: Number of Follow-Along Support Contacts Across 12-Months by Site for Clients Working Two Months or Less at the Point of Study Entry

	Site 1 (N = 20)		Site 2 (N = 12)			
Month	M	SD	M	SD	t	p
1	3.80	2.46	3.67	2.31	0.15	.88
2	3.26	3.16	3.08	2.39	0.17	.87
3	2.79	2.44	1.50	1.45	1.65	.11
4	2.15	2.11	1.08	1.17	1.60	.12
5	1.75	1.29	1.17	1.47	1.18	.25
6	1.15	1.09	0.92	1.00	0.61	.55
7	1.55	1.64	1.25	1.82	0.48	.63
8	1.05	1.36	0.75	0.87	0.69	.50
9	1.30	1.49	0.50	0.67	1.75	.09
10	1.15	1.27	0.58	1.00	1.32	.20
11	1.10	1.33	0.42	0.67	1.65	.11
12	1.40	1.70	0.080	0.29	2.56	.01
Total	1.85	1.04	1.25	0.63	1.81	.08

Figure 1: Number of Follow-Along Support Contacts Across 12 Months by Site



Relationship Between Job Support and Job Tenure

As seen in Table 4 on the following page, no relationship was found between mean monthly rate of contact (intensity of support) and job tenure outcomes, including months worked at any one job ($r = -.25$, $p = .10$) and months worked at the initial job ($r = -.20$, $p = .20$). There was also no significant relationship found between the mode of contact (i.e., the number of face-to face contacts) and duration of contact and job tenure out-

comes. However, mean monthly rate of contact at the agency office was negatively associated with months worked at any one job (r = -.32, p = .04). As noted previously, contacts with the clients' supervisors were rare, and the correlations with months worked at any one job (r = -.08) and months worked at the initial job (r = .05) were not significant.

Finally, we compared the group of clients who work the entire 12 month period to those who held a single job and lost it prior to the end of the 12 month period, and those who had multiple jobs (two or more) during the 12 month period. As seen below in Table 5, clients who had multiple jobs during the 12-month period had significantly more follow-along contacts than both other groups – i.e., those who had remained employed at the same job for the entire 12-month period and those who had one job and lost it prior to the end of the 12-month period. In addition, clients who had multiple jobs had significantly more contacts that took place at the agency office, as compared with clients who held the same job across 12 months. Finally, clients who had multiple jobs had more contacts in community locations (besides the job site) as compared with clients who had one job and lost it prior to the end of 12-month period. There were no significant differences between the three groups in the mode of contacts or typical duration of contact.

Table 4: Correlations Between Job Support Variables and Job Tenure Outcomes

Variable	Months in any one job (N = 43)	Months at First Job (N = 43)	Months From End of 1st Job to Start of 2nd Job (N = 17)
Total Contacts	-.25	-.20	.16
Type of Contact			
Face-to-Face Contacts	-.24	-.16	.19
Telephone	-.04	-.09	-.04
Location of Contact			
Agency Office	-.32*	-.30	.28
Job Site	-.12	.11	.28
Other Community Sites	-.11	-.17	.11
Duration of Contact			
Short Duration[1]	-.23	-.02	.25
Long Duration[2]	-.12	-.21	-.05

[1] 30 minutes or less
[2] Greater than 30 minutes
*p < .05

Table 5: Comparisons in Service Intensity by Number of Jobs Held During Follow-Up

	Employed in Same Job for 12 Months (N = 17)		Left First Job, No Further Jobs (N = 15)		Multiple Jobs (N = 20)			
Variable	M	SD	M	SD	M	SD	F	p
Total Contacts[a]	1.33	0.72	1.25	0.78	2.03	0.99	4.62	.01
Type of Contact								
Face-to-Face	0.96	0.80	0.95	0.76	1.50	0.86	2.80	.07
Telephone	0.37	0.33	0.30	0.26	0.49	0.41	1.49	.24
Location of Contact								
Agency Office[b]	0.45	0.31	0.55	0.38	0.80	0.54	3.43	.04
Job Site	0.30	0.37	0.42	0.54	0.37	0.37	0.37	.70
Other Community Sites[c]	0.52	0.69	0.28	0.31	0.85	0.79	3.38	.04
Duration of Contact								
Short Duration	0.72	0.41	0.69	0.48	1.03	0.49	3.02	.06
Long Duration	0.61	0.76	0.52	0.63	0.94	0.75	1.67	.20

Note: Tukey's Honestly Significant Differences Test used to test post hoc comparisons
[a] Multiple Job Group had more significantly more contacts than other two groups
[b] Multiple Job Group had more significantly more agency office contacts than Left First Job Group
[c] Multiple Job Group had more significantly more other community contacts than Left First Job Group

III. Discussion

This is the first study to examine job support for a sample specifically comprised of clients enrolled in evidence-based supported employment who have already obtained employment. The sample described in this report had substantial success in competitive employment during the study period. They worked nearly 8 months over the one-year period; in other words, they worked 65% of the 52-week period. Job tenure in the initial job averaged 8.5 months (~36 weeks), which is substantially longer than the mean of 22 weeks reported for supported employment clients in a comprehensive review of controlled trials of evidence-based supported employment (Bond et al., in press).

This report provides preliminary answers to the three questions raised in our Introduction. Regarding the first question (intensity of support), the mean frequency of contact in this study is lower than prior studies reviewed above. For example, McGuire (2005) in a study of evidence-based supported employment conducted at one of the sites also used in the current study, reported a mean monthly rate of 2.08 service contacts for clients actively enrolled in supported employment, compared to 1.57 found in the current study. However, the contrast between the McGuire study and the current study clearly illuminates the criticality of how this question is framed. Specifically, the McGuire study included all employment specialist contacts, including those before and during the job search and during the early stages of job acquisition. As suggested by the higher rates of employment specialist contact for clients with multiple jobs in the current study, we speculate that service intensity is greatest during the job search, both in the current study, and in general. Conversely, the lowest service intensity was found for clients who lose their job and do not obtain another – both in the current study and in the McGuire (2005) study. McGuire (2005) found a precipitous drop in the frequency of contact (1.21 contacts per month) when calculating the average for his total sample over a two year period. McGuire attributed this drop to client dropping out of the supported employment program. We therefore conclude that intensity of employment specialist support is dependent on how the question is asked – who is included in the sample, when the service contacts are counted, and many other factors.

The findings suggesting greater service contacts for clients who have multiple jobs may parallel the findings of greater service intensity around the point of job loss reported by Hannah and Hall (2006), although our data suggest that it was not simply job loss, but re-starting the job search that may have accounted for the increase in services. Once our full data collection is completed, we plan to address this and other related questions, such as the impact of client characteristics on service utilization.

Further, we found large differences between sites in service intensity, with Site 1 averaging nearly 50% more contacts than Site 2. The final sample will be larger, include a longer time frame, and most importantly consist of more sites, so that we will have more information on site variation to help determine whether site is an important factor in service intensity.

Regarding the second question (the pattern of support over time), the pattern is clear cut: nearly weekly contact during the first month, followed by a sharp decline over the following few months, tapering to once-a-month contact, on average, for Site 1, and declining to an even more infrequent rate in Site 2. It will be interesting to examine the pattern over two years when these data are available; it seems probable that the contact rate will be no greater than once per month and most likely even lower. If replicated, these data provide normative information about intensity of job support in evidence-based supported employment. In terms of factors influencing the service provision trajectory, idealistically, services should be determined by client need. However, it would be intriguing to examine the influence of financial incentives. For example, a successful Status 26 closure within the state-federal vocational rehabilitation system defines assumes at least 90 days of stable employment (Fraser et al., in press). It would be instructive to examine whether attainment of this status is correlated with reduced services.

Regarding the third question (the relationship between ongoing support and job retention), the preliminary findings suggest no overall relationship. In fact, the data hint a negative relationship between employment specialist support and job tenure, as suggested by the nonsignificant but negative correlation between total contacts and months in any one job. Furthermore, if the hypothesis that service intensity increased job tenure, then the findings of more intensive services but shorter job tenure at Site 1, compared to Site 2, are difficult to interpret. A myriad of confounding variables must be considered, such as client characteristics, program fidelity, and the local economy, but all things considered, these preliminary findings are more consistent with the finding that employment specialists provide more services to those who are in jeopardy of losing their job than to those who are maintaining stable employment. As noted above, it is also likely that service intensity increases at the point of the job search. Job loss alone does not appear to increase employment specialist contacts; what occurs for some clients is that they lose hope and opt out of the supported employment program.

In summary, these preliminary findings, despite their limitations, offer intriguing and informative patterns of service provision. We look forward to examining the patterns once the entire data collection is completed.

Study Limitations

One fundamental question motivating this study was the feasibility of a multisite study involving longitudinal data collection on service contacts and job status in a moderate-sized sample of supported employment clients. Drawing on recent advances in web-based data collection (Birnbaum, 2004) combined with monthly prompts to employment specialists and incentives for participating, we had hoped to improve the completeness and accuracy of service data beyond that in prior research. Our conclusions at present regarding feasibility remain tentative. Certainly data collection through electronic records present numerous advantages in terms of routine certain types of clerical errors, and we believe also in reducing response burden (Tsai & Bond, 2007). Yet our methodology clearly has not eliminated problems of missing data, confusion about data collection procedures, problems posed by staff turnover, research participant burnout, and other common and predictable problems associated with longitudinal data collection, especially with modest resources. Persistence by the second author in tracking down the inevitable instances of nonreporting and missing data has been a key element in ensuring relative completeness of data. Yet routinization of the monthly data collection, which we had hoped to be possible give the relatively modest response burden, has been elusive. Finally, we also have no independent verification of the accuracy of the reported data; this remains a clear challenge for future research to address.

We should also note a number of other important study limitations. First, we used an opportunity sample of study sites in one geographic region of the U.S., and within these sites, we depended on voluntary participation by employment specialists. Thus, questions can be raised about the generalizability of the findings. Second, the study used an observational design, precluding causal conclusions. Third, study dropouts affected the sample characteristics. Fourth, no statistical control was used to examine the impact of client characteristics of employment specialist characteristics on these preliminary findings. Fourth, the focus on service intensity was limited to employment specialist activity. We did not measure assistance provided by the mental health treatment teams or other professionals, or for that matter, assistance from natural support systems. Fifth, service contact log may have omitted categories of services that may have been important to capture.

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Experiences of College Students with Disabilities and the Importance of a Business Mentoring Program

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Abstract

College students with disabilities often lack a clear understanding of what knowledge and skills are required by specific careers on a day-to-day basis. These students often graduate from college without the chance for on-the-job experiences, and have a difficult time selecting a job that matches their preferences and abilities. This article will describe a study conducted with juniors and seniors with disabilities attending Virginia Commonwealth University who participated in a work based mentoring program. The results of a qualitative analysis of the participants' mentoring experiences in four primary areas, specifically career counseling, job shadowing, job placement assistance, and conflict resolution/problem solving are discussed.

I. Introduction

Whether it is college, adult and continuing education, or technical preparation, postsecondary education plays a major role in preparing persons for employment and career opportunities (Briel & Getzel, 2005; Briel & Wehman, 2005; Getzel & Kregel, 1996; Izzo & Lamb, 2002; Stodden & Dowrick, 2000). Individuals with disabilities find postsecondary education a means to enhance their chances of obtaining and maintaining employment, earning a higher annual income, creating a pathway to life-long independence and a greater quality of life (Briel & Getzel, 2005; Fairweather & Shaver, 1991; Wilson, Getzel, & Brown, 2000). In addition, individuals with disabilities who continue their education after high school obtain the higher order thinking and technical skills necessary to take advantage of current job market trends in today's global economy (Stodden, Conway, & Chang, 2003).

One trend gaining popularity in corporate America involves the use of mentors to enhance the success of employees. Businesses and organizations see how both formal and informal mentoring can reduce learning time for new employees, increase career advancement opportunities, and prepare new leaders (Stone, 2004). More specifically, young adults who may lack the career guidance and preparation needed to be successful on the job can also benefit from mentors at a work site. Work-based mentoring programs can help youth by imparting crucial job-specific, social, and personal skills; enriching and expanding the youth's social connections; and positively impacting self esteem and optimism for the future (Rhodes, 2003).

A number of programs have been implemented in postsecondary settings to assist students with disabilities obtain the needed skills to transition into employment (Getzel, Briel, & Kregel, 2000; Hagner, McGahle, & Cloutier, 2001; Michaels & Barr, 2002; Norton & Field, 1998). These programs have used a variety of activities including job clubs; employability workshops; and work experience programs including internships, job shadow opportunities, informational interviews, mentors (both employer and peer), and career counseling. What is significant about the outcomes of these programs is contact or some level of interaction with employers or professionals in their chosen career. These contacts with employers through internships, job shadowing, informational interviews or mentoring all have varying levels of impact on the career development of college students with disabilities, depending on the amount of time and contact with employers (Briel & Getzel, 2001; Hagner, et al., 2001; Norton & Field, 1998). There are a number of studies focusing on the process of mentoring, for example, mentors and students establishing relationships

through face-to-face meetings, by email or telephone contact (Burgstahler & Cronheim, 2001; Knouse, 2001; Powers, Sowers, & Stevens, 1995; Whelley, Radtke, Burgstahler, & Christ, 2003); however, only a few studies have examined the use of employers as mentors for college students with disabilities as they prepare to exit from college (Burgstahler & Cronheim, 2001; Norton & Field, 1998; Whelley, et al., 2003).

College students with disabilities face similar issues as all students exiting college including finding their way into a professional field and into the careers of their choice. However, there are some unique differences in the career development needs of students with disabilities as opposed to their peers without disabilities. Students with disabilities need:

a. direct exposure to the variety of career opportunities potentially available to them;
b. an understanding of their disability and how it may influence career choice and work performance;
c. an awareness of their rights and responsibilities in the workplace;
d. the risks and benefits of disclosing disability status to employers and
e. an understanding of which accommodations improve work performance and how to effectively request them from an employer (Briel & Getzel, 2001; Briel & Wehman, 2005; Gerber & Price, 2003; Getzel, Briel, & Kregel, 2000; Hennessy, Richard, Cook, Unger, & Rumrill, 2006; and Michaels & Barr, 2002).

Assisting college students with disabilities through the career planning and decision making phases of their degree program is crucial to future job satisfaction. College graduates with learning disabilities were surveyed as to their job satisfaction post college. The results were compared to a similar group of peers without disabilities. Graduates with learning disabilities were significantly more dissatisfied in the areas of pay, promotion, and total job satisfaction than graduates without disabilities (Witte, Philips, & Kakela, 1998). One of the significant findings of the study was the importance of the fit between the college graduate with learning disabilities and their employment setting. This is a result of many factors, but can be linked back to the need for students with disabilities needing more exposure to the work environment and career opportunities (Witte, et. al, 1998).

One effective strategy to address the issues above is to connect students to mentors in their field of study. Employers serving as mentors can help students with disabilities develop skills, knowledge and motivation as they transition from college into employment (Briel & Getzel, 2001; Whelley, et. al, 2003). Positive relationships with mentors have shown to enhance career development and the social and emotional aspects in an individual's life (Hagner, 2000). Additionally, formal mentoring programs connecting college students with disabilities and professionals in the community prove valuable for students to acquire job-seeking skills (Hennessy et al, 2006). Mentors typically have more experience or knowledge and serve as role models. Frequently mentors guide, provide emotional support by listening, act as a sounding board, and give advice. Work based mentors often counsel individuals beyond purely job-specific issues which may include tips on organizational skills or how to set priorities (Foster & MacLeod, 2004; Kram, 1985). In addition, mentors can share resources, provide a new perspective, and ask thought provoking questions (Heckman, Brown, & Roberts, 2007).

In a formal mentoring process, the mentor and the individual receiving mentoring services enter into an agreement to interact in specific ways that address learning goals and skill development (Stone, 2004). Typical mentoring activities are associated with:

a. providing counseling,
b. serving as role models,
c. providing job shadowing opportunities,
d. providing personal, academic and career advice, and
e. providing networking experiences (Burgstahler & Cronheim, 2001; Templin & Doran, 1999; Whelley, et al., 2003).

The ability to network or to meet professionals and develop ongoing relationships that are mutually beneficial has long been considered an effective route to securing employment (Barton, 2001). These activities are important to support individuals in college as they prepare to graduate and enter employment. While the implementation of mentor relationships varies widely across programs, a number of common elements emerge from a review of the literature. These elements include career counseling, internships, job shadowing, networking, and job placement assistance (Briel & Getzel, 2001; Burgstahler & Cronheim, 2001; Hagner, 2000; Kram, 1985; Templin & Doran, 1999; Whelley, et. al, 2003).

II. Virginia Commonwealth University's (VCU) Business Mentoring Model

The VCU-RRTC business mentoring study called Mentoring Matters is a work based mentoring program for college students with disabilities to develop a relationship with a member of the business or professional community. The intent of the program is to enable college students with disabilities to engage in worksite experiences, ask questions and exchange ideas with working professionals, and emerge with a clearer sense of their career choice. The model is based on theories developed through an examination of current literature on mentoring relationships and their role in the career development of indi-

viduals with disabilities. College students with disabilities often lack a clear understanding of what specific careers require on a day-to-day basis. These students are many times less clear about how their disability will impact their performance on the job. Students with disabilities graduate from college without the chance for on-the-job experiences, and have a difficult time selecting a job that matches their preferences and abilities (Briel & Getzel, 2001). Implementation of the study was achieved through collaboration with the VCU Disability Support Services Office and the VCU Career Center, the Business Leadership Network, and the VCU-RRTC Business Roundtable. The collaboration led to the recruitment of student participants, recruitment of mentors representing a variety of businesses and professions, and the establishment of a network to share information and resources with students and mentors.

A developed framework for the model specified students and mentors to meet a minimum of four hours a month for two semesters. The four primary areas that served as the focus for activities in the mentoring relationship included career counseling, job shadowing opportunities, job placement assistance, and conflict resolution /problem solving in a workplace environment (Getzel, Briel, & Kregel, 2000; Timmons, Mack, Sims, Hare, and Wills, 2006; Whelley, et al, 2003). Table 1 below describes the types of activities associated with each of the four areas. The rationale for providing a framework for the model was to enable VCU staff members to gather data on the focus of mentoring activities of students with disabilities participating in the program, and to provide a structure for building and maintaining a mentoring relationship. In addition, this common framework enabled VCU staff members and other collaborators to provide information, resources, and activities to all mentors and students with disabilities involved in the study. This article will provide a qualitative analysis of college student participants' experiences with their mentors in the four primary areas of exploring careers, job shadowing, networking, and problem solving. Analyses of data gathered through online surveys concerning their experiences while attending VCU are described.

Table 1: Primary Focus Areas of Mentoring Activities

1. **Career Counseling:** activities that include career focused discussions with mentors about their perceptions of the field, creating a realistic understanding of the work environment and expectations, or career related materials that assist students to form a specific goal.
2. **Job Shadowing:** activities conducted in an employment setting that last from several hours, a full day or up to a week enabling students to observe work tasks, experience work pace, and determine whether the responsibilities of a profession are consistent with their interest, abilities, and career goals.
3. **Job Placement Assistance:** activities that enable students to enter a professional position with direct assistance from their mentors, either by assisting students with job preparation skills such as developing a resume or preparing for interviews, connecting students to professional organizations or networks that may post job openings, or introducing students to their own contacts in the field and facilitating the development of a professional network that could even assist students to obtain subsequent jobs.
4. **Conflict Resolution/Problem Solving:** type of support mentors provide to assist students to remain in their job, such as analyzing potential conflicts, determining a course of action, and initiating a response.

III. Methodology

A descriptive research study was used to determine the effect of a business mentoring program and activities on the career decisions of college students with disabilities. The study examined the relationships developed as a result of the model and the effect of the mentoring experience on students with disabilities in each of the primary areas of career counseling, job shadowing, job placement assistance and conflict resolution/problem solving.

The majority of the participants in the study were traditional-age, undergraduate students with disabilities attending Virginia Commonwealth University. Demographic information on the participants including ethnicity, disability category, academic year, and gender is listed in Table 2 below. Information was gathered on 25 VCU juniors and seniors with disabilities each semester beginning March 2006 through May 2008. Juniors and seniors were recruited to enable project staff members to gather data on their career decision making process while in college, and to obtain post graduation data on the impact that business mentoring experiences had on their career choices.

Table 2: Participant Demographic Information N = 25

Participant Characteristics	Variable	Number
Ethnicity	Caucasian	15
	African-American	6
	Asian	2
	Bi-racial	1
	Other	1
Disability Category	Learning Disability	8
	Health Impairment	5
	Attention Deficit/Hyperactivity Disorder	4

Participant Characteristics	Variable	Number
Disability Category (continued)	Psychological Vision Impairment Spinal Cord Injury Cerebral Palsy Traumatic Brain Injury	3 2 1 1 1
Academic Year	Junior Senior	9 16
Gender	Male Female	5 20

The primary source for the recruitment of students was the VCU Disability Support Services (DSS) Office. To ensure students' confidentiality during the recruitment process, the DSS coordinator distributed information about the business mentoring through materials available in the office and through email correspondence. All recruitment materials asked interested students with disabilities to directly contact a project staff member. Students with disabilities voluntarily contact project staff to participate and during this contact additional information was provided about the mentoring study. Potential student participants were invited to attend an orientation meeting to determine their interest in the study. Student participants signed a consent form prior to their participation explaining how data collected through the study would be used and that all data summaries would not contain any personally identifiable information. Student participants provided input into the selection of their mentor, in terms of location and type of business. Some students with disabilities participated in more than one business site. Table 3 below provides information on students' educational majors and the location of their business mentoring experiences.

Table 3: Student Majors and Mentor Location

Major	Mentor	Business
Psychology	Program Administrator; Attorney	State agency, assistive technology; Private law firm
Psychology/Art	Team Leader	Office supply company
Psychology	Human Resources Director	Large health insurance company
International business human resource	Senior Organization HR Consultant	Large health insurance company
Psychology	Guardianship Program Coordinator; Program Specialist	County services agency for seniors; State rehabilitation services
Illustration Communication Arts	Co-owner	Printing company
History	History teacher/Department Chair; Director of Guest Relations	Middle school; Museum
Small Business Entrepreneurship	Owner	Small business
Finance	Lead Auditor	Power company
Psychology	Crime Control Act Coordinator	County juvenile justice department
History	Membership Director and Museum Educator; Director of Museum Operations	Nonprofit museum association; Museum
Mass Communications	Associate Director	University news Services
International Management	Director of Quality Assurance; Owner	Large health insurance company Small café business
History/Teaching Interested in ESL	ESOL Specialist	State Adult Learning Center
Graphic Design	Graphic Designer	University design business
Criminal Justice	Police Officer	Polic training academy
Environmental Studies	Environmental Program Planner	State agency for environment
Substance Abuse	Probation Supervisor; Regional Director	State juvenile justice department; Private counseling business
Art History; Anthropology	Special Events Coordinator	Museum development office

Major	Mentor	Business
Psychology/Sociology	Substance Abuse Counselor	State rehabilitation agency
Psychology	Program Information Specialist	State office of immigration services
English	Editorial Cartoonist; Editorial Illustrator	Local newspaper
Economics	Vice President and Investment Consultant	Nation wide bank
Mass communications - broadcasting track	Program Manager; Sports Director/Broadcaster	Large health insurance company; Local television station
Biomedical engineering	Dentist	Dentist office

IV. Data Collection Process

Online surveys were developed for students with disabilities to complete each semester of their involvement in the program. The survey was designed to gather data on student demographics, the frequency of the student's contact with mentors, the nature of their mentoring activities, and to provide feedback about their mentoring experiences. Specific questions on the survey allowed project staff members to gather data on the four primary areas of the mentoring activities which included career counseling, job shadowing, job placement, and conflict resolution/problem solving. The questions were open-ended to allow students to provide as much detail as possible about their mentoring experiences. Once surveys were received, open-ended responses were coded to identify emergent themes across the mentoring relationships.

V. Results

Career Counseling Experiences

The study defined career counseling as activities that include career focused discussions with mentors about their own experiences working in the field, their perception of essential skills to be successful, potential career paths within a specific area, and evolving trends in the profession. All of the student participants had some level of career counseling as part of their mentoring experience from general discussions with their mentors about the field to actively participating in the work environment to learn more about the specific requirements and demands of a typical workday. Student participants welcomed the opportunity to discuss their career interests, the type of job they are seeking, and to learn about other tracks within a major that could offer a more fulfilling and rewarding career; others with very broad ideas about their career goals found their mentor helpful in narrowing their career focus. As one student stated, "I told him [mentor] about myself and my goals up to this point. Mostly we tried to figure out what would be the best course for me…I am at a sort of crossroads." Another student shared "she [mentor] advised me on which minor to choose." One theme that emerged across the mentoring relationships concerned understanding the work environment. This included not only discussing the essential skills and requirements of a particular field but also addressing questions regarding the development and application of these skills in the work environment; for example, one discussion focused on how to put a sports story together in a limited amount of time. Another student discussed how to organize time to complete daily responsibilities. A business major discussed how to handle employees with poor performance records. One student realized how much teamwork was required at a print shop and began to acquire "soft" skills or the ability to communicate and form working relationships with her co-workers. Some mentors used employer surveys to assess employees' strengths and weaknesses and discussed with a student what was expected in the work setting. Two students discussed with their mentors disability rights and responsibilities in the work environment. Other student participants were able to learn first hand about the work environment and their potential career choice through direct participation in day-to-day activities. Student participants were involved in reviewing work materials, such as policies and forms, completing projects, or directly participating in classroom teaching, learning printing machinery, or developing a sports newscast story.

In addition, career counseling often involved sharing career related materials or further training resources that assist students with disabilities to develop specific skills or to form a specific goal. One student interested in learning how to hold productive meetings was loaned a book on working with teams. A student participant interested in advocating for people with disabilities was provided information from her mentor about a local advocacy training program that prepares people with disabilities to be effective advocates, which the student eventually completed. Another student considering the teaching profession was given information on the requirements to become a licensed teacher. A mass communications major benefited from

a folder with samples of press releases as well as professional magazines that provided guidelines for this style of writing.

Student participants expressed the impact that the career counseling activities had on their career decision making. One student stated that her mentor "is very open and honest about her job and has really taught me many important lessons about teaching." Another student commented: "I put my school work in a real life application." Yet another student stated, "I learned about an interesting job that I was unaware existed." Finally, one student with a disability had a mentoring relationship that had an impact on her concerning the work environment and her own disability. She stated: "I value her [mentor] opinion on disclosure of a disability and she has been inspirational in showing that all obstacles can be overcome or accommodated in a good work environment."

Job Shadowing Experiences

Job shadowing opportunities are defined as activities conducted in an employment setting that last from several hours up to a week enabling students to gain a better understanding of typical work tasks, obtain an idea of the work pace, experience workplace culture, and to provide materials to assess their own interest and abilities in completing these tasks. In these experiences, student participants primarily observed the mentor at the work site completing various tasks or join the mentor in specific work site activities. For example, one student was able to watch an illustrator draw a cartoon for the newspaper, another participated in a conference call related to quality assurance, a student participant was able to ride with police officers on duty and listen to dispatch calls coming into the station, and a participant was able to observe cameramen at a television shoot. Other students directly participated in their job shadowing experiences including interacting with students in a classroom and using printing presses and printers. One student commented about his job shadowing experience, "It gives me a chance to see what a real life professional does in the field." Another stated, "I value the exposure I have gotten to the state police and advice on how best to pursue my career interests."

Job Placement Assistance

Job placement assistance was one of the primary areas of most mentoring experiences for student participants. Activities associated with job placement assistance enable students to enter a professional position with direct assistance from their mentors, either through student connections with professional organizations, meeting and developing relationships with other employers or in their own business (networking), including supports mentors provide to assist students to obtain subsequent jobs. There are three areas that most students experienced in their mentoring relationship concerning job placement assistance. They included building a professional network with individuals in the field through initial contacts provided by their mentor, tailoring resumes for the field, and strengthening interview skills. One student expressed what she learned from her mentor, "We talked about the steps I should take to get a full time job and interview skills." Networking with individuals in their field was a benefit expressed by a number of the student participants. Two student participants had mentors that arranged meetings with a different staff person each week to learn about various departments in the company. As one student described her experience, "My mentor set up meetings with different individuals in the department and let me shadow them for a day." Another student was able to meet with human resource professionals as part of her networking experiences.

Assistance with resume writing and job interviewing skills were two areas that mentors played a key role with student participants. One student's mentor assisted her in "overcoming my shyness to participate in an informational interview." Student participants described receiving tips on writing resumes and giving mentors their resumes to provide feedback and ideas of how to tailor it to specific jobs they were seeking. One student was able to discuss interviewing skills with her mentor and practiced a mock interview. Another student with a disability received a resume resource guide that associates in the mentor's company receive. And one student stated, "My mentor introduced me to their company's recruiter who will review my resume and provide me with feedback."

Conflict Resolution / Problem Solving

The final study area is conflict resolution/problem solving which is defined as the type of support mentors provide to assist students with disabilities to identify and handle problems at a work site, enabling them to remain in their job. It was anticipated that most student participants would provide feedback on conflict resolution/problem solving once they graduated and entered the workforce. Data from this phase of the study are not yet available due to student participants' graduation schedule and securing employment. However, after analyzing the data obtained from student participants and their experiences with mentors, information and skills to face current and potential difficulties in the work environment were part of their mentoring relationship while in college. One student participating in a work cooperative program reported "my mentor gave me advice about handling stress and getting my productivity up, and being able to approach people in a professional way." Another student described learning a great deal from her mentor with a disability about accommodations and her rights and responsibilities in the work place. Comments from one student described her mentor as being very honest about the problems she could potentially face as a professional in the field. As one student summed it up, "You find out about problems before you get a job in that field."

Additional Comments From Student Participants

College students participating in the study expressed appreciation for the opportunity to build a relationship with their mentors. They were provided a wealth of information about specific jobs and given opportunities to explore positions in other departments. One student wrote, "He [mentor] is very informative on his area of work and allows me the opportunity to specifically learn about his career." Another student commented, "I value her [mentor] willingness to seek out opportunities for me to discuss my career interests with those in the finance/auditing fields." And one student stated," I appreciate the time that my mentor took out of his busy schedule to sit and talk with me. I believe he genuinely wanted to give me any and all guidance that he could... my course of action is becoming clearer."

When asked how the mentoring relationship could be improved, finding more time to meet with their mentors was the most frequent response. Other students commented that additional opportunities for hands on experiences were needed. In general, student participants were eager to meet more often with their mentors, experience more learning opportunities, and to obtain more advice from their mentors. One student wrote, "I am really enjoying spending time with my mentor." Another commented "I learned a lot through my mentor and found her to be a good role model. She clarified a lot of the things I learned in class and gave me excellent advice." It was suggested by one student that the mentoring program be coordinated with the dean of her school and the university career center for partial credit or as an internship program. Another student expressed, "I have found this experience to be an excellent source to network with others in my field of choice." And for one student it was a real life lesson about choosing and entering a career, "I enjoy the fact that my mentor has succeeded in a field she did not think she would be working in after she graduated. It lets me know that you can find a career in many different ways, and still be very satisfied and happy with the way it all turns out."

Case Study

The development of a mentoring relationship and the impact of this relationship on a college student with a disability can best be illustrated through a case study. The following case study provides an example of how the business mentoring model was implemented.

Jack, a student majoring in history was uncertain about his career options and which direction he should take after graduation. He has always been interested in history, but it was a college history professor that helped him realize it was one of his passions. Initially Jack thought he would like to teach middle school children, while continuing his education in graduate school. Through the VCU Mentoring Matters program, Jack was matched with a mentor with significant experience teaching 7th and 8th grade history in an urban setting. He wanted see first hand what it was like teaching in a classroom. Jack requested assistance from a VCU project staff member to participate in the first meeting with the mentor due to his panic disorder since he has learned he can manage his disorder by receiving support in new situations until he has a clear idea of what to expect in the respective environment. The VCU staff member, Jack, and his mentor met together for introductions and goal setting.

Jack participated four hours a week in mentoring activities. The "hands on" instructional style of the mentor was an advantage for him. The mentor enlisted the help of Jack to participate in many class activities and accommodating the learning style of all students. Jack was able to interact with the students, assist with teaching, and provide support with assignments and lessons. He learned valuable information related to the teaching profession such as "to use specific examples with the kids, use demonstrations to get a point across, and I also got a good idea of the work teachers have everyday, especially when it comes to grading papers."

Jack and his mentor also discussed and reviewed materials concerning the requirements to become a licensed teacher. Being able to initially observe in a classroom in a relaxed manner without any pressure to perform relieved his anxiety, giving him time to understand that he could manage his panic disorder in the teaching profession. However, Jack was concerned with the additional requirements to become a teacher and wanted to still explore other options.

A second mentoring experience was identified for Jack located at a small private museum that conducted a number of educational tours for various schools in the community. Jack was paired with a guest relations director who also had a history degree. He was able to gain a better understanding of museum work by assisting at the front desk, conducting research for marketing, and observing educational tours. Jack was able to meet several history school teachers in addition to the education director at the museum to learn about professional organizations in the state. Although Jack was approached with an opportunity to complete an internship at the museum during the school year, he declined in order to better manage his college work load and still be an active participant in the mentoring program. Jack is preparing to graduate and plans to use the connections through his mentoring experience to secure employment in a museum.

VI. Discussion

The results of this study provide insights into the effect of a business mentoring program on the career decision making process of 25 college students with disabilities. The findings

are a beginning step towards better understanding effective mentoring activities and their impact on college juniors and seniors as they prepare to graduate and enter the workforce. However, some limitations should be noted. Research is needed to further validate the information provided by the students' experiences. The findings described are based on the experiences of 25 college students with disabilities located at an urban university. Ideally, this research should be replicated with a greater number of students with disabilities from various geographical regions and enrolled in varying sizes of two-and-four year colleges and universities. Second, the study was designed to assess the effect of a mentoring program through work based meetings with students and their mentors. Further research is needed to determine the effectiveness of mentoring relationships developed through email contacts or through the use of other technologies. Finally, the study established specific areas for the mentoring relationship based on the current literature (i.e. career counseling, job shadowing, job placement assistance, conflict resolution/problem solving). These four areas became the focus of assisting students and their mentors to establish their relationship and to structure activities at the work site. Other mentoring activities outside of the study's four areas need examining to determine their effect on college students with disabilities' career decision making.

In spite of the limitations, the results provide important information on facilitating mentoring experiences for college students with disabilities. Given a relatively open structure for students and mentors to identify and agree on several learning objectives to center the mentoring experience, the two primary areas of focus for a majority of the student participants involved career counseling and job placement assistance activities. Students expressed the importance of mentors to assist in exploring career options and clarifying their career goals. Being able to meet at the work site, be a part of the workplace culture, or use professional work materials provided a better understanding of the work environment and the skills required in their field of study. Mentors provided students with relevant resources through topic related books, professional handbooks, printed materials and organization websites to assist them in further researching their career interests. Student participants were provided opportunities to discuss the demands of the work environment and their disability in a non-threatening atmosphere. This is particularly critical for students with disabilities who need opportunities to assess work environments and determine steps they can take to accommodate their disability in these environments (Briel & Getzel, 2005; Getzel, et al., 2000; Hennessey, et al., 2006).

The majority of students identified networking activities as a focal point of their mentoring relationships. Many students were able to meet and interview colleagues in the same department, neighboring departments, and human resource directors for the company. These activities fall under the job placement assistance area and provided student participants with critical opportunities to begin building professional networks prior to graduation. College students with disabilities are in need of opportunities to establish contacts in the field to assist in securing employment (Briel & Getzel, 2005; Hennessey, et al., 2006; Michaels & Barr, 2002).

Another aspect of job placement assistance activities involved participants receiving input and feedback on their resumes or resources to assist in their development. Students with disabilities were able to learn how to organize and describe their relevant experiences and to emphasize valued skills and abilities in the field. These students were able to develop professional resumes to assist them when competing for future employment opportunities in their chosen career. The third critical skill area that students with disabilities were able to receive as part of job placement assistance was strengthening their interviewing skills. Mentors participated in mock interview sessions for students, offered interviewing tips, and coordinated opportunities for informational interviews with colleagues.

The two remaining areas of job shadowing and conflict resolution/problem solving were also viewed by students as important aspects of their mentoring relationship, but were not a central part of most students' mentoring experiences. This could be a result of the primary interests of the students at the time of the mentoring experience or the availability of individuals in the work environment to provide job shadowing experiences. For those students who did participate in job shadowing opportunities, their experiences were found to be extremely beneficial. Having access to situations otherwise closed, such as observing in a courtroom or experiencing behind the scenes work required to put together a news story, not only offers the student new knowledge, but can also increase motivation.

It is also worth noting that the final area of the study, conflict resolution/problem solving was primarily intended to be a component of the follow up work by project staff of student participants graduating from VCU and entering the workforce. The data obtained from this phase of the study will analyze whether or not the mentoring relationship continued post graduation or if the information provided during the mentoring experience in college impacted students once they entered the work environment. This data set will hopefully provide insight on the effect of the mentoring relationship assisting students with disabilities in conflict resolution/problem solving in their employment setting. For some students who were participating in part time employment or internships while attending VCU, the mentoring relationships did include activities that addressed conflict resolution/problem solving. Specific areas identified by students included learning stress management techniques, understanding potential issues related to a career, and learning how to request accommodations and face potential barriers in the workplace.

VII. Conclusion

Business or professional mentoring relationships provide vital experiences for college students with disabilities that help to shape their career path, and initial employment experiences. Developing these relationships in a work based setting enables students with disabilities to receive crucial job-specific information, broaden the student's professional network, and discuss issues that go beyond work requirements, such as how to set priorities, how to talk to a supervisor, or what to expect from co-workers. All too often students with disabilities are not provided with professional experiences while in college (Briel & Getzel, 2005; Getzel, et al., 2000; Hennessey, et al., 2006). Mentoring experiences provide a critical link between the academic setting and work environment offering students with disabilities opportunities to explore career areas, apply their knowledge in a work setting, and develop new skills within a supportive atmosphere.

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Return to Work of Individuals with Arthritis: A Review of Job Performance and Retention

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Abstract

With so many people affected by arthritis and the significant impact it has on themselves and on their families, employers as well as on society, employment of individuals with arthritis is an important topic to consider. A review of literature was conducted to examine the issues that arise from arthritis, factors that influence work disability and employment retention, and interventions and services that are available to promote and retain employment for individuals with arthritis. In recent years, employers have begun to proactively intervene in terms of both prevention activities as well as provision of accommodation. Work disability is a common occurrence for individuals with arthritis and factors that influence work disability for those with arthritis include employment factors, employee factors, disease factors, and other factors such as access to health care and vocational rehabilitation. It is critical to consider the complex interaction of these factors in order for individuals with arthritis to remain productive and future research must consider all of these aspects when developing and implementing interventions.

I. Introduction

Arthritis is the second most frequently reported chronic condition in the United States, with osteoarthritis (OA) and rheumatoid arthritis (RA) being the first and second most common, respectively.[1] The annual incidence in North America is 24-75/10,000[2] and its prevalence is expected to increase as the U.S. population ages.[3] In 2002, 43 million (21%) of U.S. adults aged 18 and older had self-reported or doctor-diagnosed arthritis and an additional 23 million adults (11%) had possible arthritis.4,5 Annually, it results in 39 million physician visits, 744,000 hospitalizations, 3 million visits to outpatient departments, and 2.2 million visits to emergency departments.[6]

In 2001, 68 percent of people with arthritis or chronic joint symptoms were younger than 65 years old.[7] Arthritis prevalence increases with age[4] and as the population ages, the number of U.S. adults with doctor-diagnosed arthritis is projected to increase from 42.7 million in 2002 to 64.9 million in 2030.5 Arthritis affects more than 34 million Caucasians, more than 4.5 million African Americans and nearly 2.6 million Hispanics and the prevalence of arthritis is higher among women (24.3%) than men (17.1%).[4] The purpose of this paper is to review the current literature on challenges that individuals with arthritis are faced with regards to employment and interventions that are available to promote employment as well as retention of employment.

II. Osteoarthritis and Rheumatoid Arthritis: Critical Differences and Issues for Work Performance

Osteoarthritis, the most common type of joint disease, is a heterogeneous group of conditions resulting in common histopathologic and radiologic changes.[8] It is a degenerative disorder resulting from the biochemical breakdown of articular cartilage in the synovial joints.[8] In the United States, approximately 80-90% of individuals older than 65 years have evidence of primary osteoarthritis. Osteoarthritis has a higher prevalence among men when it occurs before the age of 45, but women predominate after age 55.[9,10] Although osteoarthritis is thought to be largely due to excessive wear

and tear, secondary nonspecific inflammatory changes may also affect the joints. Osteoarthritis typically develops slowly and progresses over several years. Primary osteoarthritis is a common disorder of the elderly, and patients are often asymptomatic. Patients with symptoms usually do not notice them until after they are aged 50 years. Deep, achy, joint pain exacerbated by extensive use is the primary symptom. Also, reduced range of motion and crepitus are frequently present. Joint malalignment may be visible. Heberden nodes, which represent palpable osteophytes in the distal interphalangeal joints, are characteristic in women but not men. Heberden nodes are features of osteoarthritis, not rheumatoid arthritis. Inflammatory changes are typically absent or at least not pronounced. Usually, the pain slowly worsens over time, but it may stabilize in some patients. Osteoarthritis of the knee is a leading cause of disability in elderly persons.[11] Osteoarthritis also causes millions of Americans to miss work because of back pain.

Historically, osteoarthritis has been divided into primary and secondary forms, although this division is somewhat artificial. Primary osteoarthritis is typically considered to be idiopathic, age-related degenerative changes ("wear and tear") of the affected joints, without specific antecedent disease, injury, or trauma.[8] Secondary osteoarthritis is conceptually easier to understand. It refers to degenerative disease of the synovial joints that results from some predisposing condition, usually trauma that has adversely altered the articular cartilage and/or subchondral bone of the affected joints. Secondary osteoarthritis often occurs in relatively young individuals. Age-related osteoarthritis occurs in many locations, predominantly the joints of the hands (specifically the distal interphalangeal (DIP) joints, proximal interphalangeal (PIP) joints, and carpometacarpal (CMC) joints at the base of the thumb but also includes joints of the knees, hips, feet (first metatarsal phalange (MTP) joint) and lumbar and cervical spine (apophyseal articulations). While OA can have an association with other diseases, it is not typically considered a systemic disorder, thus its effects are limited to the joints of the body.

Rheumatoid arthritis is a chronic systemic inflammatory disease of undetermined etiology involving primarily the synovial membranes and articular structures of multiple joints. The presenting complaint may be remote from a joint or may involve inflammatory symptoms at a joint. The disease is often progressive and results in pain, stiffness, and swelling of joints. In late stages deformity and ankylosis develop. The prevalence of RA is approximately 1% in the United States. The occurrence rate ranges from 0.5% to greater than 5% depending on ethnic variation. Age of onset is usually between 25 and 50 years. The disease can occur at any age but tends to peak in the fourth and fifth decades of life. The pediatric form of RA is juvenile rheumatoid arthritis (JRA), which is characterized by onset in children younger than 16 years.

Rheumatoid arthritis is usually a disease of insidious onset, although it can be abrupt. The diagnosis typically is made when 4 of 7 qualifying criteria established by the American Rheumatism Association are met. These qualifying criteria include; morning stiffness lasting longer than 1 hour before improvement, arthritis involving 3 or more joints, arthritis of the hand, particularly involvement of the proximal interphalangeal (PIP) joints, metacarpophalangeal (MCP) joints, or wrist joints, bilateral involvement of joint areas (ie, both wrists, symmetric PIP and MCP joints), positive serum rheumatoid factor (RF), rheumatoid nodules, or radiographic evidence of RA. Other contributing history includes; general malaise, weakness, fever of undetermined etiology, weight loss, myalgias, tendonitis, and bursitis. Joint involvement is typically polyarticular and symmetrical, usually sparing the distal interphalangeal (DIP) joints. Joint involvement and inflammation is evinced by; edema, effusion, warmth, tenderness to palpation, destruction (a late finding), subcutaneous rheumatoid nodules, swan-neck and boutonniere deformities, ulnar deviation of fingers at MCP joints (late findings), and bursitis. RA can also affect the cruciate ligament of the atlanto-axial (C_{1-2}) articulation in the cervical spine, resulting in spine instability and elevating the risk for spinal cord insult and injury, particularly with falls or head trauma. Importantly, RA is a diffuse systemic disease involving many areas of the body. Other organ systems that may be also be affected include; cardiac (carditis, pericarditis), pulmonary (pleuritis, intrapulmonary nodules, interstitial fibrosis), hepatic (hepatitis), ocular (scleritis, episcleritis, dryness of the eyes), vascular (vasculitis), skin (subcutaneous nodules, ulcers),

Thus, while both OA and RA can result in periods of physical limitation related to joint pain and associated functional decline, there are important differences between these two most common arthritides with respect to the workplace. Secondary OA, the most common arthritis seen in younger adults, will typically affect a single joint or region of a limb. Thus, that specific region would need to potentially be adjusted for in the design of the work site to reduce undue or repetitive stress or trauma. Importantly, if the worker has ongoing joint or regional pain, they may be more likely to modify their activity or work to accommodate these difficulties, and thus may be already adding stress to an uninvolved region and potentially predisposing it to future injury or arthritis. Individuals, more likely older, with multiple joint (or region) involvement from primary OA may have more complex ergonomic challenges at the worksite, requiring both a multitude of modifications and an ongoing process. Rheumatoid arthritis has a more typical pattern of at risk joints, specifically the larger joints of the hand and wrist, and thus workplace modifications can specifically target these regions. Reducing the stresses across these joints by modifying job tasks, utilizing adaptive aides, employing joint protection techniques, and increasing the use of larger joints (elbows or shoulders). Additionally, periods of rest and awareness of the importance of energy conservation are also key elements to

manage the overall systemic effects of RA. An awareness of the non-articular, systemic (organ) effects of the individual's RA is critical, so that both the worker and the employer can be atuned to signs and symptoms of worsening. A close, therapeutic relationship between the worker and their arthritic physician (e.g., rheumatologist, physiatrist, internist) is vital.

III. Issues Resulting from Arthritis

Work Disability

Arthritis is the leading cause of disability in the United States,[12] causing more frequent activity limitation than heart disease, cancer or diabetes.[13] This is particularly problematic since arthritis affects individuals in the prime of their working years.[7] According to the National Health Interview Survey data, there was an 11% drop in the workforce participation among working age persons with arthritis between 1970 through 1987, reporting some type of activity limitation due to the disease.14 Similarly, in a study conducted in Minnesota,15 13.7% of persons with OA and 26.3% of those with RA retired early dues to illness, compared to 3.4% of those without arthritis.

There seems to be an association between the pattern of joint involvement in OA and repetitive use. Work activities that require repetitive use of particular joint groups lead to OA.[16] Jobs that require kneeling and squatting predispose individuals to knee OA. While work that requires heavy lifting can lead to hip OA.[16] Studies show an increase in knee OA in those who in engage jobs that require high physical demands like dock workers, shipyard workers, miners, concrete workers, when compared to office or clerical staff.[17-19]

Rheumatoid arthritis has been reported to affect individual's ability to work early on,[20,21] in examining work-related factors that contribute to increased risk of work disability in people with RA, reported that 7.5%, 18%, and 27% were work disabled at 1, 5, and 10 years, respectively. A systematic review of studies on productivity loss due to RA[22] reported that from 22 to 76% (median 54%) of workers with RA had experienced work loss due to the disease within the past 6 months, and 36 to 84% (median 66%) within the past 12 months. The median of the estimates of mean duration of work loss within the past 12 months was 39 days (range 7-84 days).

Being competitively employed can have positive effects on the quality of life of people.[23] Individuals with arthritis are of no exception. Work disability, as a result of arthritis onset, has been reported to diminish their quality of life, such as lower levels of self-esteem, life satisfaction, adaptation, perceived health status, and specifically for those with rheumatoid arthritis, higher levels of depression and pain.[24-26] Despite the important role employment plays in the quality of life of people, individuals with arthritis are faced with the challenge of managing the negative physical symptoms of arthritis that they experience while trying to maintain their employment.

Low Utilization of VR Services

Very few people with chronic disease, including those with arthritis, receive public vocational rehabilitation services.[27] People with arthritis represent 8.3% of cases of work limitation[28] but make up 2% of those served by VR.[29] What is more disturbing is that even though there are reports that interventions are more effective when provided to individuals with arthritis prior to work disability,[30,31] VR services are typically given after a job loss has occurred and the results are disappointing. In a randomized trial design study, unemployed persons with musculoskeletal conditions and with desire to return to work were no more likely to regain employment after referral to public VR than those who were not referred.[32,33]

Cost on Society, Family, and Individuals

Arthritis burdens both the individual and society with substantial financial costs.[20,34,35] Individuals experience significant reduction in income[15,36] and it has been reported that average direct medical costs can range from $5425 to $ 10,053.[34,37,38] Those with RA have been reported to have over $4000 more in medical expenses compared with workers without RA.[39] The noneconomic impact of work disability on the individual and family members can also be substantial, such as social participation and household activities.[40,41]

The cost of arthritis-related work disability has been reported to be $49.6 billion in the Unites States in 1992,[42] costing the U.S. economy $86.2 billion annually.[43] The burden that falls on the employers is twofold. First, the employers incur increased health care costs due to rise in health insurance premiums from claims made by their employees with medical issues. Second, the employers experience decreased productivity. Indirect costs from lost productivity due to arthritis have been reported to exceed the direct medical costs of providing health care,[44-47] with a mean annual indirect cost of $9,744/year/patient (1998 US dollars) according to a review of cost studies of people with arthritis.[48] Additionally, employers are faced with indirect costs that stem from their employees having arthritis. This comes in the form of employees being absent from the job as well as productivity lost while the employee is at work but is not performing to the fullest due to their health issues (presenteeism). In a synthesis of evidence about the total cost of health, absence, short-term disability, and productivity losses for 10 conditions, arthritis was estimated as having one of the highest overall economic burdens on employers in terms of absenteeism and presenteeism (on the job productivity).[49]

IV. Factors Associated with Work Disability or Unemployment

Individuals with arthritis are faced with numerous barriers, which prevents them from retaining their employment. Individual or personal barriers involve physical limitations such as fatigue, not being bale to use their hands, depression, pain, bowel and bladder issues, changes in cognition and communications, and spasticity.[50] Workplace barriers may include not being able to choose their rest periods, physical activities (e.g. working for 8 hours, handling, and prolonged sitting), working conditions (e.g. being too cold), task related activities (writing, repetitive work), and worksite access issues.[51]

A number of cross-sectional and longitudinal studies have analyzed various socio-demographic, clinical, and work related factors associated with work disability or unemployment among persons with arthritis. The results of these findings have been summarized in four recent reviews of the literature. Sokka, and Pincus[52] analyzed predictive and associative markers in 15 studies. They found individuals who were not working have more joint involvement, radiographic damage, and/or laboratory abnormalities than those who were employed. Demographic variables such as age, occupation, level of education, duration of disability, and functional status of performing activities of daily living appeared to identify work status more than physiological variables.

De Croon, Sluiter, Nijssen, et al.[53] conducted a review of literature on factors that predicted work disability in individuals with RA. Of the nineteen publications between 1988 and 2004 that were identified, 13 met the methodological criteria and were examined by using a rating system that assessed the level of evidence for the predictive factors. Results showed strong evidence that physically demanding jobs, low functional capacity, old age, and low education consistently predicted work disability. On the other hand, biomedical factors did not consistently predict work disability. Due to lack of studies that met the selection criteria, there was no evidence found to support personal factors predicting work disability, such as coping style, or work environmental factors that included autonomy, support and work adjustments roles in employment. The authors concluded that work disability associated with RA is a "bio-psychosocially determined misfit" between individual capability and work demands.

Verstappen, Bijlsma, Verkleij, et al.[54] reviewed 27 articles that examined work disability and employment of individuals with rheumatoid arthritis, published between 1980 and 2002. With regards to sociodemographic variables, the authors found that individuals who were older, less educated, and earned lower income prior to RA onset were more likely to be work disabled. Inconsistent findings were reported for marital status and race was not a risk factor for work disability. Those with much greater functional disability and underwent joint surgery or received more disease modifying antirheumatic drugs (DMARDs) or used a glucocorticoid were also more likely to be engaged in work disability. With regards to work-related factors, individuals who were not working due to RA onset often had blue collar jobs and more physically demanding jobs compared to those who were still employed.

Burton, Morrison, Maclean, et al.,[22] reviewed studies that examined the relationship between RA and reduced workplace productivity from an employer perspective. Of the 307 articles that were screened, 38 met the selection criteria for the review. A median of 66% of employees with RA experience work loss due to RA in the previous 12 months. The median duration of the work loss was 39 days. Having a physically demanding type of work, more severe RA, and older age were consistently predictive of work disability after onset of RA. The authors concluded that disease status ultimately determined work disability and should be the primary target for intervention.

Transportation to and from the workplace can prevent individuals with arthritis from maintaining employment.[21,50] However, transportation issue is dependant upon the individual circumstances since those who can drive to work can obtain a handicapped license plate or permit and are not faced with this issue.[55] It is the workers who use public transportation that often report commuting as a major problem.[50]

V. Factors Associated with Maintaining Employment

The majority of the research has focused on examining factors associated with the risks of work disability for individuals with arthritis, with much less looking at factors that affect retention of employees with arthritis. Support from management and employers is a critical part in maintaining employment for those with RA.[56,57] Many individuals with arthritis are faced with multiple challenges and make major adaptations in order to maintain work.[50] Some changes are more advantageous to maintaining employment than others.[58] Allaire[59] summarized the various work changes that assist employees with arthritis in preserving employment. These included cutting back on employment activity, using sick days, changing their jobs, using job accommodations provided by the employers, and other types of changes such as help with commuting, obtaining assistance from coworkers, timing their work schedule according to their fatigue level, and getting up earlier to manage morning stiffness. The author concluded that there was little evidence with regards to the efficacy of these various work changes. Spe-

cifically for those with RA, the most helpful adaptations made to continue working are reported to be change job or alter career path, alter work hours, use more disease modifying anti-rheumatic drugs, sleep more, and work at home.[50]

Lacaille, Sheps, Spinelli, et al.,[21] in addition to identifying physical function and pain influencing work disability, identified work-related factors that are associated with increased risk of work disabilities for those with RA. The authors reported that the risk of work disability is lowered for individuals who are self employed, whose work stations are modified, that work was important to the person, and who received continued support from family towards employment. These factors are potentially modifiable and with effort to do so, will consequently help individuals with RA remain employed.

More recently, Varekamp et al.[57] investigated what employees with RA need to retain their employment, from both their perspectives as well as those of the health professionals. Among the employees with RA, employer support, understanding and acceptance of RA as well as responsibility and coping ability, suitable working conditions, support from coworkers, health professionals, and the organization were reported to be necessary for them to continue working. From the professional's perspective, well informed professionals who cooperate, employees' coping capacities and commitment to work, financial regulations at the workplaces, adequate social security provisions, medication, and therapy, a positive attitude on the part of employers and colleagues, and suitable conditions were reported to be necessary for continued employment. The authors concluded that factors necessary for continued employment for individuals with RA lie at different psychosocial, practical, organizational and social policy levels.

In addition to the work changes, coping skills and self-management efforts of those with arthritis to remain productive and healthy plays a significant part in remaining employed.[58,60] Studies have focused on cognitive coping efforts,, such as acceptance, positive reframing, and relaxation to manage their symptoms or losing their job due to arthritis[61,62] but Gignac[63] recently examined behavioral coping strategies that 492 individuals with osteoarthritis or rheumatoid arthritis used to manage their arthritis and employment. Coping behaviors reported at home and work included adjusting time spent on activities, getting help from others, modification to activities and anticipatory coping (e.g. planning, caution, movement such as stretching and exercising to minimize symptoms, and alternating rest with activity). Fewer coping behaviors were reported at the workplace than at home and more anticipatory coping were reported by those who expected to remain employed Other factors that were associated with maintaining employment included modification to activities, longer disease duration, and discussing arthritis with their employers.

VI. Interventions that Promote Employment

Vocational Rehabilitation

Vocational rehabilitation is one way to address work disability and job loss. However, there is little evidence regarding the effectiveness of vocational rehabilitation.[64] A review of the vocational rehabilitation programs in patients with chronic rheumatic diseases[65] reported that the rate of successful return to work varied from 52 to 69%.[29,66,67,68] Studies that have examined the effects of vocational rehabilitation have reported their job tenure as being short-termed.[27]

Programs to Assist Job Retention

Studies suggest that prevention of work disability and retaining their job may be more effective rather than assisting individuals to return to work.[55,69,70,71] A considerable amount of arthritis related work disability occurs early after disease onset.[20,71,72,73,74,75] Of those with RA, 20% to 40% have quit their jobs completely as a result of RA within the first 3 years of the disease.[20,70,76] Therefore, it is important that intervention be provided as soon as possible in order to minimize the effects of work disability, preferably while the individual is still employed. Providing accommodation for impairment related work problems is the primary job retention intervention.[55,77]

A few programs to assist individuals with arthritis retain employment have been developed. In Project Alliance, although most participants did not complete the program, among those who did, 80% retained employment (need to contact author for detail as to why many did not complete).[77] Similarly, 92% of employed participants with arthritis retained employment 6 months after participating in the Job Raising Program, which used a self-improvement model of vocational rehabilitation developed for individuals with arthritis.[78]

Allaire, Li, and LaValley[30] conducted a randomized controlled trial with 242 participants with 48 months of follow-up to determine the efficacy of vocational rehabilitation provided to persons with rheumatic diseases while they were still employed but were at risk for job loss. The experimental group received two 1.5 hour sessions of vocational rehabilitation where barriers in the workplace, in commuting, and in the individual's home were identified using Work Experience Survey tool.[79] The counselors interviewed participants face-to-face using the tool. After barriers of the participant were identified, the participant and counselor prioritized the barriers. Potential solutions were suggested and their feasibility was discussed. The best solutions were identified as a plan of action. If the participant desired, an on-the-job evaluation of barriers was available and likewise, counselors could contact an employer on the participant's behalf. The control group

received printed materials about disability employment issues and resources by mail. Results indicated that job retention intervention effectively prevents job loss for persons with rheumatic diseases at risk for job loss if it is provided while they are still employed. Also, there were significant differences between groups at 24 months and 48 months follow-up. This suggests that although intervention was brief, the effect is long lasting and highly cost effective.

Allaire, Niu, & LaValley[80] examined the effectiveness of job retention intervention in employed individuals with rheumatic diseases who are at risk for work disability. One hundred and twenty-two participants in the experimental group received intervention which consisted of the following components; identification of work barriers using WES tool[79] and solutions, vocational counseling and guidance, and education and self-advocacy. The control group received copies of pamphlets and fliers about how to manage health-related employment issues and available resources that experimental group participants received. Result showed that job loss was delayed and satisfaction level higher in the experimental group compared to the control group, suggesting that job satisfaction may lead to job retention.

In order to minimize the effects of work disability, health professional need to identify workers with arthritis early so that they can provide intervention to those who are at risk of work disability.[81] The Work Limitations Questionnaire was developed to assess limitations of workers with health conditions and the validity has been reported for use amongst workers with OA.[82] The Work Instability Scale assesses the need for workplace modifications among workers with rheumatoid arthritis and it has been reported to have 82% specificity for identifying need for modification.[83]

Health and Disease Management Programs Provided by Employers

Given that the most individuals with arthritis develop the illness between 35 and 50 years of age, and that many experience functional limitation that results into reduced productivity, employers have vested interest in proactively accommodating individuals who develop the disease to prevent work disability and so that individuals are able to maintain their employment.

More and more employers, recognizing the relationship between poor health and employment costs as well as retention,[84-86] are proactively providing services and programs that increase productivity and morale and incentives for staying at work, such as training, health promotion, fitness facilities, and leisure activities. A well designed health and disease management program that is properly implemented has been reported to enhance the quality of health care that are provided to workers, improve their productivity, and lower their health risks,[87,88] as well as decreasing costs.[89,90]

Mahalik et al.[91] reviewed the literature on arthritis with a specific focus on worksite interventions aimed at improving employability. Their review stressed the need to treat and assist individuals with arthritis with employment. They found that when accommodations were made a multifaceted was used, however oftentimes individuals with arthritis either chose not to seek accommodation due to the potential stigma associated with disclosure and/or were not aware of possible adjustments. The authors noted that there is a small, but continually growing body of research in this area. More recent new is the report of work site interventions to assist individuals with employment. The authors recommend that future research in this area should use a combination of psycho-educational and behavioral components within a cognitive-behavioral approach. The need for randomized, comparative studies measuring multiple outcome variables along with long term follow up to better measurer the effectiveness of worksite interventions is also affirmed.

VII. Discussion

There are a limited number of studies evaluating the effectiveness of vocational rehabilitation services and/or programs for individuals with arthritis. One approach, proven effective with other populations, to prevention or reoccurrence involves analyzing the person's work activities in enough detail to identify those features of his working life which are placing him at risk. It is not unusual for a patient to want some type of "quick fix" to allow him or her to immediately return to work. However, simply receiving physical relief fails to identify what caused or aggravated the problem in the first place thereby initiating possible recurrence.

Instead, it is recommended that the management of work related disability should start early on. The clinician (rehabilitation team representative) should visit the work place in order to identify problems and assess what factors contributing to the patient's condition are under his or her direct control. This type of functional assessment is the first step toward identifying effective work place supports and accommodations that may enable the person to return to work. Supports may include any one or a combination of instruction on different ways to complete tasks and assistive technology. In some instances, this may require the team member to work with the firms' occupational health department. If a person is going to work at a new place of employment this may be done in conjunction with a vocational rehabilitation provider.

If a worksite visit is not feasible, then the team will have to settle for interviewing the patient about tasks performed and observe him or her demonstrating how it is done. Unfortunately, a lot of critical information can be lost, as this approach is

not nearly as informative as making direct observations in the actual work setting. Additionally, every patient and workplace is different. Thus, there is no simple formula for gathering the needed information. Again, making direct observations in the real work setting can be crucial to assisting an individual with arthritis with returning to work either at preinjury workplace same job, different job in same work place or gaining employment in a new place of employment.

Once observations are made, the team representative should be in a better position to help determine which risks can be eliminated by teaching the patient a new way of working, which require minor changes and which require more radical changes. Radical changes often will involve negotiations between the employer and the worker. In some instances this may relate to accommodations like use of assistive technology, increased breaks, change in scheduling, performing work in a different way, or reassignment of job functions. Under some circumstances, it may require the new worker be assigned to a vacant position.

Increased break times or changes in scheduling can also be an effective accommodation. Some individuals may require longer break times or multiple shorter ones throughout the course of the work day. Others may find that they simply feel better certain times of day and will benefit from changes in scheduling to be at work during peak performance periods. Sometimes, a work task may be performed in a different way; yet still yield the same result in an acceptable amount of time. This type of change in the way the activity is performed may serve as a meaningful accommodation to some workers.

A change in job functions may be helpful. This might involve reassignment of marginal or non essential job functions to another worker. Perhaps, a change in essential functions, the major job duties, or reassignment to a vacant position will be warranted.

Whenever assistive technology is needed, it may need to be fabricated or adapted to the individuals needs. This is because sometimes, existing products intended to help overcome various challenges are poorly designed from a functional standpoint. For example, the optimal height of a workstation will depend on the size of the worker.

One of the factors that can be modified so that individuals with arthritis are able to either retain their employment after onset of arthritis or return to work if they had to terminate their employment is workplace environment. Employers should consider providing workplace accommodations as well as appropriate treatment and insurance coverage in order retain skilled employees with arthritis. A recent study on the impact of RA on medical expenditures, absenteeism, and short-term disability benefits39 found that the total average cost for employees with RA was $4244 (2003 dollars) more than those without RA. Since the annual cost of RA has been reported to be associated with the duration of the disease and the extent of the disability as measured by Health Assessment Questionnaire (HAQ) scores,48 combination of diagnosis followed by treatment with disease-modifying drugs provided within the first 3 months of onset92 with workplace accommodations, such as work station modifications,21 would be effective for employees diagnosed with RA to remain productive.

Work disability is a common occurrence for individuals with arthritis. Factors that influence work disability for these individuals include employment factors, employees factors, disease factors, and other factors such as access to health care and vocational rehabilitation. The prospect of individuals with arthritis remaining productive depends on the complex interaction of numerous factors. Future research must consider all aspects when developing and implementing interventions.

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Quality Indicators for Competitive Employment Outcomes in School and Work Programs

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Abstract

The quality of employment outcomes achieved by people with significant disabilities varies widely across the country. This paper describes a set of research-referenced quality indicators for measuring the effectiveness of employment services. A Program Review Format containing seven quality indicators for competitive employment services is presented. Probe questions for assessing each indicator are described, along with program improvement strategies. The program review format can be used by CRP staff in reviewing the quality of the process followed and the employment outcome achieved for an individual program participant. It can be used as an overall CRP self-assessment in reviewing the consistency of its employment services and supports with a core set of quality indicators. Where practices are not representative of higher quality services and competitive employment outcomes, priorities for follow-up attention can be set. The quality indicators could also be used as an interview guide for use by persons with disabilities and their families in selecting a community rehabilitation program as a source of employment services. Finally, the quality indicators and review format are of value to Vocational Rehabilitation Counselors and other representatives of case management and funding agencies in working with employment service providers to assess, monitor, and strengthen the quality of employment services.

I. Introduction

Customized employment; resource ownership; real work for real pay; job carving; micro enterprise; business within a business: increasingly, references are appearing to a rapidly expanding array of employment outcomes possible for and achieved by persons with significant disabilities (Griffin, Hammis, & Geary 2007; Wehman et al, 2007). These employment outcomes reflect careful job matches frequently involving negotiated arrangements with employers (Targett & Inge, 2008). The focus on employment in community integrated job settings as a first and primary choice recognizes the benefits of employment for a person with a disability in terms of wages, the potential for benefits, and the dignity that arises from gainful employment. There are benefits also for employers in meeting labor needs and for family, coworkers, and the general public who are able to see the employed individual in a fully competent role in the workplace and community (Wehman, Revell, and Brooke, 2003).

Unfortunately, there are substantial disparities across the United States in the extent to which individuals with disabilities are participating in community integrated employment. For every one person served through state Developmental Disabilities programs in the U.S. in Fiscal Year 2004 who are in competitive employment (including supported employment), approximately three individuals continue to be served in center based programs such as sheltered workshops, day activity centers, or day habilitation programs (Braddock et al, 2005; Rusch & Braddock, 2005). The results of a recent national survey of Community Rehabilitation Programs indicate that the most utilized program was facility-based work, with almost 88% of the agencies providing this service (Inge et al, 2008). Persons with severe and persistent mental illness continue to have very high rates of unemployment in the range of 85% to 90% (McQuilken et al, 2003).

In addition, the quality of employment outcomes obtained by persons with disabilities has varied substantially. For example, employment outcomes in

supported employment have at times been perceived as drawing heavily on more entry-level jobs in a limited band of predominantly service occupations (Wehman & Kregel, 1995; Mank, 1994). Limited planning and job development efforts create situations where these employment opportunities sometimes represent a forced choice situation for a person with a significant disability (Griffin et al, 2007). Job performance, satisfaction and retention suffer.

Despite the national data that continue to show high rates of unemployment among persons with disabilities and the predominant use of center based services, there are a number of very positive examples of a growing recognition of the importance of prioritizing employment at the state, community, and program level. For example, a number of states have rates of participation in competitive employment substantially higher than the national average of 24% for persons served through state Developmental Disabilities programs in FY 2004. These states include Alaska (41%), Connecticut (51%), Indiana (48%), Louisiana (46%), Massachusetts (43%), New Hampshire (49%), Oklahoma (71%), Pennsylvania (40%), and Vermont (43%) (Braddock et al, 2005). States such as New Hampshire and Washington are putting into place clear policies prioritizing funding of services leading to community integrated employment outcomes (Hall et al, 2007; Washington State Department of Social and Health Services, 2004).

In addition, significant improvements in the rates of employment outcomes for persons with severe and persistent mental illness have been reported for programs following a clear set of evidenced-based practices in supported employment (Becker et al, 2006; Bond et al, 2001). Some community rehabilitation programs have followed strategic plans that reshaped traditional more centered based service orientation into a clear priority focus on community integrated employment outcomes (Brooks-Lane et al, 2005). Numerous examples of successful customized employment endeavors by persons with the most significant disabilities are being published (Griffin et al, 2007). Also, a recent national survey of consumer attitudes towards companies that hire people with disabilities noted that 87% of the survey participants indicated that they would prefer giving their business to companies that hire individuals with disabilities (Siperstein & Romano, 2006).

As community rehabilitation programs and their staff providing employment supports move increasingly to an emphasis on competitive job outcomes, it is critically important that a clear set of indicators be followed to measure the quality of services being provided and the job outcomes being achieved. These quality indicators must reflect the variety of perspectives critical to evaluating employment services. The first perspective is the point of view of individuals with a disability who turn to a community rehabilitation program for support in getting and retaining a job (O'Brien et al, 2003). Do individuals served by the supported employment program consistently achieve truly meaningful job outcomes? Does job planning include a review of disability benefits and the impact of employment on these benefits? Who selects these jobs and do these employment opportunities reflect informed customer choice and control?

The indicators must also reflect the perspective of employers. Are employers satisfied with the work produced by the individuals in supported employment and the quality of the ongoing support services received from the supported employment program? The indicators must be responsive to the agencies funding the supported employment program. Does the provider have a well coordinated job retention support system in place? Finally, the combined set of indicators must serve as a means for self-assessment by the supported employment program to help identify areas of strength that can be used in marketing its services and also areas that need priority attention for improvement.

What are the core indicators of quality competitive employment services that can be used collectively by an individual in choosing a CRP, a funding agency seeking positive employment outcomes for the dollars spent on services, and an employment service agency seeking to measure the quality and effectiveness of its services? Current descriptions of best practices in providing services and supports leading to competitive employment outcomes for persons with significant and the most significant disabilities (i.e., Wehman et al, 2007) point directly to key benchmark indicators for measuring the quality of employment services. For example, there is evidence that the provision of effective benefits planning to Social Security Disability beneficiaries early in the employment planning process is linked with better wage outcomes (Trembley et al, 2004). Job finding that is individualized with attention to personal preferences and support services that are ongoing are linked to improved employment outcomes (Bond, 2004). The following seven quality indicators for measuring employment outcomes are derived directly from current best practices in employment services for persons with disabilities:

1. Use of Benefits Planning
2. Individualization of the Job Goal
3. Quality of Competitive Job
4. Consistency of Job Status with Co-Workers
5. Employment in an Integrated Job Setting
6. Quality of Job Site Supports and Fading
7. Presence of Ongoing Support Services for Job Retention and Career Development

The purpose of this paper is to describe a set of key indicators that can be used in measuring the quality of employment services provided and employment outcomes achieved in assisting individuals with disabilities. In the discussion that follows, each of the seven indicators will be described in terms of its

Figure 1: Quality Indicators for Review of Competitive Employment Job Outcomes

Accomplishment Area / Quality Indicator	Assessment Questions	Current Status*	Priority Code for Attention to Improve Job Outcomes
A. Use of Benefits Planning	a. Did the agency secure services from a certified Benefits Planner to assist individual and family in understanding the impact of wages on benefits? b. Was a written benefits analysis completed? c. Did Analysis present impact of employment on all Federal and other Benefits Programs in which the individual is currently enrolled?	___1 ___2 ___3 ___4	
B. Individualization of Job Goal	a. Were the individual's strengths, abilities, and interests considered when establishing job goal? b. Did the individual lead the planning and job assessment process formulating a job plan? c. Did the individual choose the job coach/employment specialist providing primary services and supports? d. Is the individual satisfied with job outcome and services?	___1 ___2 ___3 ___4	
C. Quality of Competitive Job	a. Does individual earn at least minimum wage? b. Is individual working at least 20 hours per week? c. Is employer satisfied with the job performance of the individual?	___1 ___2 ___3 ___4	
D. Cosistency of Job Status with Co-Workers	a. Is individual employed and paid by business where work is taking place, not by service provider? b. Are wages earned and benefits received commensurate with those received by others doing similar work? c. Are opportunities for advancement consistent w/ those available to co-workers?	___1 ___2 ___3 ___4	
E. Employment in Integrated Job Settings	a. Is the work site absent of a congregation of persons with disabilities? b. Are there co-workers who are not disabled within the work site with whom the consumer has regular contact? c. Are there social interactions with co-workers at the work site (e.g.: during breaks, lunch, or after-hours gatherings of co-workers)?	___1 ___2 ___3 ___4	
F. Quality of Job Site Supports and Fading	a. Do job site training and support strategies match the learning style of the individual and the culture of the job site? b. Is there evidence of a planned fading program, including involvement of co-workers in giving instructions and support to consumer?	___1 ___2 ___3 ___4	
G. Presence of Ongoing Support Services for Job Retntion and Career Development	a. Is there a written long term supports plan and is the plan being implemented? b. Are contacts made with the individual at least twice monthly to monitor employment stability? c. Is there a plan for career advancement? d. Do ongoing post-employment support services for the individual include support for changing job settings/re-employment?	___1 ___2 ___3 ___4	

* Current Status Code	** Priority Code (Importance for attendtion in 12-18 months)
1. Outcome and services not representative of this indicator. Program practices do not indicate that this indicator is considered in developing jobs. 2. Outcome and services demonstrate awareness of indicator, but current practices indicate inconsistent application. 3. Noticeable efforts in this indicator area; room exists for additional progress. 4. Outcome fully consistent with this indicator.	L = Low importance M = Medium Importance H = High importance Note: Type of job unknown in 6 cases.

importance as a quality measure for a supported employment program. Probe questions are provided to assist staff of a community rehabilitation program in determining the extent to which its services and outcomes are consistent with the defined quality indicator. Figure 1 on the following page presents a summary program review format for use by CRP staff in completing an initial self-assessment on each of the seven indicators. The format includes a Current Status Code scale for assessing program practices in relation to each indicator. Finally, a Priority Code for Attention scale is provided to note areas that need attention for improvement. Staff completing the assessment can note the current status of its program in relation to the indicator, and establish a priority for follow-up attention in areas where current practices are not representative of higher quality services and employment outcomes.

The following review of the seven quality indicators for competitive employment outcomes also includes a brief summary of strategies to improve program performance for each of the indicators.

II. Indicator #1: Use of Benefits Planning

Effective planning for a successful employment outcome for a person with a disability should include a review of the critical issues surrounding the receipt of disability benefits provided by both the Social Security Administration (SSA) and by other public programs. For many individuals with significant disabilities, the monthly cash payments provided by SSA disability programs represent an important source of monetary support. The associated public health insurance benefits such as Medicaid and/or Medicare frequently pay for essential medical equipment and services. The SSA disability benefit programs offer people with disabilities a significant financial resource that can work to facilitate movement to employment in a well planned program. However, fear of benefit loss potentially caused by paid employment also serves as a major barrier to this process (Miller, O'Mara, & Kregel, 2007).

Work and receipt of disability benefits are not mutually exclusive. The SSA disability programs include numerous provisions known as "work incentives" that are designed to ease the transition from dependence on benefits to greater economic self- sufficiency. These work incentives offer many opportunities to support movement to employment. Receipt of SSA disability should be viewed as a potential advantage that can be utilized in a strategic fashion to assist the beneficiary in achieving employment goals.

Potential probe questions for measuring the quality of Benefits Planning include:

- Did the agency secure services from a certified Benefits Planner to assist individual and family in understanding the impact of wages on benefits?
- Was a written benefits analysis completed?
- Did Analysis present impact of employment on all Federal and other Benefits Programs in which the individual is currently enrolled?

Strategies for Program Improvement

Arranging for benefits planning as a component of an employment plan is not the singular responsibility of the community rehabilitation program. Benefits planning can be arranged through the Vocational Rehabilitation Counselor or by others involved in the employment planning, including the person seeking employment and her/his family, and by the CRP. A state-by-state national directory of Benefits Planning programs sponsored by the Social Security Administration can be found at http://www.socialsecurity.gov/work/ServiceProviders/WIPADirectory.html.

The critical point for the job coach and CRP is to work with the all those involved in developing the employment plan with the individual to assure that a careful benefits analysis is completed. Unaddressed questions or lingering concerns about the impact of employment on disability benefits by an individual with a disability and his/her family can be severely detrimental to the potential for achieving a successful employment outcome.

III. Indicator #2: Individualization of Job Goal

High quality employment programs place a priority on empowering individuals to make choices regarding potential jobs and their career paths. A critical factor in assessing the overall quality of an employment program is determining if users of the service make choices during the employment process and are truly in control of their employment outcomes. Organizations that support choice and control shape their service delivery practices by the wants and needs of their customers. An individualized job goal flows directly from use of a person centered process focused on assisting the individual with a disability in exploring job and career interests. For individuals who have had limited exposure to work and the community, it is important that the steps followed include a number of activities that provide opportunities for the person to build an awareness and understanding of job possibilities.

Potential probe questions for measuring the quality of the individualization of the job goal include:

- Were the individual's strengths, abilities, and interests considered when establishing job goal?
- Did the individual lead the planning and job assessment process formulating a job plan?
- Did the individual choose the job coach/employment specialist providing primary services and supports?
- Is the individual satisfied with job goal identified?

Strategies for Program Improvement

The extent to which the person with a disability seeking employment is in position to make an informed choice is a critical measure of the degree to which job goals are individualized. There are a number of strategies CRP staff can use in providing opportunities for informed choice. Use of a person centered discovery process in assisting the individual in setting an employment goal one key strategy (Inge et al, 2008). A discovery process involves both taking the time to really get to know the person with whom employment supports are being planned, and also for the person to get to know herself/himself in terms of job interests and goals (Callahan, 2008; Griffin et al, 2007). Community visits, observations in a variety of settings, job tryouts, job site assessments, involving family and friends for inputs: all of these activities are just some examples of how a CRP can utilize a variety of strategies to assure that the job goal chosen by an individual with a disability is individualized to that specific person.

IV. Indicator #3: Quality of Job Outcome

Wages and number of hours worked weekly are critical quality indicators for an employment program for a number of reasons. Focusing on jobs that pay minimum wage or above sets up a real work for real pay employment situation. It is critically important that CRPs consistently avoid work opportunities that pay less than minimum wage. Hours of weekly employment establish the base for a number of meaningful employment outcomes. Jobs with low work hours are usually characterized by lower pay and limited benefits. In comparison, employment of 20 or more hours per week brings better access to higher wages and potential benefits such as health coverage, vacation and sick leave, and insurance coverage. Higher hours of weekly employment also improve access to work-related training provided through the employer and social interaction with co-workers.

Supporting a high percentage of competitively employment individuals with disabilities in lower hour jobs creates a variety of possible strains on the CRP. These can include responsibilities for helping individuals working a limited number of hours fill non-work hours. Many funding agencies require a certain level of program involvement per week; lower hours of employment can create situations where programs turn to more center-based, segregated services to fill hours. This practice perpetuates center based services, ties-down staff who could be shifted to supporting customers in the community, and creates confusion among program participants and their families as customers move back and forth between community integrated work and set-apart, center based services.

Potential probe questions for measuring the quality of job outcomes include:

- Does individual earn at least minimum wage?
- Is individual working at least 20 hours per week?
- Is employer satisfied with the job performance of the individual?

Strategies for Program Improvement

There are a variety of ways to ultimately measure the quality of the job outcome and much of this will occur in the job negotiation phase between the employer and the new employee with a disability. Ultimately, the best advantages for career advancement and improved employee benefit packages are reserved for full time employees. If part time work is the goal of the new employee, do not negotiate work hours less than 20 hours per week. It will be important to be sure that the new employee's work schedule is similar to other workers in the business to be sure that social interaction is not impeded. Additionally, in all cases of part time employment, continue to reassess the employee's interest in full time employment. Over time, employees will build skills, stamina, and confidence and may be interested in a job change.

V. Indicator #4: Consistency of Job Status with Co-Workers

A critical measure of the true quality of an employment outcome is the consistency of the job status of the individual with a disability with that of his/her co-workers. The preamble to the 1997 regulatory announcement for supported employment within the Federal Vocational Rehabilitation programs frames paid employment in integrated settings in the context of the parity principle by asking the question: Is the experience of the person with a disability at parity with the experiences of the non disabled co-worker (Federal Register, February 11, 1997)?

One example of a measure of parity is the source of employment for the individual with a disability. A worker at a job site who is actually the employee of an outside service provider has limited career opportunities. Most people with disabilities

are not interested in dead-end positions. As with other members of the labor force, people with disabilities are interested in jobs where they can build their resumes and/or employment positions and potentially grow with a company. Meaningful employment outcomes for individuals in supported employment are jobs that have full parity with other jobs within the workplace in terms of how people are hired, supervised and compensated; the opportunities they have to interact with co-workers; and the access they have to job advancement and career opportunities.

Potential probe questions for measuring the consistency of job status with co-workers include:

- Is individual employed and paid by business where work is taking place, not by service provider?
- Are wages earned and benefits received commensurate with those received by others doing similar work?
- Are opportunities for advancement consistent w/ those available to co-workers?

Strategies for Program Improvement

Final job negotiations done with the employer will be vital to ensuring that the job status of the new employee with a disability is generally the same as other company employees. Agreeing to or actually setting up "special" or different payment structures, work schedules, and/or benefit packages will diminish some of the major benefits of competitive employment and will make it difficult for the new employee to become socially integrated within the work site. Employers are generally open to job accommodation modifications because they make these arrangements with most all employees. Too often CRP job developers working with a perspective new employee with a disability set up an employment contracts that are unusual and many times unconventional when compared to other employees in that business. All individuals with disabilities should earn wages commensurate with that of coworkers performing the same or similar job functions. It is the responsibility of the job coach to support the new employee until he/she has learned the new job task and able to perform the entire job description with the same quality and production rate of coworkers.

VI. Indicator #5: Employment in Integrated Settings

Integration and community participation are important outcome measures of quality services. Individuals with significant disabilities can and should work in regular business environments and participate fully in life of their communities. Work is a highly valued activity in the American culture and offers wage earners numerous benefits. Having a job and paying taxes can enhance an individual's status in the community and offer the employee an opportunity to interact with co-workers and to develop a host of relationships at work and in the community.

Potential probe questions for measuring the quality of employment in integrated settings include:

- Is the work site absent of a congregation of persons with disabilities?
- Are there co-workers who are not disabled within the work site with whom the consumer has regular contact?
- Are there social interactions with co-workers at the work site (e.g.: during breaks, lunch, or after-hours gatherings of co-workers)?

Strategies for Program Improvement

There are multiple factors that can be examined when determining if an employee is integrated in the workplace and participating in the community. Analyzing a business site to determine if the company offers an opportunity for integration is important, as is the need to repeat the analysis periodically as the employed individual becomes more familiar to his or her coworkers. In addition, the employee's work area, work hours, and satisfaction level play an important role in assessing a customer's integration and community participation.

VII. Indicator #6: Quality of Job Site Supports and Fading

A key to the career success of people with significant disabilities is the unique arrangements of the necessary supports that will assist each customer of employment services in obtaining and maintaining competitive employment (Brooke, Inge, Armstrong & Wehman, 1997). Detailed job analysis, identification and use of community and workplace supports, systematic instruction, compensatory strategies, orientation training, and workplace accommodations have always been the cornerstones of a well-developed plan of support.

Potential probe questions for measuring the quality of job site supports and fading include:

- Do job site training and support strategies match the learning style of the individual and the culture of the job site?
- Is there evidence of a well thought our plan for fading job supports, designed from the first day of employment?
- Is the employee with the disability a partner in all aspects of his or her plan for job site support, including the selection of compensatory strategies and the decision to involve co-workers with instructions and support?

An experienced employment specialist knows to base all employment decisions based upon the preferences of the new employee. Critical to the success of job site support and fading is a well designed plan. For example, waiting until the new employee has learned his or her job before thinking about fading substantially increases the likelihood that the job coach will experience difficulty with fading from the job site. An efficient job coach has a plan for fading from the first day of work.

VIII. Indicator #7: Presence of Ongoing Support Services for Job Retention and Career Developmenmt

The provision of ongoing supports as long as needed after employment is the core characteristic of supported employment that differentiates it from other employment services. There is strong evidence that maintenance of ongoing supports after employment is a characteristic of successful supported employment programs generating better employment outcomes (Bond, et al, 2001). Well coordinated job retention systems provide ongoing individualized supports that assist the employee with a disability in areas such as structuring workplace accommodations, monitoring and assessing job stability, adjusting supports to address changing needs at and away from the job site, provides other supports that enhance job retention, and provides replacement assistance in situations of job loss or job enhancement.

Community rehabilitation programs can face a substantial challenge in operating a well coordinated job retention system that extends into the extended services phase of supported employment services after the time limited funding from Vocational Rehabilitation ends. Although there are very few studies that have focused on extended services, there is evidence that many supported employment providers have very limited access to funding for extended services. Extended services funding provided to agencies frequently does not cover the cost for providing these services and monthly follow along services are often funded from other program revenues.

Potential probe questions for measuring the quality of ongoing support services for job retention and career development include:

- Is there a written long term supports plan and is the plan being implemented?
- Are contacts made with the individual at least twice monthly to monitor employment stability?
- Is there a plan for career advancement?
- Do ongoing post-employment support services finclude support for changing job settings/re-employment?

Too often employment specialists engaged in long terms supports take on the role of assisting each individual on their caseload with all of their work support needs. When this occurs, the employment specialist becomes overextended in his/her commitments and has a drastically limited the number of individuals that he or she can serve effectively. Long term supports should be approached with the employment specialist serving in a coordinating position by managing and directing the long term supports plan where possible rather than providing the actual services.

For example, if a supported employee is having difficulty paying his or her bills, the employment specialist would not run a budgeting class. Rather, a creative brainstorming process would take place considering the possible options. Once the individual selected the option of choice, the employment specialist would follow up to be sure that the plan is being implemented as designed. Also, there is strong documentation that once there is a change in management at the job site, many supported employees experience difficulty for a host of different reason. It is vital for the employment specialist to remain in contact with the business site and when there is a change in management, to go back into the business and explain the ongoing employment services as a key resource for the employer in maintaining a productive employee within the business.

IX. Summary

The quality of employment outcomes achieved by people with significant disabilities varies widely across the country. However, if community rehabilitation service providers follow the quality indicators and program review strategies described in this paper, they can improve their services and the job outcomes for people with disabilities. The program review format can be used by CRP staff in reviewing the quality of the process followed and the employment outcome achieved for an individual program participant. It can also be used as an overall CRP self-assessment in reviewing the consistency of its employment services and supports with a core set of quality indicators. Where practices are not representative of higher quality services and competitive employment outcomes, priorities for follow-up attention can be set. The quality indicators could also be used as an interview guide by persons with disabilities and their families in selecting a community rehabilitation program as a source of employment services. Finally, the quality indicators and review format are of value to Vocational Rehabilitation Counselors and other representatives of case management and funding agencies in working with employment service providers to assess, monitor, and strengthen the quality of employment services.

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Allegations of Employment Discrimination Under the ADA and Resolutions: Populations Characteristics and Trends

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Abstract

This study investigates allegations of workplace discrimination made by job-seekers and workers across three main impairment groups including general disability, chemical dependence and psychiatric disability. Specifically, the types of allegations and resolutions were compared across disability classifications and demographic characteristics. Demographic characteristics of individuals making allegations were consistent with those of individuals with disabilities in the general population. A number of statistically significant relations were found with respect to both allegations and resolutions; however, some of these differences may not be socially significant. Approximately 79% of allegations were related to post-hire issues, such as discrimination in promotion and termination, disciplinary actions, and harassment. While initial allegations reflect the individuals' perception that they have been discriminated against, the majority of allegations investigated by the EEOC are decided in favor of employers.

I. Introduction

Discrimination in the workplace has been an issue for individuals with disabilities some time (Bishop & Allen, 2001; Cook, 2006; Martin, Brooks, O'Day, 1998; Ortiz, & Veniegas, 2003; Rumrill, Roessler, & Koch, 1999). Title VII of the Civil Rights Act of 1964 created the Equal Employment Opportunity Commission (EEOC) as an independent federal agency with the authority to receive, initiate, and investigate allegations of employment discrimination. The EEOC investigates claims of workplace discrimination involving several Federal laws: Title VII of the Civil Rights Act of 1964 (Title VII), Equal Pay Act of 1963 (EPA), Age Discrimination in Employment Act of 1967 (ADEA), Title I and Title V of the Americans with Disabilities Act of 1990 (ADA), Sections 501 and 505 of the Rehabilitation Act of 1973, and the Civil Rights Act of 1991.

According to the ADA (§ 12101), 43,000,000 Americans are estimated to have one or more physical or mental disabilities. This number is increasing as the population as a whole grows older, and is now estimated at 54,000,000, nearly one of every six Americans (McNeil, 1997). The ADA defines an individual with a disability as a person who has a physical or mental impairment which substantially limits one or more major life activities, has a record of said disability, or is regarded as having such impairment. The ADA also protects applicants and employees from discrimination based on their relationship or association with an individual with a disability, whether or not the applicant or employee has a disability.

The ADA requires that an employer make accommodations to a qualified employee or applicant provided that it does not impose "undue hardship" on the employer; i.e., providing it is "reasonable." That being said, a qualified applicant or employee is one who can perform the essential functions of a job with or without reasonable accommodations, and only qualified individuals are protected. The ADA defines accommodations as modifying existing facilities making them accessible, restructuring job tasks, or acquiring the appropriate equipment or technology to accommodate the individual.

Obviously, "reasonable accommodations," "substantial limitation," and "regarded as" disabled are all terms involving a measure of subjectivity. For

this reason, the EEOC is prepared to conduct and resolve investigations fairly and accurately in light of all evidence obtained. Many American businesses, however, voluntarily support trying to end workplace discrimination in an effort to reduce the costs of time, money, and image (National Organization on Disability, 2002). Some employers are also willing to hire workers with mental retardation or other disabilities in order to be considered "good corporate citizens" (Johnson, Greenwood, & Schriner, 1998; Olson, Cioffi, Yovanoff, & Mank, 2001)

The ADA covers employers with 15 or more employees, as well as labor unions and employment agencies. When an individual with a disability has been "wronged" under the auspices of one of these laws, a charge can be filed with the EEOC. The individual filing the charge is defined as the Charging Party (CP). The employer is defined as the Respondent. The EEOC offers the Respondent the option of resolving the charge via mediation, settlement, or conciliation, which may save the employer time and money. If none of these options are optimal or successful, an investigation is set into motion and the possibility of a lengthy litigation becomes probable. A statistic published by the EEOC states that in the fiscal year of 2005 alone, 14,893 charges of disability discrimination were received by the EEOC and 15,357 cases from previous years were resolved. In Fiscal Year 2006 alone, the EEOC recovered $44.8 million in monetary benefits for CPs and other aggrieved individuals.

To keep things in perspective, it should be noted that in order for individuals to be protected under the ADA they have to disclose that they have a disability. Because many disabilities are not apparent just from appearance, individuals sometimes choose not to disclose for fear they will be subject to discrimination. However, if an individual wants the right to the protection of the ADA, disclosure must occur. This may not seem like much of a problem, given the new and creative technologies that are developed to aid employees with disabilities. In spite of this, however, disabilities still affect the ability of many employees and their ease of placement in the work force (Schwochar & Blanck, 2003). This directly impacts the decision of individuals to disclose their disability to their employer.

The first purpose of this study is to describe the universe of allegations and resolutions of workplace discrimination derived from Americans with disabilities as previously categorized. The second purpose is to identify observable trends in allegations and resolutions by gender, age and race.

II. Method

Data Source and Reduction

The data used in this study were drawn from a database maintained by the EEOC of ADA Title I allegations closed between July 26, 1992 (the first effective date of ADA Title I) and September 30, 2003. The final data set consisted of 122,677 unduplicated, closed records with an allegation basis across the three main impairment groups of GENDIS (general non-behavioral disability), Chemical Dependency and Psychiatric Disability (Behavioral Disability) (refer to Table 1 below for specific impairments within these groups). For the purposes of this study, the category of "other disabilities" was not included because of the unknown nature of the impairments represented in this group. Also excluded were CPs who have record of disability, are regarded as having impairment, and those who have a relationship or association with an individual with a disability, because individuals in these groups are likely to not be disabled at the time the allegation was filed, and therefore their inclusion would confound the study.

Table 1: Disability Type by Category

Type	N	Common Reported Impairments
GENDIS (General Non-Behavioral)	70,768	Allergies, asthma, back impairment, chemical sensitivities, cancer, diabetes, epilepsy, orthopedic impairment, mental retardation, neurological impairment, brain/head injury, cerebral palsy, missing digits or limbs
Chemical Dependency (Behavioral)	6,110	Substance abuse, alcoholism, drug abuse
Psychiatric Disability (Behavioral)	45,799	Emotional psychiatric impairment, anxiety disorder, depression, manic/depressive disorder, schizophrenia, other psychiatric disorders

It is important to note that each record, thus the unit of analysis for this study, is an allegation, not the CP. A single CP may make more than one allegation in a single complaint, or may make the same allegation on more than one occasion. Each allegation made by a CP represents one of the 122,677 records.

Study data were strictly limited to allegations brought under Title I of the ADA. Allegations brought under other federal employment statutes were not considered, including the Civil Rights Act, Equal Pay Act, Age Discrimination in Employment Act, and the Family and Medical Leave Act. In addition, charges brought under State anti-discrimination statutes were excluded due to wide variations in definitions of disability, discrimination, or remedies for breach.

To maximize confidentiality, all information regarding the CP and the Respondent was purged except for descriptive data. For the CP, this included age, race and ethnicity, gender, and

type of impairment.. Each allegation is coded by the EEOC investigator into one of 40 possible discrimination issues. These were reduced to three areas of discrimination:

1. Getting a job (e.g., recruitment discrimination, interviewing, and hiring);
2. Working conditions (e.g., discrimination in assignments, advancement, disciplinary actions, or demotions; permitting an antagonistic work environment); and
3. Keeping a job (e.g, discriminatory termination or layoff, return to active status from layoff).

When an allegation is closed, it becomes a resolution either with merit or without merit. Merit resolution indicates that evidence of discrimination based on disability has been found whether or not the Respondent accepts the remedy for breach (penalty, remediation or consequence) prescribed by the EEOC. A resolution without merit indicates that there is insufficient evidence to conclude that actual discrimination did occur, or the matter was closed for a technical or administrative reason. Examples of the latter might include the following: the Respondent was not covered under ADA Title I, the allegation was withdrawn, or the CP was not a qualified person with a disability.

Statistical Analysis

To describe the universe of allegations of workplace discrimination based on all three impairment groups, frequencies were computed for demographic characteristics of the Charging Parties and Respondents and broken down by discrimination issue as well as merit of resolution. To identify observable trends, allegations as described by discrimination issues and types of resolutions were calculated and compared across impairment groups, as well as across gender, age and race. Chi-square goodness-of-fit statistics were used to compare impairment groups, age, gender and race across the three categories of allegations (getting a job, working conditions, keeping a job). Likewise, Chi-square goodness-of-fit statistics were used to compare impairment groups, age, gender, and race between the two types of resolution (merit vs. non-merit). Frequencies and percentages are provided for Respondent demographics broken down by discrimination issue, as well as merit status of resolutions.

III. Results

Tables 2 through 5 on the following pages cross-tabulate CP characteristics by type of allegation, including CP disability, sex, age and race. As shown in Table 2 on this page, the most frequent type of issue for all three disability groups was in keeping a job. However, individuals with chemical dependency were far less likely to allege discrimination in getting a job and more likely to allege discrimination in keeping a job to a statistically significant degree (χ^2=1300, df=4, p<.0001).

Table 2: Types of Allegations by CP Disability Group

	"Get Job"		"Work Conditions"		"Keep Job"	
	N	Row%	N	Row%	N	Row %
GENDIS	14,174	23.5%	19,407	32.2%	26,770	44.4%
Chemical Dependency	520	9.8%	1,545	29.2%	3,232	61.0%
Psychiatric Disability	7,407	18.6%	15,313	38.5%	17,021	42.8%

* $\rho < 0.0001$ * $df = 4$

Table 3: Types of Allegations by CP Sex

	"Get Job"		"Work Conditions"		"Keep Job"	
	N	Row%	N	Row%	N	Row %
Female	11,260	22.0%	18,547	36.2%	21,391	41.78%
Male	10,828	20.0%	17,676	32.7%	25,579	47.30%

* $\rho < 0.0001$ * $df = 2$

Table 4: Types of Allegations by CP Age

	"Get Job"		"Work Conditions"		"Keep Job"	
	N	Row%	N	Row%	N	Row %
Under 21	58	16.7%	83	23.9%	207	59.48%
21 to 35	4,155	19.8%	6,473	30.9%	10,316	49.26%
36 to 50	11,167	21.4%	18,440	35.3%	22,607	43.30%
51 up to 65	4,422	21.1%	7,685	36.6%	8,898	42.36%
65 or Older	266	18.2%	556	38.1%	636	43.62%

* $\rho < 0.0001$ * $df = 8$

Table 5: Types of Allegations by CP Race

	"Get Job"		"Work Conditions"		"Keep Job"	
	N	Row%	N	Row%	N	Row %
Caucasian	14,616	21.7%	22,291	33.1%	30,416	45.18% `
African American	3,850	18.9%	7,608	37.4%	8,887	43.68%
Hispanic	1,392	19.9%	2,739	39.1%	2,868	40.98%
Other	1,996	20.9%	3,253	34.0%	4,319	45.14%

* $\rho < 0.0001$ * $df = 6$

Significant relationships were also found for allegation by sex ($\chi 2$=324.0, df=2, p<.0001), age ($\chi 2$=319.3 df=8, p<.0001), and race ($\chi 2$=22.8, df=6, p<.0001). In general, males were more likely to allege discrimination in keeping a job, and females were more likely to allege discrimination in working conditions. Older CPs (ages 36 and up) were more likely to allege discrimination in working conditions, while younger CPs (age 21 and under) were more likely to allege discrimination in keeping a job. CPs of the primary minority races (African-American and Hispanic) were more likely to allege discrimination in working conditions, while Caucasian CPs and those of "other races" were more likely to allege discrimination in keeping a job.

Resolutions

Tables 6 through 9 present cross-tabulations of CP characteristics and resolutions of the allegations. Significant relationships were found in cross-tabulation of resolution by disability group ($\chi 2$=195.5, df=2, p<.0001), age ($\chi 2$=26.5, df=4, p<.0001), and race ($\chi 2$=212.5, df=3, p<.0001), but not by sex. Allegations by CPs with general disabilities were more likely to be decided in favor of the CP vs. allegations made by members of other disability groups. Allegations by older CPs (over 65) were more meritorious than those below 65. Allegations made by Caucasian CPs and those classified as "other races" were more meritorious than those of other racial/ethnic groups. This means that more actual (vs. perceived) discrimination was experienced by these groups.

Table 6: Type of Resolution by CP Disability Group

	Resolved in Favor of Charging Party		Resolved in Favor of Respondent	
	n	Row %	n	Row%
GENDIS	15,612	22.1% `	55,156	77.9%
Chemical Dependency	1,059	17.3%	5,051	82.7%
Psychiatric Disability	8,737	19.1%	37,062	80.9%

* $\rho < 0.0001$ * $df = 2$

Table 7: Type of Resolution by CP Sex

	Resolved inFavor of Charging Party		Resolved in Favor of Respondent	
	n	Row %	n	Row%
Female	12,214	20.9%	46,154	79.1%
Male	13,167	20.5%	51,019	79.5%

Table 8: Type of Resolution by CP Age

	Resolved in Favor of Charging Party		Resolved in Favor of Respondent	
	n	Row %	n	Row%
Under 21	90	21.6%	326	78.4%
21 to 35	5,090	21.2%	18,970	78.8%
36 to 50	12,063	20.0%	48,310	80.0%
51 up to 65	5,203	20.8%	19,761	79.2%
65 or Older	407	23.2%	1,344	76.8%

* $\rho < 0.0001$ * $df = 4$

Table 9: Type of Resolution by CP Race

	Resolved in Favor of Charging Party		Resolved in Favor of Respondent	
	n	Row %	n	Row%
Caucasian	17,125	21.7%	61,742	78.3%
African American	4,175	17.8%	19,287	82.2%
Hispanic	1,430	17.9%	6,570	82.1%
Other	2,365	21.4%	8,677	78.6%

* $\rho < 0.0001$ * $df = 3$

IV. Discussion

Limitations of the Data

The EEOC ADA database provides succinct records of allegations and decisions regarding employment discrimination. Its primary purpose is to inform the EEOC and Congress of discrimination issues, and therefore there are some limitations with regard to research investigations that use the data. For example, the database only includes allegations that are reported to the EEOC, not those that are resolved internally between the employee and employer, or those that employees choose not to pursue. Nor does the database include allegations brought at the state level. However, it should be noted that the EEOC ADA database represents the entire population of EEOC-investigated and closed discrimination cases, and in that respect generalizability of the findings are not at issue.

Major Findings and Implications

The category of "keeping a job" accounted for the largest proportion of allegations made by individuals with disabilities. For all groups, the majority of allegations were in the area of job retention, indicating that nearly half of the CPs were already employed or had been employed at the time the alleged action occurred. The percentage of allegations closed with merit, i.e., in favor of the CP, was always markedly lower than allegations closed without merit, i.e., in favor of the Respondent.

CPs with general disabilities represented approximately 57% of the data set. This percentage is consistent with prevalence rates of like disabilities in the general population (U.S. Census Bureau, 2000). In addition, the demographic characteristics of CPs mirrors epidemiological studies and such disproportionate statistics are likewise prevalent in males and minority group members. These consistencies support the face validity of and provide credence to the IMS dataset with respect to its representation of adults with disabilities.

The data are clear that most allegations of discrimination occur post-hire. Approximately 79% of allegations were related to post-hire issues, such as discrimination in promotion and termination, disciplinary actions, and harassment. Discrimination in recruitment or hiring practices accounted for only about one-fourth of allegations. Unfortunately, the EEOC dataset does not include the time frame (i.e., pre-hire or post-hire) in which the CPs disclosed their disabilities to employers (or even if they did so). This precludes our ability to examine the degree to which presence or timing of disclosure influences discrimination. This is certainly an area that warrants further investigation but which cannot be adequately addressed through the EEOC data.

Seven of the eight cross-tabulations and chi-square analyses revealed statistically significant differences; however, it should be noted that many of these statistical differences are not necessarily significant from a practical standpoint, with differences of only a few percentage points between groups. This is the limitation of chi-square analyses with very large populations. However, some interesting relationships were revealed.

For example, it is interesting that CPs with chemical dependencies were less likely to allege discrimination in hiring and more likely to allege discrimination in keeping a job than were CPs in the other groups. One plausible explanation for this anomaly is that chemical dependencies are not visible disabilities, are less likely to be disclosed at hire, and more likely to result in disciplinary actions when the CP's work is affected by the effects of his or her dependencies.

It is also telling that patterns of allegations and resolutions varied to some degree by sex, race, and age, which are also areas in which employees are protected from discrimination under Federal law. It is feasible that discrimination (or perceptions of discrimination) may be influenced by a combination of personal characteristics of the alleging party, not just based on his or her disability. If so, it would be feasible that claims made under the ADA could have been made based on

race, sex or age under the Civil Rights Act, Equal Pay Act, or the Age Discrimination in Employment Act.

Finally, it is notable that cases were resolved in favor of the CP more frequently when the CP has general disabilities (22.1%) as opposed to chemical dependency (17.3%) and psychiatric disability (19.1%). While the difference is only a few percentage points, the significant finding is that individuals with general disabilities have a 16% better chance of a merit resolution than individuals with psychiatric disability, and a 28% better chance than individuals with chemical dependency. It is plausible that workers with general disabilities are more able to be accommodated and/or more able to perform the essential functions of their jobs than are members of the other two groups. This is certainly an area that warrants further investigation.

The data are also clear that most allegations of discrimination by job-seekers and employees with disabilities are ultimately decided by the EEOC to be without merit. This is consistent with prior findings from studies of the EEOC data. For example, Rumrill, Roessler, McMahon, and Fitzgerald (2005) found that only 25% of all allegations by individuals with multiple sclerosis were closed with merit. While it is an undeniable fact that many individuals with disabilities, whether it is a general disability, chemical dependency or a psychiatric disability, perceive themselves to be victims of employment discrimination, the majority of allegations investigated by the EEOC are decided in favor of employers.

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Post Hire Employment Discrimination Toward Workers with Disabilities: Development of a Prediction Model for Merit Claims

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Abstract

A significant portion of workers with disabilities perceive themselves to be the victims of discriminatory policies and practices, yet only a small minority of allegations filed with the Equal Employment Opportunity Commission (EEOC) are resolved in favor of the worker. This study investigates allegations of employment discrimination under Title I of the Americans with Disabilities Act that occur following the point of hire. Specifically, a JMP Partition Model analysis was conducted to determine factors that predict allegations that are determined to be with merit by EEOC investigators. The findings show that only two variables were significantly related to the criterion variable: Time period in which the case was resolved and geographic region of the Respondent against whom the allegation was charged. Implications of the findings are presented.

I. Introduction

Discrimination continues to be a significant barrier to employment for many individuals with disabilities. Surveys of individuals with various types of disabilities have consistently shown that many feel that they have experienced discrimination (Bishop & Allen, 2001; Cook, 2006; Martin, Brooks, Ortiz, & Veniegas, 2003; Rumrill, Roessler, & Koch, 1999). In response to an online survey of 522 workers with disabilities conducted by Harris Interactive (2007) for CareerBuilder.com and Kelly Services, 44% of respondents indicated that they have felt discriminated against or treated unfairly by their coworkers or supervisors because of their disabilities. The most frequently cited incidents included discrimination in pay, assignments, training, and promotion, as well as hostile comments from coworkers and supervisors, exclusion from office social activities, and refusal to provide accommodations. Moreover, 61% of survey respondents indicated that when they had reported discriminatory or unfair treatment to their employer, no action was taken against the alleged offender.

Title I of the Americans with Disabilities Act of 1990 (ADA) prohibits discrimination in hiring, promotions, and terminations toward qualified persons with disabilities. "Qualified" defines individuals who can perform the essential functions of a job or could do so with reasonable accommodation. The ADA defines the term disability with respect to an individual as "(A) a physical or mental impairment that substantially limits one or more of the major life activities of such individual; (B) a record of such an impairment; or (C) being regarded as having such an impairment;" the ADA also covers workers who have a relationship or an association with an individual with a disability, such as a spouse or parent (42 U.S.C. §12102). The ADA applies to public and private employers with 15 or more employees, with the exception of religious organizations or private clubs. Labor unions and employment agencies, to the extent that they influence hiring, are also bound by the ADA.

To receive the protections and accommodations under the ADA, the job seeker or employee must disclose that he or she has a disability. Because many disabilities are not visible (e.g., psychiatric disabilities, learning disabilities), individuals with those types of disabilities sometimes choose not to disclose for fear they will be subject to discrimination. However, if an individual wants the rights and protections afforded by the ADA, disclosure

and documentation of disability must occur at some point in the period of employment.

Some (Acemoglu & Angrist, 2001; Beegle & Stock, 2003; DeLeire 2000a, 2000b) have argued that one of the unanticipated consequences of the ADA has been a decrease in earnings and job opportunities for job-seekers with disabilities, particularly among males, resulting in harm to the Act's intended beneficiaries. In addition, Acemoglu and Angrist (2001) analyzed data from the Current Population Survey (CPS) from 1988 to 1997 and found no evidence that the ADA affected separation rates for employees with disabilities. They conclude that this finding suggests that the ADA has not achieved its purposes for protecting individuals with disabilities after the point of hire.

Since 1992, the Equal Employment Opportunity Commission (EEOC) of the U.S. Department of Justice has investigated allegations of employment discrimination under Title I, as well as allegations brought under other federal employment statutes not directly related to disability, including the Civil Rights Act, Equal Pay Act, Age Discrimination in Employment Act, and the Family and Medical Leave Act. The EEOC's Integrated Mission System (IMS), from which the data for this study were extracted, provides a unique opportunity to examine workplace discrimination in terms of both its perception (i.e., the allegation brought by the individual with a disability) and its merit or lack thereof as determined by an impartial EEOC investigator.

Numerous studies of the IMS have been conducted and have yielded results of importance to policy-makers, employers, and individuals with disabilities, including the following:

- The majority of allegations investigated by the EEOC are decided to be without merit (McMahon & Shaw, 2005).
- The anticipated impacts of the U.S. Supreme Court's Sutton trilogy decisions, i.e., decreases in the number and percentage of decisions in the claimant's favor, have not been seen; the percentage of merit claim decisions increased for claimants with epilepsy following the Sutton decisions (West, Dye, & McMahon, 2006).
- Patterns of allegations and resolutions vary by sex, race, and age, which are also areas in which employees are protected from discrimination under Federal law, suggesting that perceptions of discrimination may be influenced by a combination of personal characteristics of the alleging party, not just his or her disability (Davis, West, & McMahon, 2008).

Post-hire allegations constitute the majority of claims filed by claimants, in large part because injured workers constitute a far larger proportion of claimants than was expected in the early years of ADA implementation (Bell, 1993; McMahon & Shrey, 1992). Therefore, individuals claiming discrimination as an employee (rather than as a job-seeker) have a higher likelihood of having a known disability, either through disclosure or through the occurrence of workplace injury. Addressing the EEOC experiences of this group will help shed light on the employment retention and career advancement barriers they face. This is particularly relevant in light of increasing rates of workplace disabilities and rising costs for disability claims in recent years for both Social Security Disability Insurance and private disability insurance carriers, and subsequently the growing need to retain injured and disabled workers in the workplace through disability management programs (McQueen, May 1, 2007).

The purpose of this study was to analyze IMS data related to post-hire allegations of discrimination under Title I. Specifically, IMS variables were used to develop a prediction model for a decision favorable to the claimant, i.e., that discrimination had occurred against a qualified employee.

II. Method

Data Source

The data used in this study were drawn from a database maintained by the EEOC of ADA Title I allegations closed between July 26, 1992 (the first effective date of ADA Title I) and September 30, 2005, the last year for which data were available. From the database, a study data set of 331,701 records was extracted that were allegations of discrimination occurring post-hire. Each record, and thus the unit of analysis for this study, is an allegation, not an individual filing an allegation, or Charging Party (CP). A single CP may make more than one allegation in a single complaint or may make the same allegation on more than one occasion. Each allegation made by a CP represents one of the records. Study data were strictly limited to allegations brought under Title I of the ADA. Not considered were charges brought under state antidiscrimination statutes due to wide variations in definitions of disability, discrimination, or remedies for breach. Also not considered were allegations of retaliation, because these are not a directly related to the existence or consequence of disability.

To maximize confidentiality, all information regarding the CP and the Respondent (the employer against which the allegation is made) was purged except for descriptive data. For the CP, this included age, race and ethnicity, gender, and the disability basis of the allegation. For the Respondent, the data included the type of organization, number of employees, and location by broad geographic regions as used by the U.S. Department of Education. In addition, the IMS contains a variable describing the nature of the discrimination alleged to have occurred, known as "issues." The possible post-hire discrimination issues were reduced to three types of post-hire discrimination:

1. Failure to provide reasonable accommodations to a qualified employee;
2. Discriminatory job actions (e.g., disciplinary measures, terminations, wages, denial of training opportunities or promotions, failure to reinstate following layoff); and
3. Hostile or unfavorable work environment or conditions (e.g., harassment, intimidation, segregation, unpleasant work assignments, constructive discharge, inequitable work terms or conditions).

When an allegation is closed, it becomes a resolution either with merit or without merit. Merit resolution indicates that evidence of discrimination based on disability has been found whether or not the Respondent accepts the remedy for breach (penalty, remediation, or consequence) prescribed by the EEOC. A resolution without merit indicates that there is insufficient evidence to conclude that actual discrimination did occur, or the matter was closed for a technical or administrative reason. Examples of the latter might include the following: the Respondent was not covered under ADA Title I, the allegation was withdrawn, or the CP was not a qualified person with a disability.

Dependent and Independent Variables

The dependent variable in this study will be resolution of the investigation with merit merit. The predictor variables include:

a. the claimant's disability classification (i.e., the "basis" of the allegation),
b. age,
c. sex,
d. race,
e. the type of issue as described previously,
f. the location of the Respondent by region,
g. the type of Respondent by Standard Industrial Classification (SIC) code, and
h. the size of the Respondent organization in terms of number of employees.

In addition, because of the previous finding of increasing rates of merit decisions following the U.S. Supreme Court's 1999 Sutton trilogy decisions (West, Dye, & McMahon, 2006), the year of closure was also included as a predictor variable, dichotomized as 1992 - 1999 and 2000-2005.

IMS basis classifications were collapsed into the following categories: Physical disabilities, sensory disabilities, behavioral impairments (i.e., chemical dependencies and psychiatric disorders), neurological impairments, and other disorders. Those workers who met the definition of disability using other prongs (i.e., having a record of impairment, regarded as having an impairment, or having a relationship or association with an individual with an impairment), were excluded from this analysis.

Because of the small numbers of CPs in some racial classifications, these data were collapsed and recoded into the following groups: Caucasian, African-American, Hispanic, and Other. Age groupings were (a) under age 21, (b) 21-35, (c) 36-50, (d) 51-64, and (e) age 65 and older.

Size of the Respondent (number of employees) was classified using the following groups: (a) 15-100, (b) 101-200, (c) 201-500, and (d) 501 and over. Respondent regions and SIC codes were defined as shown in Table 2 on the following page.

Statistical Analyses

First, descriptive data for the CP and the Respondent were aggregated, as well as the closure status of allegations. Second, data were analyzed using a data mining approach, the JMP Partition Model. Data mining refers to analysis of large data sets for discovery of relationships. The JMP Partition platform is commonly used when exploring relationships without a prior model, and can be used for both continuous and categorical values (Sall, Creighton, & Lehman, 2005). JMP Partition Model recursively partitions the data according to relationship between the dependent variable and the independent variables. In brief, it finds a set of cuts (continuous variables) or groupings (categorical variables) of values that best predict the criterion value by forming a tree of decision rules until the desired fit is reached or additional variables fail to improve the prediction model. The splits are determined by maximizing the LogWorth value, which reflects degree of separation for a potential split. For continuous variables, LogWorth is related to the sum of squares due to the differences between means. For categorical variables, it is related to the likelihood ratio chi-square statistic.

III. Results

Descriptive Analyses

Tables 1 and 2 on the following page present information regarding CPs and Respondents, respectively. Table 1 shows that individuals with physical impairments and those between the ages of 36 and 50 constituted the largest segment of CPs (44.1% and 46.8% respectively). Males and females were almost equally represented. Minorities represented approximately 38% of CPs, substantially higher than their representation in the U.S. according to Census data (20%).

Nearly half of all allegations were made in two regions: The Southeast (23.1%) and the Midwest (23.6%), most likely because of the large populations in these two regions. Most CPs

were employed in large organizations, with 43.5% working in organizations with over 500 employees. Respondent organizations were largely in the manufacturing, retail, and service industries.

Table 3 below presents frequencies for the type of allegations made by CPs. This table shows that the majority of allegations (53.9%) were related to discriminatory job actions. Hostile or unfavorable work environment or conditions were alleged in 26.3% of allegations, and 19.8% were for failure to accommodate a qualified employee.

Overall, 21.0% of all allegations were closed with merit and 79.0% were closed without merit. This is consistent with other findings from IMS studies for all CPs and for subsets of the IMS database.

Table 1: CP Characteristics

Disability Classifications	n	%	Sex	n	%	Age	n	%	Race	n	%
Sensory	15,284	5.3%	Male	168,193	50.9%	Under 21	34,118	10.3%	Caucasian	180,072	62.1%
Physical	127,586	44.1%	Female	162,197	49.1%	21-35	62,498	18.8%	African-American	59,705	20.6%
Neurological	33,853	11.7%				36-50	155,231	46.8%			
Behavioral	53,318	18.4%				51-64	73,762	22.2%	Hispanic	19,703	6.8%
Other	59,370	20.5%				65 and over	6,092	1.8%	Other	30,684	10.6%

Table 2: Respondents Characteristics

Region	n	%	SCI Code	n	%	Size	n	%
Southwest	52,510	15.8%	Agriculture (010-099)	1,934	0.6%	15-100	104,386	33.1%
Southeast	76,587	23.1%	Mining (100-149)	2,375	0.7%	101-200	37,996	12.1%
Rocky Mountain	11,301	3.4%	Construction (150-199)	5,908	1.9%	201-500	35,318	11.2%
Pacific	38,452	11.6%	Manufacturing (200-399)	57,306	18.6%	501 and over	136,923	43.5%
Northwest	6,035	1.8%	Transportation/Utilities (400-499)	29,227	9.5%			
Northeast	18,107	5.5%	Wholesale (500-519)	5,921	1.9%			
New England	4,655	1.4%	Retail (520-599)	30,982	10.0%			
Midwest	78,366	23.6%	Financial/real estate (600-659)	14,837	4.8%			
Mid-Atlantic	32,692	9.9%	Services (660-909)	90,878	29.5%			
Great Plains	12,998	3.9%	Public Administration (910-980)	28,690	9.3%			
			Not Classified	40,350	13.0%			

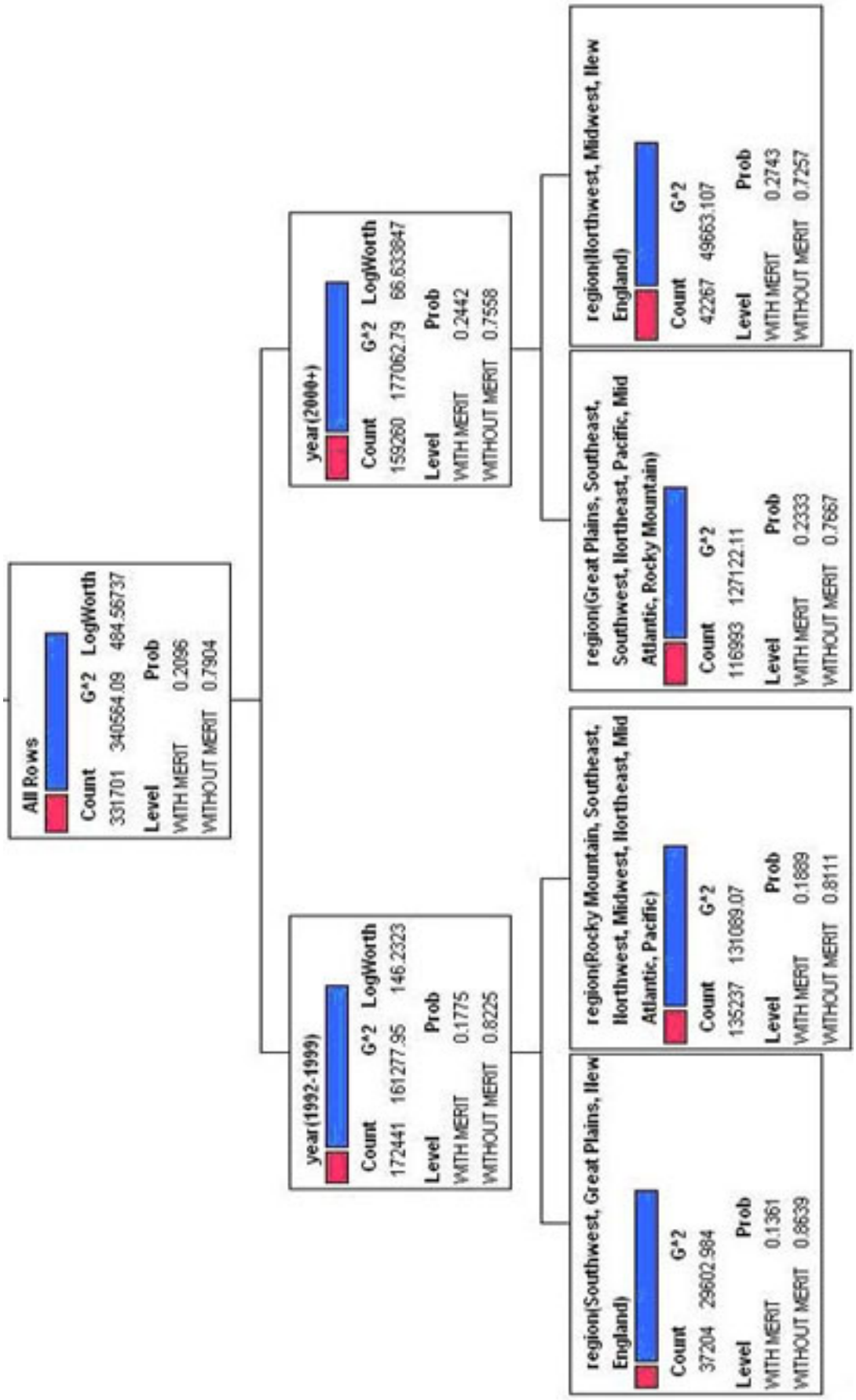
Table 3: Allegation Types

	n	%
Failure to provide reasonable accommodations	65,624	19.8%
Discriminatory job activities	178,720	53.9%
Hostile or unfavorable work environment or conditions	87,357	26.3%

Partition Model

Findings from the JMP Partition Model are presented in Figure 1 on the following page. Only two variables were found to predict the criterion value. Period of closure was the strongest predictor, with 17.8% of allegations closed with merit from 1992 to 1999 and 24.4% closed with merit from 2000 to 2005, a difference of approximately 38%. The second predictor variable was region of the Respondent. For cases closed in the Northwest, Midwest, and New England in years 2000 to 2005, the merit resolution rate was 27.4% as opposed to 23.3% in the other regions. For cases filed in the years 1992 to 1999, those filed in the Southwest, Great Plains, and New England regions had a merit resolution rate of only 13.6% compared to 18.9% for all other regions. No other variable contributed to the prediction model. Overall, the prediction model was very weak, with an RSquare value of .009.

Figure 1: Results of JMP Partition Model



IV. Discussion

Limitations of the Study

The source of data for this study, the EEOC IMS database, was not developed for research purposes. Its primary purpose is to inform the EEOC and Congress of discrimination issues, and therefore, there are some limitations with regard to research investigations that use the data. For example, the database includes only allegations that are reported to the EEOC, not those that are settled internally between the employee and employer prior to the employee making an EEOC claim, or those that employees choose not to pursue. Nor does the database include allegations brought at the state level. Finally, as with all databases of this nature, there are finite options for each data element and sometimes coding judgment decisions have to be made, in this case on the part of EEOC investigators, from the individuals and circumstances presented.

Discussion of Findings

The initial finding of this study, as in other studies using the EEOC IMS data system, was that the overwhelming majority of allegations of discrimination under Title I were found to be without merit. Only 21% of allegations were found to be qualified under the ADA and to have experienced discrimination based on their disability.

As Mudrick (1997) notes, the low success rate for EEOC claims by individuals with disabilities is not substantially different from those charging discrimination on the basis of race, sex, or other factors. However, this is small consolation to those workers with disabilities who perceive themselves to be the victims of discrimination and who have expectations of a finding in their favor. While it cannot be ruled out that some unknown number of intentionally false or frivolous allegations were filed, the more likely assumption is that it is difficult for many employees who are protected under the ADA, the Civil Rights Act, and other protective legislation to either (a) adequately prove their claim, or (b) distinguish between job actions that are disagreeable but allowable and those that are discriminatory.

The JMP Partition Model analysis found that CPs have had much higher success rates, in terms of merit resolutions, in the years following the Sutton trilogy Supreme Court decisions in 1999. This finding has significant implications for workers with disabilities. First, this finding supports and expands upon the finding of West, Dye, and McMahon (2006) for CPs with epilepsy, that these decisions have not had the anticipated negative effects on workers with disabilities.

Prior to these decisions, the EEOC issued guidelines stating that mitigating measures such as medications and assistive devices should not be considered when determining whether or not an individual has a disability as defined by ADA. In Sutton v. United Air Lines (1999), the Supreme Court held that the use of corrective eyeglasses could be considered in deciding whether or not two sisters were disabled, because with corrective eyewear their visual acuity was normal. The Supreme Court followed similar lines of reasoning in deciding Murphy v. United Parcel Service (1999) involving an employee with high blood pressure, and Albertson's, Inc. v. Kirkingburg (1999) involving a worker with monocular vision. Following these decisions, the EEOC rescinded its interpretive guidance related to mitigating factors.

There were many dire predictions following these decisions, and rightly so. These decisions created a Catch-22 in that a worker with disabilities whose functional limitations were mitigated through medication, assistive technology, accommodations, etc., could no longer qualify for protection under the ADA. However, without mitigation, he or she would be unable to perform essential job duties. Ultimately, according to advocates for individuals with disabilities, Sutton would lead to even fewer cases of true discrimination decided in favor of the claimant and . Indeed, lower courts followed the Supreme Court's precedent in ADA cases involving cancer, muscular dystrophy, epilepsy, diabetes, depression, and even multiple sclerosis.

These were court cases, however, and not EEOC investigations and resolutions. Also, new EEOC guidance recommended increased use of the "regarded as" prong of the ADA definition and those allegations were excluded from this study. In part, however, this study found that the key predictor for a merit resolution was that the claim was resolved following the Sutton Decision. Thus, allegations of workplace discrimination had a much higher probability of a merit resolution post-Sutton, although the odds still favor the employer. Factors contributing to the increasing rate of merit resolutions are a topic of future research.

The second predictor, the location of the Respondent, appears to be an anomaly despite population variances. The possibility exists that this is an artifact of variance in EEOC investigator decision-making and their assigned regions, but that is speculation and is belied by the training and guidance provided by the EEOC to its investigative teams. Regional variance in case resolutions is another area for future research.

What can also be taken from this study is that most of the variables were not found to be predictive of a merit resolution, including CP sex, race, age, disability basis, and the type of discrimination alleged. This finding suggests that cases were decided, if usually not to the satisfaction of the worker with disabilities, with consistency across claimants, allegations, and circumstances.

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The Role of Veteran's Disability Benefits in Community Reintegration and Employment for Serivce Members with TBI

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Abstract

Any successful return-to-work or community reintegration initiative focused on veterans with TBI must include an analysis of the impact that paid employment may have on the disability benefits provided by the various branches of the Armed Forces within the US Department of Defense (DoD) and the US Department of Veterans Affairs (VA). If veterans with disabilities perceive employment as risky, in terms of its adverse impact on essential disability benefits, they may elect to protect their benefits instead of pursuing employment. Four major policy and practice areas within the DoD and VA disability benefit programs are identified and analyzed in terms of how they affect civilian return to work efforts of veterans. There areas are: the manner in which the military determines that service members are unfit for duty and subsequently separated or retired from the service; the manner in which disability ratings are determined and how disability ratings affect benefits; the designation of total disability ratings for veterans who are deemed to be "Individually Unemployable"; and the manner in which earned income is treated by the VA Disability Pension program.

I. Introduction

A complex array of medical services, cash benefits, and other specialized programs are available to serve and support veterans of the US Armed Forces who experience disabilities. The U.S. Department of Defense (DoD) awards and administers some benefits provided to veterans, while the U.S. Department of Veterans Affairs (VA) governs others. In addition, the current conflicts in Afghanistan and Iraq have involved the deployment of a significant number of men and women who are members of the National Guard or military reserves. These veterans have significant past involvement in the civilian workforce and are often eligible for a whole separate system of disability benefits provided by the Social Security Administration (SSA) and the Centers for Medicare and Medicaid Services (CMS).

In addition to these specific benefit programs, certain chronically unemployed veterans with the most severe disabilities may qualify for other benefit programs designed to meet the needs of individuals with limited income and few resources. These individuals and/or their dependents may be eligible for and receiving HUD Section 8 Housing Subsidies, Temporary Aid to Needy Families (TANF), Medicaid, energy assistance, or food stamps. In addition, it is estimated that veterans comprise approximately one-third of all homeless adults in the country (VA Website, Homeless Veterans, Overview of Homelessness, http://www1.va.gov/homeless/page.cfm?pg=1). Veterans who are homeless often rely heavily on vital income support programs such as Supplemental Security Income (SSI), and may participate in special HUD housing programs for homeless veterans.

Any successful return-to-work or community reintegration initiative focused on veterans with disabilities must include an intensive analysis of the impact of paid employment or self-employment on DoD and VA disability benefits, as well as any other public benefits veterans may receive based upon disability. To the extent that earnings from employment may jeopardize a veteran's program eligibility or cash benefit amount, it will make it far

less likely that an individual will choose to pursue employment. If veterans with disabilities perceive employment as risky, in terms of its adverse impact on essential cash benefits, rental assistance, health insurance, or other special programs, they may elect to protect their benefits instead of pursuing employment.

This manuscript describes the extent to which the design of veterans' disability benefits affects successful community reintegration, in terms of promoting or discouraging full participation in the civilian workforce after separation from the Armed Forces. The first section of this chapter will provide a brief overview of the benefits system available to veterans with disabilities, including disability evaluation and description of the various monetary benefit programs. The second section will identify and analyze four major disincentives to employment in the veterans' disability benefit system that serve as disincentives to full employment. Within each of these areas, specific recommendations will be made for changing current policies or practices to improve civilian employment outcomes for veterans with disabilities.

II. Overview of the Benefits System for Veterans with Disabilities

When a service member becomes injured or ill while on duty, the first priority of the armed forces is to provide medical treatment and rehabilitation services that will enable the individual to return to active duty as quickly as possible. When a service member is not able to return to full active duty within a reasonable period of time, a service member's treating physician will generally initiate the process of determining whether or not the individual is fit for active military duty by referring the individual for assessment under the military Disability Evaluation System (DES). The DES is designed to provide a uniform procedure for the evaluation of a service member's medical condition and the member's ability to continue serving in the armed forces.

The Disability Evaluation System (DES)

The DES assessment process involves two distinct stages: the Medical Evaluation Board (MEB) and the Physical Evaluation Board (PEB). The purpose of the MEB is to determine whether the service member's injury or illness is severe enough to compromise the member's ability to return to full duty based on the job specialty designation of the individual's branch of service. A PEB is an administrative body possessing the authority to determine whether or not a service member is fit for duty. A designation of "unfit for duty" is required before an individual can be separated from the military because of an injury or medical condition. Service members who are determined to be unfit for duty due to disability are either separated from the military or are permanently retired, depending on the severity of the disability and length of military service. Individuals who are "separated" receive a one-time severance payment, while veterans who retire based upon disability receive monthly military retirement payments and have access to all other benefits afforded to military retirees.

The Disability Rating System

The PEB is also responsible for determining the "disability rating" which is the percentage of disability for ill or injured service members. Individuals may be determined to be disabled anywhere along a continuum ranging from 0% to 100% disabled in 10% increments, based on the Veterans Administration Schedule for Rating Disabilities (VASRD), as supplemented by the regulations of the service member's branch of the military.

When analyzing the various programs, it is important to note that there are sharp differences in disability ratings performed by the DoD and the VA. The military will only consider the physical conditions that make a service member unfit for continued service, while the VA is required to consider all service-connected disabilities and the totality of the changes in the service member's medical condition that occurred during military service. Furthermore, the military disability rating assigned to a service member is permanent – it is not subject to reevaluation. The VA process permits reevaluation of service-connected disabilities if a condition worsens or improves over time, or if there is a change in the law governing the assignment of disability ratings. Veterans who receive both DoD and VA benefits could have two completely different disability ratings governing the two types of benefits (Intrepid Heroes Fund, 2007).

Both the DoD and the VA also designate certain veterans as having "total disability". Total disability, or 100% disability, is considered to exist when there is present any impairment of mind or body which is sufficient to render it impossible for the average person suffering from the same conditions to follow a substantially gainful occupation. In addition, a veteran may be classified as having "permanent total disability" when the impairment is reasonably certain to continue throughout the individual's life. The designations of "total disability" or "permanent total disability" are important because certain VA benefits are only afforded to individuals with these classifications. These designations of total or permanent total disability also may increase the amount of monetary benefits a veteran is entitled to receive and affect the extent to which an individual may be subject to disability reevaluations. (38 CFR, Section 3.340).

DoD and VA Benefit Programs Based Upon Disability

The Military Disability Retirement program operated by DoD allows service members with 20 or more years of active service

(service retirement eligible) to retire from the Armed Forces as disabled, regardless of the percentage level of disability, if they are found to be unfit for service by reason of physical disability. Individuals with less than 20 years of active service at the time they are removed from the military by reason of physical disability may be either separated or retired, based on a variety of factors, including the severity of disability as measured by the disability rating.

The VA offers two additional benefits based upon disability: Disability Compensation and Disability Pension. Disability Compensation is a monetary benefit paid to veterans who are disabled by an injury or disease that was incurred or aggravated during active military service. These disabilities are considered to be service-connected. The amount of disability compensation varies with the degree of disability (disability rating) and the number of veteran's dependents, and is paid monthly. (US Department of Veterans Affairs, 2007)

Veterans with low incomes and few assets who are permanently and totally disabled, or are age 65 and older, may be eligible for a type of VA monetary support known as "Disability Pension". Unlike the VA Disability Compensation program, the Pension program is means-tested – eligibility is based upon meeting certain income and asset tests. In addition, Disability Pension payments are reduced by the amount of countable income of the veteran, spouse or dependent children.

III. Disincentives to Employment in the Veteran's Disability Benefit System

The structure of the DoD and VA disability benefit systems create a number of significant disincentives to full employment. Disincentives in four major policy and practice areas are described below:

1. The manner in which the military determines that service members are unfit for duty and subsequently separated or retired from the service;
2. The manner in which disability ratings are determined and how disability ratings affect benefits;
3. The designation of total disability ratings for veterans who are deemed to be "Individually Unemployable"; and
4. The manner in which earned income is treated by the VA Disability Pension program

The disability benefit programs are appropriately intended to provide compensation for lost earnings capacity caused by the injury or illness the service member incurred while serving our country. The veterans benefits are meant to replace the wages which otherwise would have been earned if the disability had not been incurred. However, the programs are based on a flawed premise that fails to distinguish between the concept of disability in the context of military duty from the potential of veterans to acquire and maintain employment in the civilian workforce. In addition, the ratings system used by the military assumes that it is possible to objectively quantify the economic impact that various disabling conditions have upon individuals in the civilian workforce. Neither of these assumptions is valid in light of what is known about how to accommodate disability in the workplace and how to structure benefit programs in order to promote employment.

Problems with How Serivce Members are Determined to be Unfit for Duty

The process used by the DoD to determine whether to retain or discharge service members who incur a disabling injury or illness fails to recognize and apply proven strategies used by a large number of employers in the private sector to return injured or ill workers to successful employment. As a result, the process unnecessarily excludes individuals who may be able to successfully contribute to the mission of the various service branches. In practice, a decision that a service member is "unfit for duty" due to injury or illness generally results in separation from the military, which then leads to application for disability benefits. Service members are considered to be "fit for duty" when the military Physical Evaluation Board (PEB) determines whether the service member can perform the functions of his or her position as delineated in the regulations of the service member's branch of the military.

If a service member can't perform the functions of the current job specialty, it is possible to be granted an assignment to a new job specialty, but this decision is not made by the PEB. Service members who want assignment to a new job specialty generally appear before a Medical Retention Board (MMRB) that is an administrative board composed of three members, including one medical officer. Adding another administrative level at this point in the process further complicates decision making and hampers coordination of return to work efforts.

Under certain circumstances, a service member who has been determined to be "unfit" may still be permitted to remain on active duty in the armed forces. The DoD allows this continuation of service under a program known as Continuation of Active Duty or COAD. To be considered for COAD, the service member must be physically capable of performing useful service in a job specialty for which he/she is currently qualified or potentially trainable. In addition, the service member must be capable of performing his/her duty without risking adverse health effects to the service member or others and the need for medical treatment that would take significant time away from the service member's duties. While this policy may allow some armed service members to return to work after disability, historically only a small percentage of COAD requests have received approval (Intrepid Fallen Heroes Fund, 2007).

Current procedures used to determine fitness for duty should be modified to reflect advances that have occurred in health promotion and disability management. Over the past 15 years, private businesses have been learning how to manage the personnel and productivity costs associated with disability. To reduce the full and true cost of disability, businesses have increasingly been implementing "disability management" (DM) programs. Research has shown that the most effective components of these disability management programs are:

1. Common case management techniques characterized by ongoing open communication between ill or injured employees, supervisors, physicians, and designated case manager to resolve issues preventing a speedy return-to-work.
2. Aggressive return-to-work (RTW) policies and strategies, including modified job duties, transitional job duties, job site accommodations, and vocational counseling,
3. Active coordinated management of work and non-work related disability issues.
4. Identifiable, simple and coordinated points for intake and claims reporting for all disability issues. (Calkins, et. al, 2000, Williams & Westmoreland 2002)

IV. The Problem of Military Disability Ratings -- How Employment Affects Disability Ratings and How Disability Ratings Affects Employment

The disability rating system utilized by the DoD and the VA includes several practices which directly and indirectly affect the extent to which veterans engage in return to work efforts after separating from military service. These practices include:

1. Providing higher disability payments and access to additional benefits or services to veterans' with higher disability ratings, and;
2. Using employment as an indicator that triggers reexamination of a disability rating.

In both the DoD and VA disability benefits systems, the higher the disability rating, the higher the monthly payment provided to the veteran. For example, in 2007 a veteran rated at 40% would receive a VA Disability Compensation monthly payment of only $501 while a veteran rated at 60% would be paid $901 each month. This represents a difference of more $400 per month or a 79.8% increase in the monthly payment amount. When increments such as this are multiplied by 12 calendar months over a period of many years, the financial stakes involved in just a 20% rating increase become readily apparent. Similarly, the DoD retirement payments based on disability also increase as the disability rating increases.

In addition to the monthly increases, certain benefits are only provided to veterans who have ratings that meet or exceed certain limits. For example, veterans with disability ratings of at least 30 % are eligible for additional VA allowances for dependents. This includes spouses, minor children, children between the ages of 18 and 23 who are attending school, children who are permanently incapable of self-support because of a disability arising before age 18, and dependent parents. The additional amount a veteran receives for a spouse and/or children depends on the disability rating – the higher the rating, the higher the proportionate increase. Furthermore, to receive military retirement based upon disability with less than 20 years of service, service members must have an aggregate disability rating of 30% or higher. Retirement comes with a monthly benefit payment as well as all the other benefits provided to military retirees – including health care coverage through the Tricare system. Service members with military disability ratings less than the 30% necessary for the military's disability retirement pay are separated from services and only receive a one time severance payment. Again, attaining a higher disability rating may result in substantially increased cash benefits for the veteran as well as eligible dependents.

While it is understandable that Congress, the military departments of the US government, as well as the American people would want to provide additional monetary compensation to veterans who have incurred more severe disabilities in the service of their country, there are some significant unintended consequences that result from this policy. By providing significant monetary rewards for higher disability ratings, veterans have a powerful incentive to focus on their injuries and to portray their disabilities in the most incapacitating light possible. This practice also encourages veterans to continue to seek ever higher disability ratings as they age (GAO-06-309, May 2006). Providing increased cash payments and enhanced benefits for ever higher disability ratings discourages veterans from viewing themselves as capable of acquiring and retaining employment in the civilian workforce.

Furthermore, the manner in which disability rating are reexamined by the VA is related to employment. After the initial disability rating has been made, most veterans are subject to periodic re-examinations of their disability and their assigned rating. Reexaminations will be requested whenever the VA determines there is a need to verify either the continued existence or the current severity of a disability. Generally, reexaminations will be required if it is likely that a disability has improved, or if evidence indicates there has been a material change in a disability or that the current rating may be incorrect. A reexamination of the disability rating may mean that the rating will be increased, but it could also result in a rating reduction under certain prescribed circumstances. A reduced rating could potentially cause a significant reduction in monthly benefit payments.

In the VA disability evaluation system, the percentage "rating" assigned to an individual is directly related to the impact which the disability is expected to have on that individual's earnings capacity (38 CFR, Section 4.1, 2003). The provisions contained in the VA rating schedule are intended to represent the average impairment in earning capacity in civil occupations resulting from disability. The lower the rating, the less the disability is expected to diminish the earnings capacity of the individual; the higher the rating, the more the disability is expected to diminish earnings capacity. It is reasonable to expect, therefore, that individuals who enter the civilian workforce after the VA establishes their disability rating evaluation may need to be reexamined or reevaluated.

Undoubtedly, the extent to which veterans fear that work will trigger a disability rating reevaluation will have a direct impact their willingness to attempt employment at any significant level. While it is unclear how often employment actually does result in reduced disability ratings, the perceived risk of disability reexamination and a reduction in rating due to employment actively discourages return to work efforts, or reinforces working "off-the-books" for cash. Neither of these outcomes is positive in terms of the long-term well-being of the veteran or the local community in which the individual resides. The end result of linking additional compensation to higher disability ratings and then linking higher disability ratings to loss of earnings potential is that both the DoD and VA systems inadvertently reward veterans for being unemployed, under-employed, or employed in a manner which fails to comply with IRS and SSA laws and regulations.

Efforts by veterans to obtain and maintain employment should not trigger a reexamination of a veteran's disability rating. This is currently the case for individuals who receive military retirement based upon disability as these ratings are never reexamined under any circumstances. The VA already exempts certain groups of veterans from reductions in disability ratings due to employment. Veterans who are NOT monitored at all for changes in employability status include those who: Are 69 years of age or older; have been rated totally disabled due to "individual unemployability" for a period of 20 continuous years, or are assigned a 100 % schedular evaluation.

While the current exemption policy is positive, it does not go far enough. It does not make sense to reward older and more severely disabled veterans for working while penalizing the younger and less severely disabled veterans. Presumably, these individuals have the most potential to work at competitive levels and represent the group that should be most actively encouraged to participate in the civilian workforce. According to the VA, about 65 percent of veterans who began receiving disability compensation in fiscal year 2003 had disabilities rated 30 percent or less (GAO-07-512T). This majority of less severely disabled veterans should be supported in their return to work efforts by every possible means.

Finally, it is important to understand that there are some pervasive problems with the VA Schedule for Rating Disabilities which exacerbate employment issues. The VASRD was first developed in 1919 and had its last major revision in 1945. While this system is supposed to quantify loss of earnings capacity due to disability, our national economy and workforce have changed so significantly since the World War II era when the ratings were last revised, that there could be no longer any reason to believe that a direct relationship between the disability ratings and actual earnings capacity of a specific veteran continues to exist (Buddin & Kapur, 2005).

The GAO has reported that two major studies of the schedule have been conducted since the implementation of the 1945 version to determine whether the schedule constitutes an adequate basis for compensating veterans with service-connected disabilities. One was conducted by a presidential commission in the mid-1950s and a second by VA in the late 1960s. Both studies concluded that at least some disability ratings in the schedule did not accurately reflect the average reduction in earning capacity among veterans with disabilities and needed to be adjusted.

In addition, the GAO found that the VSRD has not been adjusted to incorporate the results of many recent medical advances and that rehabilitation services and technologies used to accommodate disabilities in the workplace are not considered during the rating process (GAO-02-597). It seems safe to conclude that there is currently very little correlation between the disability ratings and real loss of earnings capacity. Since the entire ratings system is based upon this fundamentally flawed premise, it is time to "uncouple" employment from the compensation issue and focus on policies that encourage independence and economic self-sufficiency.

V. The Problem of Individual Unemployment (IU)

As previously indicated, total disability ratings for VA Disability Compensation and Disability Pension may be assigned in certain prescribed instances where the schedular rating is actually less than 100% - the usual standard for the designation of "total disability". If the VA determines that an individual with the disability is unable to secure or follow a "substantially gainful occupation" as a result of service-connected disabilities, that individual may be deemed to have total disability for the purposes of VA compensation.

The VA defines a "substantially gainful occupation" as employment at which non-disabled individuals earn their livelihood with earnings comparable to the particular occupation in the community where the veteran resides (M21-1MR Part IV, Subpart ii, Chapter 2, Section f). When the VA conducts an evalu-

ation of employment, they are looking to see whether or not the veteran is working in a substantially gainful occupation as defined above. Low levels of employment, which the VA describes as "marginal employment" would not be sufficient to reduce the disability rating. Marginal employment exists when a veteran's earned annual income does not exceed the amount established by the U.S. Department of Commerce, U.S. Census Bureau, as the poverty threshold for one person. For the year 2007, the most recent year for which figures were available, this would represent an annual income of no more than $10,210 for the 48 contiguous states.

Even when earned annual income does exceed the poverty threshold, it may still not represent substantially gainful employment if (1) the employment occurred in a protected environment, such as a family business, or a sheltered workshop, (2) the veteran has maintained the employment for less than 12 months, or (3) if the veteran is receiving supported employment services (38 CFR, Section 4.16). In addition, the fact that a veteran is either participating in a program of rehabilitation or has completed such a program and is "rehabilitated" would not automatically preclude a finding of IU. The Federal regulations state that caution must be exercised in determining that actual employability is established by clear and convincing evidence.

According to a study conducted by the GAO in 2006, the VA has seen substantial growth of unemployability benefit awards to veterans with service-connected disabilities. The GAO analysis of VA data showed that the number of IU beneficiaries and payments more than tripled since the mid-1990s. From September 1996 to September 2005, the number of veterans receiving IU benefits has increased from about 71,000 to about 220,000. Moreover, the GAO estimated that IU benefit payments from 1996 to 2005 have grown from about $857 million to $3.1 billion. In September 2005, nearly half of all veterans receiving disability compensation who were rated between 60 percent and 90 percent received IU benefits. In addition, the GAO found that while the majority of veterans being newly designated as UI are older (46% at the age of 60 or older, and 19 % were age 75 or older), a disturbing percentage of new UI cases fall within the prime working years. The GAO study found that 15% of the new IU beneficiaries from October 2004 to October 2005 were aged 20-49 while an additional 39% were aged 50-59. (GAO-06-309, May 2006).

The designation of individual unemployability results in some of the same work disincentives previously attributed to the DoD and VA system of assigning disability rating percentages. A veteran who is able to establish UI status could potentially increase his/her rating from 60% with a monthly benefit of $901 to 100% with a monthly payment of $2,471 per month in calendar year 2007. This represents an increase of $1,570 per month or $18,840 over a year which represents an additional 64% in cash compensation. To illustrate the potential amount of IU benefits that could be received, the GAO estimated the lifetime present value of the increase in disability compensation benefits for veterans with schedular disability ratings between 60 and 90 percent who began receipt of IU benefits in 2005 at different ages. For example, for younger veterans, those at age 20 in 2005, the estimated lifetime present value of these benefits can range from almost $300,000 to over $460,000. (GAO-06-207T, October 2005).

The long-term financial benefits of establishing UI status are significant and increase exponentially for veterans with dependents, for whom additional monetary compensation may be received. The economic impact of this massive rating increase must be hard to resist for veterans who have struggled to maintain employment, those who do not have the requisite skills or experience to secure higher-paying jobs, or older veterans who may face age discrimination in the civilian marketplace. By providing veterans such substantial monetary incentives for remaining unemployed and proving they are unemployable in the future, the VA essentially makes it unprofitable for some veterans to try to support themselves and their families by working in the civilian economy. In these cases, employment simply does not pay as well as remaining unemployed and collecting enhanced benefits. This result is particularly unfortunate for younger veterans who are just entering their prime employment years. By opting out of the civilian workforce, these younger veterans seriously limit their ability to ever successfully become employed at a substantial level later in life, since they do not acquire the valuable employment skills and experience that businesses seek.

Experience within the Social Security disability benefits system has indicated that when individuals invest significant time and energy into documenting and proving their inability to work at a substantial level, the subsequent determination tends to act as a self-fulfilling prophesy (NCD, 2005). Individuals who have fought long and hard to achieve disability benefits based upon their inability to work at a substantial level become convinced that they are unable to work at any level, whether or not this is actually the case. The psychological impact of focusing on deficits, incapacities and inabilities can be devastating to an individual's sense of self-worth. In addition, there tends to be an inverse correlation between the amount of effort individuals expend to access disability benefits and their willingness to risk continued receipt of these benefits by working. The harder an individual works to acquire disability benefits, the less likely that individual is to do anything which might jeopardize continuation of those benefits – including going to work.

Other federal benefit programs have attempted to eliminate obstacles to employment in ways that could be applied to the work disincentives created by the IU designation. The SSA disability system includes an earnings test referred to as Substantial Gainful Activity (SGA). SSA links their definition of disability directly to a beneficiary's ability to engage in SGA

level work which for 2008 is $940 per month of gross earned income for non-blind individuals. SSA encourages employment in the Supplemental Security Income (SSI) program by allowing recipients to earn substantially more than the SGA guideline each month after initial eligibility for SSI has been established. In the SSI program, an individual receiving the maximum federal benefit payment would have to earn more than $1,359 per month in 2008 before all cash benefits would be lost. Even after that point, special rules allow former SSI recipients to retain Medicaid coverage. The VA could consider adopting a similar approach to reducing disincentives to employment for these individuals. The SSI program currently uses a one-for-two reduction system in which benefit payments are reduced by one dollar for every two dollars of countable earned income. Recent experiments with a one-for-four reduction system have been applied in several SSA demonstration projects with encouraging results.

Another option would be to adopt a strategy similar to that utilized in the HUD Section 8 housing program. In order to encourage paid employment, HUD allows residents to earn wages without experiencing any increase in rent or reduction of rental subsidy for a period of one year. The VA already uses a similar approach, but the time period could be extended by several years, or perhaps even made permanent once the IU designation has been applied.

In addition, it is recommended that the VA consider adding certain earned income exclusions or work incentives that will reduce the amount of income that is counted for benefit reductions. For example, there could be deductions offered for expenses veterans incur due to their disability when they become employed, similar to the Impairment Related Work Expense provision offered by SSA for all beneficiaries of its disability programs. Furthermore, the VA should consider implementing a program patterned after SSA's Plan for Achieving Self-Support (PASS), in which beneficiaries are permitted to set aside income and/or resources for use in attaining a specified occupational objective which leads to greater economic self-sufficiency. This would allow veterans to leverage their pension benefits to pay for the items or services needed to prepare for an income producing career.

VI. Employment Discrimination in the VA Disability Pension Program

The VA Disability Pension is a strictly means-tested program and earned income from employment or self-employment will definitely impact a veteran's eligibility as well as the amount of payment due each month. In the Disability Pension program, the VA considers all income from sources such as wages, salaries, earnings, bonuses from employers, income from a business or profession or from investments or rents as well, as the fair value of personal services, goods or room and board received in lieu thereof will be included. Furthermore, salary is not determined by "take-home" pay, but is based on "gross pay" before any deductions made under a retirement act or plan and amounts withheld for taxes. In the case of self-employment, the gross income from a business or profession may be reduced by the necessary operating expenses, such as cost of goods sold, or expenditures for rent, taxes, and upkeep.

Unfortunately, Disability Pension benefits are reduced dollar for dollar for any income that is deemed countable under the VA rules. For example, if a veteran was entitled to a Disability Pension in the amount of $400 per month and went to work earnings $300 in gross wages per month, the Disability Pension would be reduced one dollar for each of the $300 received in wages. The reduced Disability Pension payment would be $100. Veterans receiving disability pension are required to report all income and changes in assets to the VA.

The manner in which the VA pension program treats earned income removes virtually any incentive a veteran would have to work for pay. Not only would wages cause a dollar for dollar reduction in the benefit amount, but the rules fail to take into account any impairment related expenses the veteran may incur by working and penalizes the veteran based upon gross rather than net earnings. A veteran receiving pension benefits who chooses to work could potentially have LESS disposable income after the applicable deductions are made. There are quite literally no work incentives inherent in this system.

VII. Recommendations: Changes in Veterans Disability Benefits that Encourage Work

Recommendations are offered in the areas of:

1. procedures used to determine fitness for duty,
2. disincentives to employment in the disability rating system,
3. the designation of total disability ratings for veterans who are deemed to be "Individually Unemployable", and
4. the manner in which earned income is treated by the VA Disability Pension program.

Recommendation 1:

The procedures used to determine a service member's fitness for duty should be revised to reflect the advances in science and technology utilized by the modern military and the incredible improvements made in rehabilitation engineering and adaptive technology for people with disabilities.

Modifications to determination procedures that acknowledge changes in the armed service and current rehabilitation technologies must lead to improved retention, reassignment, retraining, or accommodation rates among active duty personnel.

Recommendation 2

Procedures for determining fitness for duty for armed services personnel must access and implement "disability management" programs that have been developed and implemented in the private economy of the past two decades.

Disability Management programs provide a pro-active, employer-based approach to:

a. prevent and limit disability;
b. provide early intervention for health and disability risk factors; and
c. foster coordinated disability administrative and rehabilitation strategies to promote cost effective restoration and return to work strategies (Habeck, et al, 1999; Williams, et al 2002).

Current fitness for duty determination procedures must incorporate these strategies for managing the personnel and productivity costs associated with disability that have proven effective in the private sector.

Recommendation 3

A revised approach to assessing fitness for duty should be modeled on the successful rehabilitation technology, rehabilitation engineering and workplace accommodation strategies used routinely in the public rehabilitation program.

Implementation of a major paradigm shift in the conceptualization of fitness for duty will require that the military personnel who determine fitness for duty be substantially re-trained to focus more on residual capacities and accommodation rather than unfitness or deficits in the performance of duties.

Recommendation 4

Policy changes should be made in the disability rating system to ensure that attempts by veterans with disabilities to pursue employment will not automatically trigger changes in their disability rating, particularly in cases where the veteran's underlying medical condition has not changed.

Undoubtedly, the extent to which veterans fear that work will trigger a disability rating reevaluation will have a direct impact their willingness to attempt employment at any significant level. While it is unclear how often employment actually does result in reduced disability ratings, the perceived risk of disability reexamination and a reduction in rating due to employment actively discourages return to work efforts.

Recommendation 5

The VA should adopt a policy that specifically excludes employment as a reason to reexamine a veteran's disability rating.

One option could be a payment of a lump-sum disability settlement which would preclude the need for ongoing disability evaluations. An added advantage of this lump-sum payment is that it could be used to capitalize small business start-up or pay for additional training or education a veteran might need to re-tool for higher paying professions in the national economy.

Recommendation 6

The VA Schedule for Rating Disabilities should be modified to "de-couple" the concepts of presence of disability and real loss of earnings capacity.

Multiple studies have concluded that at least some disability ratings in the schedule did not accurately reflect the average reduction in earning capacity among veterans with disabilities and need to be adjusted. Formally separating employment from degree of disability would remove disincentives to employment for many veterans with disabilities.

Recommendation 7

The VA should investigate and incorporate work incentives and other policy initiatives in use in other federal benefit programs that would allow veterans to pursue employment without significant financial penalties.

For example, the VA could adapt incentives in SSA's Supplemental Security Income (SSI) program by either significantly raising the earnings limit represented by "marginal employment", or by reducing benefit payments by a small amount only after the marginal employment level of earnings has been exceeded.

Recommendation 8

The VA should consider the elimination or reduction of earnings restrictions that currently discourage VA pension recipients from pursuing employment or self-employment.

Disability Pension benefits are reduced dollar for dollar for any income that is deemed countable under the VA rules. The VA should change the way that earned income from employment and self-employment is treated by implementing a different offset formula. In addition, the VA consider initiating certain earned income exclusions that reduce the amount of income

that is counted for benefit reductions (e.g. deductions offered for expenses veterans incur due to their disability when they become employed, similar to the Impairment Related Work Expense provision offered by SSA).

VIII. Conclusion

The DoD and VA disability benefit systems currently contain serious structural flaws that serve to discourage veterans from re-entering the civilian workforce after separation from the military. Most significantly, these systems are based on the outdated premise that the presence of a disability automatically and indefinitely precludes an individual from engaging in substantial employment. As the GAO found in a 2005 study:

> "VA's and SSA's disability programs remain mired in concepts from the past—particularly the concept that impairment equates to an inability to work—and as such, we found that these programs are poorly positioned to provide meaningful and timely support for Americans with disabilities." (GAO-05-662T, May 2005).

There is an urgent need for Congress, DoD, and the VA to carefully consider a series of legislative, policy, and regulatory actions to reconceptualize the notion of disability as it relates to employment within both the DoD and VA systems. This modernization is essential if we expect veterans of the armed forces to successfully renter the civilian world and thrive as productive citizens and workers.

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Conclusion

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We have tried in this monogrpah to present empirical and literature review research across the spectrum of workplace supports. In our earlier work we discussed how work supports can be placed in a taxonomy of business mediated, government mediated, consumer mediated and agency mediated supports. In the current RRTC cycle we have extended and expanded this level of study by moving from a taxonomy to empirical investigations. We learned a tremendous amount about business mediated supports from the Kregel and Habeck studies as well as the Manpower research; at the same time the Benefits Counseling/Work Incentives research and the EEOC research shows the power of government mediated supports; and consumer mediated impacts can be seen in the Business Mentor preliminary work done with college students with disabilities that Elizabeth Getzel is leading. Agency mediated supports were also studied with the work led by Gary Bond examining long term job retention by treatment programs working with those workers who has psychiatric disabilities.

The good news is we have been able to start a research program in the workplace supports area and we have learned quite alot. More importantly, we know better which research questions to ask in the future and even more so what will be involved in delving more deeply in the prospective evidence based investigations.

The knowledge translation and dissemination components of this research have been far reaching. We have used webcasts widely, electronic newsletters monthly, worked with state agencies to create new policites for hiring and retention of persons with disabilities and exapnded our research into One Stop Career Centers, Veterans Hospitals, Social Security Administration and numerous local special education programs. We are receving more questions thatn we have the answers to and our future research will pull from what we have learned but tighten the next generation of research questions within tighter methodologies.

In closing, the study of workplace supports and job retention is crucial to understanding what goes on in the workplace for persons with disabilities and others at risk. We are finding that our research has tremendous implications for the whole concept of universal design or for enhancing productivity of all workers in a company. Our next generation of research will involve studying more closely and with more controls those innovate business driven model of support and retention that are working.

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