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October 29, 2013

Representative Loudenbeck  
State Capitol, Room 309 North  
Madison, WI 53707

Dear Representative Loudenbeck and Members of the Committee:

Thank you for the opportunity to share why I think Assembly Bill 351 will have such a strong impact on the lives of thousands of people with disabilities in our state. I was motivated to come today because I'm a DVR success story. I was connected to DVR in high school, by accident. I heard about it my senior year when I was at my annual clinic visit from an intern who also happened to have a disability. She highly recommended the program and explained that it helped her get into med school. I applied shortly after that and was assigned a great counselor who has long since retired. He guided me toward my career goals and provided supports to help me get my Bachelor's degree in elementary education from UW Whitewater. That's what really set me on the path to where I am today – a career professional working with youth with disabilities, their teachers and families to help them also experience the success I have achieved.

My path to employment also began at UWW where I was hired by the Center for Students with Disabilities after I graduated to find college students jobs in their majors. While I was there I also started the state's Youth Leadership Forum and ran it for 8 years. I've provided parent training to help families understand the transition from school to the adult world. I co-developed YIPPE, a program that trains families and youth together on the transition process and I've worked on policy issues around people with disabilities and employment. All these experiences gave me a strong background in youth leadership, family engagement and youth employment over the past 15 years and created a niche for myself in the state as an expert on youth transition and employment.

Today, I am the project coordinator for the Let's Get to Work grant. This is a federal grant that I co-wrote and WI was one of only 6 states selected to implement a Partnerships in Employment grant. The grant is focused on making policy changes or improvements that lead to improved integrated employment outcomes for youth with significant I/DD. What we have learned from that grant is that earlier connection to DVR has a big impact on the long term employment outcomes for youth with disabilities. Families need to know that DVR exists and what kinds of services can be offered and when to access them. I'm fortunate that my late connection to DVR did not impact my overall outcomes; however, youth with more significant disabilities need more time to work on their employment skills. We also know from research that at least one paid employment experience while still in high school significantly improves the likelihood of long term employment outcomes as an adult. By fully funding DVR and adding 7 new positions, thousands more people with disabilities will receive the services they need to find and maintain employment in their communities.

When I was in high school and college, I was on Social Security benefits that had me living in poverty. I was one of the few who successfully transitioned from being on benefits to full time work that provided me with benefits through my employer. Without the assistance I received from DVR, I don't believe I could have made that leap. Sadly, I have at least 5 or 6 friends who are also well educated, skilled individuals who have not had success in finding employment.

I'd like to thank DVR for their assistance at a critical time in my life and my parents for expecting me to be employed. I now have a full time job that I love, I've earned my Master's degree in Vocational Rehabilitation, I own my own home, have a husband and two beautiful children, my own transportation that allows me to commute to work every day from Fort Atkinson in Jefferson County. Most importantly, instead of living off Social Security and living in poverty the rest of my life, I'm a proud taxpayer.

Thank you for your consideration,

Jennifer W. Neugart



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October 28, 2013

Assembly Committee on Workforce Development  
Representative Amy Loudenberg, Chair  
State Capitol, Room 415 Northwest  
Madison, WI 53707

Dear Rep. Loudenberg and members of the Committee:

Thank you for the opportunity to comment on proposed Assembly Bill 351.

When I first got out of the state institution, I didn't go to a regular job. I went to a sheltered workshop. But it wasn't challenging enough for me. I needed more to do. I wanted to work with people with and without disabilities. I just wanted to be part of my community and have a voice.

When I got up in the morning I wanted to have a purpose, and I didn't have a purpose because I didn't look forward to going to the sheltered workshop at all. Because I knew that I was going to be doing the same thing as I did the day before. I was putting stickers on Betty Crocker cookbooks.

My job coach started working with me. And I used DVR, and they helped me go to school and get my first job. I haven't used DVR in over twenty years, because I have been employed in several jobs and volunteered for that whole time. I have worked in retail, food service, and now I have my dream job working at People First of Wisconsin, where I have been for fourteen years. I have been successful with the support of a job coach as I have moved up in my career.

Now I advocate for me and other people with disabilities. I wanted to give back to my community. After 14 years, I am now the Executive Director of People First Wisconsin.

I want you to know that psychologists said that I would not amount to anything. That I would have to work in a sheltered workshop and live in a group home.

I don't live in a group home, I live in my own apartment and my roommates are my two sweet baby kitties. And I don't work in a sheltered workshop. I am a part of my community. And I pay taxes.

I would like the committee to look at employment and to understand people want to have a purpose. They want to be like other people. In the community at large. That means they want to pay taxes. They want to live in their own apartments. And they want a job that pays a decent



**People First Wisconsin**  
3195 S. Superior Street, Suite 103  
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wage. They don't want charity, they want to have what everyone else has. They want to be treated like a person, not a number.

It is not what is on the outside, it is what in your heart. We are people. We are not a label. You label jars not people.

People First of Wisconsin supports this bill. This bill will help a lot of young people getting out of high school at 21 and get into a real job.

I am also an author. I am giving the committee a copy to explain where I have come from and how I got to where I am today.

Sincerely,

Cindy Bentley  
Executive Director, People First of Wisconsin

October 29, 2013

To: Representative Loudenbeck, Chair  
Members, Committee on Workforce Development

From: Alicia Boehme, Advocacy Specialist

**Re: Assembly Bill 351 - funding and position authority for vocational rehabilitation services**

The unemployment and underemployment of people with disabilities in Wisconsin is a serious issue that impacts multiple public systems. (The employment rate is 70% for working-age persons without disabilities, while only 37% of people with disabilities are in the workforce.) Our organization applauds all efforts by the legislature to address this issue, improve employment outcomes for people with disabilities and meet employer workforce needs. Increasing the availability of vocational rehabilitation services in Wisconsin will go a long way toward addressing this problem.

This bill will provide the necessary state dollars to capture the total estimated federal matching funds available for vocational rehabilitation services for people with disabilities in Wisconsin. The state to federal match is generous at 21.3% state funds to 78.7% federal funds. The fiscal bureau has determined this investment will eliminate a growing waiting list that stands currently at 4,129 individuals. If a portion of this additional funding were also targeted toward increasing the availability of rehabilitation counselors statewide (9), as the Department of Workforce Development (DWD) has suggested is necessary, the investment could result in serving a total of 5,736 additional individuals.

According to DWD, the 3,250 DVR consumers who returned to the workforce in 2012 are projected to earn \$56.4 million annually, representing a 210 percent return on the public investment. These earnings result in purchases of goods and services that in turn support Wisconsin's economy and transform successful DVR customers into workers and taxpayers, while also decreasing dependence on public assistance (i.e. utilization of food stamps, low income housing and Social Security Benefits.) People with disabilities in the United States are estimated to have an annual spending power of nearly \$800 billion.

People with disabilities are not only an untapped labor pool in Wisconsin, they are also qualified, committed employees who save employers turnover costs. The turnover rate for employees with disabilities is 8% in comparison to 45% for other workers. This is one reason why it is an important time in Wisconsin's economy to invest in DVR and in employment of people with disabilities. DVR's strategic plan puts more emphasis on direct outreach to business – through the use of business consultants and their Business Service Initiative they are focusing on employer demand. They are helping job seekers with disabilities by matching skills training directly to business needs. This will result in better retention and better productivity for the worker and business. It is an excellent model to invest in that both maximizes a worker's potential and helps businesses improve the bottom line.

Last week our agency attended an employer recognition event in Sheboygan County along with DWD Secretary Reggie Newson and Lt. Governor Rebecca Kleefisch. There were more than 100 local employers represented and they all employed people with disabilities in some manner. This initiative to fully fund vocational rehabilitation services clearly fits within the state's overall economic goals to find ways to benefit business, local communities and the state.

People with disabilities can and want to work. Among non-employed, working-age people with disabilities, 80% say they want a paying job now or in the future. Their contributions can impact many parts of the state's economy as they become fully capable workers and earners. DVR can get people with disabilities the supports they need to be successful.

**RECOMMENDATION: Support the full funding of vocational services and additional position authority as outlined in this bill.**

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October 29, 2013

Assembly Committee on Workforce Development  
Representative Amy Loudenberg, Chair  
State Capitol, Room 415 Northwest  
Madison, WI 53707

Dear Rep. Loudenberg and members of the Committee:

Thank you for the opportunity to comment on proposed Assembly Bill 351.

The Wisconsin Board for People with Developmental Disabilities (BPDD) advocates on behalf of people with developmental disabilities such as brain injury, cerebral palsy, epilepsy, Prader-Willi syndrome, and intellectual disability, and is charged with representing the interests of the disability community in Wisconsin. Sixty percent of the board—appointed by the Governor—is people with developmental disabilities or family members of people with developmental disabilities.

Employment is one of the top priorities we hear about from self-advocates and the entire disability community. One in five Americans has a disability. Difficulty in finding and keeping jobs is a common challenge for people with disabilities, impacting their ability to live independently and their reliance on public benefits. Here are a few facts underscoring this issue:

- Wisconsin's working-age employment rate for individuals without disabilities is half that of the general population's: near 70% for the general public, but only 37% for people with disabilities.
- Among non-employed, working-age people with disabilities, 80% say they would like a paid job.
- More than 4,000 people with disabilities are on the vocational rehabilitation program's wait list for critical employment supports that can help them move from a life of public dependence to financial independence.

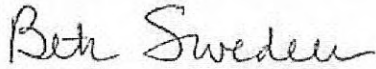
Improving integrated community job opportunities enables people with disabilities to contribute to local economies, more fully participate in their local communities, help permanently get out of poverty, and reduce overall reliance on public benefits

Helping people with disabilities participate in competitive work in integrated work settings has significant return on investment. For every dollar of costs to taxpayers in funding integrated employment, taxpayers received an average of \$1.46 back. This bill's federal match means that for a \$4 million investment, Wisconsin would receive nearly \$18 million that could be used to provide critical employment supports to a population who desperately wants to work.

The Vocational Rehabilitation (DVR) program successfully returned 3,250 disabled persons into the workforce in 2012, and early estimates show they are close to 3,800 successes for 2013. Workers with disabilities who received DVR support have an average wage of \$12 an hour, and are projected to earn \$56.4 million annually—a 210% return on taxpayer investment in the program.

This bill is a positive step toward simultaneously meeting our state's workforce needs for prepared workers, addressing Wisconsin's high unemployment rate for people with disabilities, reducing overall reliance on public benefits, and funneling more money into local economies through increased purchasing power.

Thank you for your consideration,



Beth Swedeo, Executive Director  
Wisconsin Board for People with Developmental Disabilities

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Scott Walker, Governor  
Reginald J. Newson, Secretary

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**Assembly Committee on Workforce Development  
Assembly Bill 351, Funding and Position Authority for DVR**

**October 29<sup>th</sup>, 2013**

**Testimony provided by Michael Greco, Division Administrator  
Division of Vocational Rehabilitation**

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Chairperson Loudenbeck and members of the Assembly Committee on Workforce Development:

I am Mike Greco, Division Administrator for the Division of Vocational Rehabilitation at the Department of Workforce Development and I appear before you today to speak in favor of Assembly Bill 351.

Assembly Bill 351 demonstrates Governor Walker's continued focus to assist residents of the state of Wisconsin by growing the economy, developing our workforce, transforming education, reforming government and investing in our infrastructure. Our budget invested over \$100 million in workforce development and as one of eight workforce development items in Governor Walker's fall workforce development package, AB 351 continues to build on that investment.

The DWD's Division of Vocational Rehabilitation is looked to as a national leader in vocational rehabilitation services, and rightfully so. In FFY 13 Wisconsin's DVR exceeded every federal mandatory standard, in some cases by twenty to thirty percent. In SFY 13 DVR offered \$5.8 million in temporary work wages to over 3000 individuals to gain work experience while earning a wage, helping to build work stamina and putting DVR job seekers on a path to self-sufficiency. Additionally, DVR invested in 36 new self-employment plans, helping to launch new businesses throughout the state and invested \$15 million in education and training services. Even more impressive, DVR facilitated 3,840 successful employment outcomes with estimated annual earnings of \$66.3 million; that is more than double the taxpayer's investment in their services. All of this demonstrates that DVR is a true economic engine for the state of Wisconsin; the great thing is DVR can do much more.



With the additional state funds and the position authority contained in AB 351, DVR will be able to assist an additional 2,500 individuals in SFY 14, an additional 2,900 individuals in SFY 15 and reduce the wait list for services for those in category 2 to just over one month. Disabled job seekers want to work and AB 351 gives DVR the additional tools to assist thousands more in their search for long-term rewarding employment.

At this time I would like to thank Governor Walker for including this legislation as part of his fall workforce agenda, the authors for guiding this legislation, and the entire legislature for the strong bipartisan support this bill, and its companion in the senate, have received thus far. Together we are moving Wisconsin forward.

I would be happy to answer any questions the committee may have at this time.

**Testimony of Jayme Moker**  
**Vice President, Vocational Services**  
**Curative Care Network**  
**Assembly Work Force Development Committee**  
**October 29, 2013**

**2013 Assembly Bill 351**  
**Room 415 Northwest, State Capitol**  
**Public Hearing**

**Assemblywoman Amy Loudenbeck and Committee Members:**

**Thank you for the opportunity to appear before the committee today. Curative Care Network has been providing vocational services to the Southeast Wisconsin area for more than 94 years. In addition, we have been a partner with the Wisconsin Division of Vocational Rehabilitation, as a contract provider, for over thirty years.**

**Because of our experience, we are well aware of the both the benefits of vocational rehabilitation services that help individuals with disabilities to find meaningful employment in the community and become productive citizens. In addition, we are also very familiar with the unmet need of people with disabilities.**

**Currently, there are more than 4,000 people in the state of Wisconsin on the waiting list for vocational services.**

**My purpose in providing this testimony is to both applaud and encourage you to pass Assembly Bill 351.**

**To demonstrate the value and importance of vocational rehabilitation services, I'd like to tell you about Tim. For reasons of privacy, I am using the fictitious name Tim.**

**Curative Care Network began working with Tim about one and a half years ago. At that time, he was unemployed and was referred to us via the Division of Vocational Rehabilitation for a**

consultation. After a period of job exploration and work trials, Tim was placed in an internship with an employer that not only welcomed him but was aligned with Tim's own job goals. This period, from the consultation through the completion of the internship took about one year. Throughout this process, Curative Care Network was providing job coaching to Tim, including obtaining feedback from his employer.

This feedback and coaching process continued until Tim was deemed to be an independent employee without the need for Curative Care Network's counseling and coaching. And, I'm happy to report that, as a result of this process, Tim has been working independently and is now a permanent employee at this business.

This, I think you will all agree, is a great example of how the process is designed to work. Unfortunately, as I noted earlier, there are more than 4,000 people in need of and deserving of the same services Tim received. That's the reason why, as a representative of Curative Care Network, and as someone who works to assist individuals find employment on a daily basis, your passage of Assembly Bill 351 will go a long way toward helping those in need.

Thank you for the opportunity to address this committee. I hope this testimony helps to inform the Legislature's consideration of these bills. Thank you.

## State lauds company for hiring workers with disabilities



OCTOBER 29, 2013 • BY ALLISON GEYER | AGEYER@LACROSSETRIBUNE.COM

Larry Hutson remembers that while growing up on a farm west of Sparta he pulled nails out of timber and pounded them straight so they could be used again.

“My dad was very much a repurposer,” Hutson said. “People have been repurposing materials since the beginning of time.”

It’s an old concept that Hutson and his wife, LuAnn, have turned into a successful start-up business. Used Anew specializes in deconstructing buildings that would otherwise be demolished and recycling the materials.

Used Anew received a Governor’s Award on Monday morning for the company’s work with the state Department of Workforce Development’s Division of Vocational Rehabilitation, which provides employment resources for people with disabilities.

Hutson contacted DVR with a job description and worked with business services consultant Amy Studden to set up a trial run internship with Brian Brueggeman and Justin Creamer, who eventually became Hutson’s employees.

“There tends to be a stereotype that individuals with disabilities are limited, but this is a classic example of how (they) can contribute,” Studden said. “They want to work, they want to give back. It’s been phenomenal to see these guys in action.”

The DVR this year secured more than 3,000 successful employment opportunities, and the agency hired

20 business consultants throughout Wisconsin to connect employers with what Studden called an “untapped” candidate base.

“It’s all about making the right connection,” she said. “It’s about finding one of our consumers (or two consumers, in this case) who can meet the needs of the employer.”

It’s a resource Hutson said he would recommend to other business owners without hesitation.

“It’s a wonderful opportunity,” Hutson said. “It gives these folks a chance to feel useful and valuable, and from an employers’ standpoint, these guys are a perfect fit — they work really hard, they have good attitudes and a good sense of humor.”

Since its launch in May, Used Anew has taken down several farm outbuildings, an outdoor summer kitchen, a two-story farmhouse and is in the process of deconstructing a barn.

Once a structure is stripped, materials like siding, lumber, trim, cabinetry and light fixtures are processed and sold.

“We’ve really found kind of a niche here,” Hutson said. “This gives us an opportunity to put some good quality material in the hands of people who enjoy crafting and making things.”

Sustainable construction — and deconstruction — has a multitude of benefits, Hutson said. It reduces waste by repurposing quality materials that would have otherwise ended up in the dump, it provides work opportunities for people like Brueggeman and Creamer and it saves landowners money on demolition costs and landfill fees.

“We call it a win-win-win-win,” Hutson said.





# Jennifer Shilling

WISCONSIN STATE SENATOR  
32ND SENATE DISTRICT

## Assembly Committee on Workforce Development Public Hearing on Assembly Bill 351

October 29, 2013

Chairwoman Loudenbeck, members of the committee, I want to thank you for the opportunity to testify in support of Assembly Bill 351, which would provide additional funding for the state's successful vocational rehabilitation services program.

I also want to thank Governor Walker for including this bill as part of his workforce development package that he announced last month.

Unemployment and underemployment of people with disabilities continues to be a serious issue in every community and every legislative district throughout the state.

To help address this issue, the state's vocational rehabilitation program provides employment assistance services to people with disabilities including job search and placement assistance, transportation, on-the-job support, vocational training, interpreter services, as well as career guidance and counseling.

Individuals who receive services through the vocational rehabilitation program are able to successfully transition to steady employment and become more productive members of their communities, more self-sufficient, and less reliant on other state assistance programs.

Assembly Bill 351 is a smart investment in a proven workforce development program that will increase access for people with disabilities seeking job training and employment assistance services.

Everyone has skills and talents that they can offer and utilize in a workplace setting. Helping individuals with special needs to identify their unique abilities and maximize their potential is not only the right thing to do, but it's the smart thing to do.

By investing in services to help people find work and eliminating barriers to employment, we can improve workplace opportunities for thousands of Wisconsin residents and successfully take steps to reduce the unemployment rate for people with disabilities.

Again, I want to thank the committee for holding a public hearing on this bill and thank Governor Walker for his support. This legislation received bi-partisan support in both the Senate Economic Development Committee and the Joint Finance Committee, and I am hopeful that we can continue to have bi-partisan support in moving this important bill forward.



**Testimony In Support of Assembly Bill 351  
Assembly Committee on Workforce Development  
October 29, 2013**

Chairwoman Loudeneck and members of the committee, I appreciate this opportunity to testify on Assembly Bill 351, which would increase access to workforce development services for people with disabilities. I want to thank Senator Shilling for authoring this legislation with me, and Governor Walker for showing his support by including it in his jobs package.

With October being Disability Employment Awareness Month, this is the perfect time to address an important need. Wisconsinites with disabilities have been hit particularly hard by the economic downturn. Many have turned to the state Division of Vocational Rehabilitation (DVR), which provides important job training and employment assistance services for people with disabilities who are looking for work.

On average, DVR works with 17,000 job seekers with disabilities. Each month, DVR averages 1,486 new applicants, provides 726 new Individualized Plans for Employment, and successfully closes 319 cases. The DVR offers career guidance and counseling, job search and placement assistance, rehabilitation technology, job training, transportation, and more. It also serves employers looking for training and technical assistance regarding disability employment issues. And the DVR has proven its efficacy, providing a return of \$2.10 for every \$1.00 invested.

However, over 4,000 people with disabilities remain on the waiting list for DVR employment assistance, with some waiting up to four months. At the same time, employers are struggling to find well-trained, reliable, and qualified job applicants. By investing in services to help people find work and eliminating barriers to employment, we can empower individuals and improve workplace opportunities for thousands of people with disabilities.

Assembly Bill 351 would shorten the waiting list by making a smart investment to capture full federal funding for the DVR. Under our bill, Wisconsin will be able to take full advantage of federal incentives for the state's successful vocational rehabilitation program. This will provide employment assistance to thousands of unemployed Wisconsinites with disabilities, and will restore hope to those waiting for help.

Senator Shilling and I are pleased that our bill received early bipartisan support, including that of our governor, as well as the endorsement of advocacy groups like Disability Rights Wisconsin and the Board for People with Developmental Disabilities. Working across the aisle to put people back to work should be our focus this session, and Assembly Bill 351 is an important step toward that goal. With your support, we can get people back to work and help those with disabilities access valuable job training services.

I urge the Committee's support of Assembly Bill 351 and I welcome any questions you may have. Thank you.







## Legislative Fiscal Bureau

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May 13, 2013

Joint Committee on Finance

Paper #735--Revised

### **GPR Funding for Vocational Rehabilitation Case Service Aids (DWD)**

[LFB 2013-15 Budget Summary: Page 512, #2]

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#### **CURRENT LAW**

The Division of Vocational Rehabilitation (DVR) within the Department of Workforce Development (DWD) is required to advise and assist any individual who applies to DVR for vocational rehabilitation services. Staff counselors arrange evaluations of applicants to determine eligibility and subsequent services for those deemed eligible. The primary source of revenue for DVR rehabilitation services is federal Title I-B funds. Each year, the federal government allocates a certain amount of funds to each state. A match of 21.3% state funds to 78.7% federal funds is required to receive federal monies. DVR uses GPR case service and administrative funds, as well as some program revenues, to provide this match. Base funding for the state match for federal Title I-B funds is \$15,034,300 GPR and \$106,500 PR. The primary source of program revenue is a charge imposed on the net proceeds of businesses operating in the supervised business enterprise program for the blind and visually impaired.

The amount of Title I-B funds that may be drawn down with state matching funds is capped at a certain amount, annually, for each state. The overall Title I-B allocation is generally authorized an annual increase in funding equal to the percentage change in the consumer price index (CPI). Federal funds are then allocated among states based on a formula, which is, in part, population-based. Federal monies allocated to Wisconsin for federal fiscal year 2012-13 are estimated at \$60,274,400.

Federal law generally requires each state participating in the DVR program to meet a maintenance-of-effort (MOE) level of funding. To meet the MOE requirement, the state must provide matching funds equal to the amount that the state provided two federal fiscal years prior. If the MOE requirement is not satisfied, the state may be subject to federal penalties and Title I-B reductions. In the 2011-13 biennium, the state provided matching funds in an amount just sufficient to meet the MOE requirement.

## GOVERNOR

Provide total state matching funds of \$15,061,200 (\$14,912,100 GPR and \$149,100 PR) in 2013-14 and \$15,451,100 (\$15,302,000 GPR and \$149,100 PR) in 2014-15 to meet the federal MOE requirements in each year of the biennium. As compared to the base amount, GPR funding would be reduced by \$122,200 in 2013-14 and increased by \$267,700 in 2014-15.

## DISCUSSION POINTS

1. Disabled individuals apply for services at a DVR field office (typically at a DWD job center) and staff counselors arrange medical, psychological, and vocational evaluations to determine eligibility and vocational rehabilitation needs. For those deemed eligible, the field staff develop individual rehabilitation plans (individualized plan for employment -- IPE) and provide guidance and counseling. Services provided under the IPE can include: (a) job-related services, including job search and placement assistance; (b) vocational training; (c) diagnosis and treatment of physical and mental impairments, including use of prosthetic and orthodontic, and eyeglasses and visual services; (d) transportation; (e) on-the-job supported employment services; (f) interpreter services; (g) technical self-employment assistance; (h) rehabilitation technology, including telecommunications; (i) job-related services to the family; and (j) post-employment services necessary to retain, regain, or advance in employment. The individual rehabilitation plans are designed to assist the person to become capable to compete in the labor market, practice a profession, be self-employed, raise a family and make a home, and participate in sheltered employment or other gainful work. DVR counselors purchase required goods and services for individual clients based on the client's IPE.

2. As noted, the primary source of revenue for DVR rehabilitation services is federal Title I-B funds. Each year the federal government allocates a certain amount of funds to each state. A match of 21.3% of state funds to 78.7% federal funds is required to receive federal monies. A state must provide the required amount of matching funds or it will not receive its total allotment for that year. This funding is used to provide services to disabled individuals and to cover administrative expenses. The overall Title I-B allocation is authorized an annual increase in funding equal to the percentage change in the CPI. Additional funding in excess of the CPI percentage increase may also be provided. The federal funds are then allocated among states based on a formula, which is, in part, population-based. The total amount of Title I-B funds estimated to be allocated to Wisconsin for federal fiscal year 2013 is \$60,274,400. According to DWD, the federal grant was estimated at \$63,397,400 at the beginning of the fiscal year; however, the federal sequestration reduced the amount available to Wisconsin by \$3,123,000 (4.9%).

3. Each increase in federal funds requires a corresponding increase in state matching funds to draw down the additional federal monies. State matching funds are provided through GPR and program revenue. Table 1 shows: (a) the amount of revenues made available by the federal government that could have been claimed since federal fiscal year (FFY) 2007; (b) the amount of federal revenues captured with state matching funds; and (c) the amount of federal revenues that the federal government retained because the state did not provide matching funds to capture the full amount.

**TABLE 1**

**Federal Vocational Rehabilitation Grants -- Total Grant and Amount Captured**

<u>Federal Fiscal Year</u>	<u>Total Federal Grant Available</u>	<u>Total Federal Grants Matched by the State</u>	<u>Federal Grant Amount Not Matched by the State</u>
2007	\$54,832,000	\$54,832,000	\$0
2008	55,648,200	55,648,200	0
2009	57,088,800	57,088,800	0
2010	60,807,000	55,648,200	5,158,800
2011	60,586,500	57,088,800	3,497,700
2012	61,532,700	55,648,200	5,884,500

4. As noted, federal law generally requires that each state provide matching funds for the DVR program to meet the federal MOE requirement. The federal MOE requirement is equal to the amount that the state provided two years prior. Under current law, Wisconsin's MOE level is \$15,061,100 for 2013-14 and \$15,451,000 for 2014-15. If the state does not meet the MOE level of funding, the Secretary of the Department of Labor (DOL) must reduce the state's allotment in the following year by the amount that the state was deficient in meeting its MOE requirement. The DOL Secretary may provide a waiver to this requirement if a state must respond to exceptional or uncontrollable circumstances, such as a major natural disaster or a serious economic downturn. As shown in Table 1, Wisconsin captured the total amount of federal funds available to the state from FFY 2007 through FFY 2009. Beginning in FFY 2010, the state provided matching funds in an amount needed to meet the federal MOE requirement, but not sufficient to capture the full federal allocation. State matching funds were held at the MOE level to draw down the same amount of federal monies in 2009-10 and 2011-12 (\$55,648,200) as the amount drawn down in 2007-08. As a result, the state avoided federal reductions by meeting the MOE requirement. Similarly, the amount of federal revenue captured by state matching funds in 2010-11 (\$57,088,800) was the same as the amount drawn down in 2008-09. Again, the state avoided federal reductions to the state grant amount by providing matching funds to meet the MOE requirement.

5. Table 2 shows the projected federal Title I-B vocational rehabilitation case service grants to Wisconsin and the state matching funds provided under AB 40. The Department estimates the federal grant amount for Wisconsin at \$60,274,400 in 2012-13, which reflects a reduction of 2.0% as compared to the prior year. The 2012-13 estimated funding level was reduced by 4.9%, as a result of the federal sequestration, compared to the amount that was originally estimated. State matching funds are provided at the MOE level for 2012-13 in an amount to draw down \$57,088,800 of the available federal grant. As a result, the amount of federal funding estimated to be available for Wisconsin's DVR program was not reduced by the sequestration. According to DWD, federal grants are estimated at \$62,396,100 for 2013-14 and \$64,592,400 for 2014-15, representing growth of 3.5% in each year. The following table shows the total amount of federal grant monies that are available to the state in the current fiscal year, and the amount of revenue that is expected to be available over the biennium.



**TABLE 2**

**Federal Vocational Rehabilitation Grants and State Matching Funds Under AB 40**

<u>State Fiscal Year</u>	<u>Federal Grants</u>	<u>State Match Required to Capture Funds</u>	<u>GPR and PR Matching Funds</u>	<u>State Match Gap</u>	<u>Unmatched Federal Funds</u>
2013	\$60,274,400	\$16,313,200	\$15,451,000	\$862,200	\$3,185,600
2014	62,396,100	16,887,400	15,061,200	1,826,200	6,747,400
2015	64,592,400	17,481,800	15,451,100	2,030,700	7,503,100

6. As shown in Table 2, the bill would provide total state GPR and PR matching funds of \$15,061,200 in 2013-14 and \$15,451,100 in 2014-15. The bill would appropriate state matching funds in an amount to meet the MOE requirement for each year of the biennium, but would not provide funds to capture the total amount of estimated federal funds. For 2013-14, the proposed state funding level would draw down estimated FED of \$55,648,700 in 2013-14, which would be \$6,747,400 lower than the estimated amount of federal dollars allocated to Wisconsin. Similarly, the proposed funding level would draw down \$57,089,300 FED in 2014-15, which would be \$7,503,100 lower than the estimated amount allocated to the state in 2014-15.

7. Under federal law, if DVR services cannot be provided to all eligible individuals with disabilities in the state who apply for the services, the state plan must: (a) show the order to be followed in selecting eligible individuals to be provided vocational rehabilitation services; (b) provide the justification for the order of selection (OOS); (c) include an assurance that, in accordance with criteria established by the state for the OOS, individuals with the most significant disabilities will be selected first for the provision of vocational rehabilitation services; and (d) provide that eligible individuals who do not meet the order of selection criteria must have access to services provided through an information and referral system.

When an individual is found eligible for vocational rehabilitation services, an OOS determination is completed. The individual's OOS priority category is determined jointly by the counselor and individual by evaluating the individual's functional limitations, anticipated required services, and the duration of those services. DVR establishes a wait list of individuals who are eligible, but cannot be served due to lack of resources. When DVR determines it has adequate resources to serve more individuals on the waiting list, activations are made based on the category (individuals with the most significant disabilities are served first) and date of application.

There are three OOS categories. Category 1 includes persons with a most significant disability. An individual has a most significant disability if a severe mental or physical impairment exists that seriously limits three or more functional capacities in terms of an employment outcome and their vocational rehabilitation requires multiple services over an extended period of time. Category 2 includes persons with significant disabilities. An individual has a significant disability if a severe mental or physical impairment exists that seriously limits one or more functional capacities in terms of an employment outcome, and their vocational rehabilitation requires multiple services over an extended period of time. Category 3 is for all other persons eligible for DVR services--

those who do not have a disability that seriously limits functional capacities and does not require multiple services over an extended period of time. "Multiple services" are two or more primary services needed to achieve a successful rehabilitation outcome. "Extended period of time" is defined as needing vocational rehabilitation services for six months or more, with a 90-day follow-up after achieving a successful rehabilitation outcome.

8. As of March 18, 2013, the DVR order of selection wait list had a total of 4,129 eligible applicants. Of those individuals remaining on the wait list, one individual had a most significant disability (Category 1), 2,609 individuals had significant disabilities (Category 2), and 1,519 individuals were non-significantly disabled (Category 3). Table 3 shows the total number of persons that were on the DVR wait list at the end of the six prior federal fiscal years (September 30). According to DWD, the increase in the waiting list from 2007 to 2008 was primarily due to a staff hiring freeze that was in effect, as well as the slowdown in the economy. The Department indicates that the reduction in the waiting list from 2008 to 2009 reflects the Division's ability to hire project positions with federal monies from the American Recovery and Reinvestment Act of 2009, which offset reduced staff hours resulting from state mandated furloughs.

**TABLE 3**

**End of Federal Fiscal Year DVR Wait List: 2007 to 2012**

<u>Year</u>	<u>DVR Wait List</u>
2007	39
2008	5,642
2009	3,988
2010	4,648
2011	4,273
2012	4,564

9. According to DVR, Category 1 applicants generally receive services immediately and are not placed on the wait list. Persons on the Category 2 wait list currently experience an average wait time of between four and five months before receiving DVR services, and individuals with a Category 3 disability currently experience an indefinite waiting period. Each individual on the OOS wait list is contacted after the individual has been on the wait list for 12 months to determine if additional information is available and if he or she wishes to remain on the wait list. If the individual no longer wishes to remain on the wait list, his or her case is closed and the individual is notified in writing of the closure and the right to appeal the closure. For the past three years, DWD has contacted Category 3 individuals who have been on the wait list for at least 12 months and, as a result, 766 individuals were removed from the wait list in FFY 2011, 395 individuals were removed from the list in FFY 2012, and 161 individuals have been removed from the list in FFY 2013 as of April 9, 2013. Therefore, the 1,519 Category 3 individuals currently on the DVR waiting list may understate the number of persons that would seek DVR services if additional funding had been available to serve them.

10. At the funding level proposed by the Governor, DVR anticipates that the wait period

may extend to between four and six months before a Category 2 individual were to receive services. Individuals with a Category 3 disability are not expected to be invited off the wait list to receive services over the biennium, and are expected to continue to experience an indefinite waiting period. According to the Department, staff vacancies are being filled as quickly as possible and the current level of DVR counselors is unable to absorb any increase in the number of cases. The Department indicates that additional counselor positions would be needed to provide additional caseload services. The current counselor staffing level at DVR is 184 FTE positions. During FFY 2012, active caseload services were provided to approximately 22,000 individuals per month, which equates to nearly 120 active cases per counselor per month.

11. If state matching funds were increased to draw down the total amount of the federal grant available to Wisconsin in 2013-14 and 2014-15, the Department indicates that approximately nine additional counselor positions would be needed to best serve additional DVR consumers with the additional revenues available for case services. If the Legislature authorized those additional counselors to the Division, new position authority of 1.92 GPR and 7.08 FED could be provided in 2013-14 and 2014-15. DWD reports that salary, fringe benefits, and general administrative overhead would total \$612,100 per year for the additional positions. The remaining additional funds would be used to purchase rehabilitative goods and services.

12. According to DWD, the annual cost for case services (which is in addition to salary and administrative overhead) per consumer in the DVR program is approximately \$2,943. If the state were to provide additional GPR of \$1,826,200 in 2013-14 and \$2,030,700 in 2014-15, it is estimated that the state would be able to capture the full amount of federal DVR monies. As compared to the state matching funds currently appropriated under the bill, an additional \$8,573,600 in 2013-14 and \$9,533,800 in 2014-15 would be available for DVR. If the Division were to hire an additional nine counselors to serve additional DVR consumers, approximately \$7,961,500 in 2013-14 and \$8,921,700 in 2014-15 would be available for case service aids. The additional revenues could serve approximately 2,705 eligible individuals in 2013-14 and 3,031 individuals in 2014-15, as compared to the amount of state matching funds currently provided for DVR case service aids in the budget bill.

Based on the analysis described above, an estimated 5,736 additional individuals could be served and invited off the wait list over the biennium if the Legislature provided GPR funding to draw down the full federal grant amount. This would suggest that the current wait list (4,129 persons) could be eliminated. However, while it is expected that the waiting list would be significantly reduced if state matching funds were to draw down the full amount of federal funds in support of the program, it might not be entirely eliminated. Costs for case services under this analysis were based on actual FFY 2012 costs of \$2,943 per individual served. If these costs increase, the estimated number of additional individuals who could be served would be somewhat overstated. Additionally, Category 3 individuals who voluntarily chose to remove themselves from the waiting list, or individuals who chose not to apply for services due to the indefinite waiting period, may choose to apply for DVR services that were not previously available to them. General population growth over the biennium could also lead to an increased number of individuals seeking DVR services.

## ALTERNATIVES

1. Approve the Governor's recommendation to provide state matching funds for vocational rehabilitation case service aids of \$14,912,100 GPR and \$149,100 PR in 2013-14 and \$15,302,000 GPR and \$149,100 PR in 2014-15 to meet the MOE requirement for state matching funds.

2. Increase appropriated revenues and position authority for vocational rehabilitation case service aids by \$1,826,200 GPR in 2013-14, \$2,030,700 GPR in 2014-15, and 1.92 GPR positions annually to capture the total estimated federal match available over the biennium. Increase federal funds and position authority under the bill by \$6,747,400 FED in 2013-14, \$7,503,100 FED in 2014-15, and 7.08 FED positions annually to reflect increased estimates for federal matching funds.

ALT 2	Change to Bill	
	Funding	Positions
GPR	\$3,856,200	1.92
FED	<u>14,250,500</u>	<u>7.08</u>
Total:	\$18,107,400	9.00

3. Increase general fund revenues by some other amount to capture some other level of federal grant monies.

Prepared by: Sean Moran





# Vocational rehabilitation services and employment outcomes for adults with cerebral palsy in the United States

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## PUBLICATION DATA

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## ABBREVIATIONS

RSA-911	Rehabilitation Service Administration Case Service Report
SSDI	Social security disability insurance
SSI	Supplemental security income

**AIM** The aim of this study was to examine the relationship between vocational rehabilitation services provided and work outcomes among people with cerebral palsy (CP), taking in to account demographic characteristics.

**METHOD** From the US Department of Education Rehabilitation Service Administration Case Service Report (RSA-911) database, data from 3162 individuals with CP (1820 males [57.6%] and 1342 females [42.4%] age range 16–54y) whose cases were closed in 2009, were used in this study. A total of 1567 cases (49.6%) were closed with clients being categorized as 'successful employment' and 1595 cases (50.4%) were closed with clients being classified as unemployed.

**RESULTS** Multivariate logistic regression was used to examine the relationship between services provided and work outcomes with regard to demographic characteristics. Males aged between 26 and 54 years old with higher education attainment were more likely to be employed. Individuals receiving disability benefits were less likely to be employed. After controlling for the effect of demographic and work disincentive variables, five vocational rehabilitation services significantly predicted employment outcomes ( $p < 0.05$ ), including (1) on-the-job training; (2) job placement assistance; (3) on-the-job support; (4) maintenance services; and (5) rehabilitation technology.

**INTERPRETATION** Medical and health professionals need to be aware of vocational rehabilitation agencies as a resource for providing medical, psychological, educational, and vocational interventions for adults with CP to help them maximize their employability, to address their much needed work adjustment skills, to establish independent living, and to eventually reach their full potential in participation in society.

Cerebral palsy (CP) is considered the most common childhood disability. According to Best,<sup>1</sup> international studies show an incidence of over 2.0 per 1000 live births. CP describes a group of permanent conditions that affects the development of movement and posture and causes life-long limitations in activity. These motor limitations result from non-progressive disturbances that have occurred in the developing fetal or infant brain. Speech and language disorders, sensory deficits, intellectual disabilities, behavioural problems, and seizures are impairments that can be associated with CP.<sup>2</sup>

Economic independence and social integration are basic rights that are important to people with CP. In a study conducted by Liptak,<sup>3</sup> adults with CP listed work and an independent economic life as two of the most important life domains related to their health and well-being. Steven-

son et al.<sup>4</sup> reported that young people with CP who were in school ranked getting a job as a top priority. However, for decades, adults with CP have continued to experience significantly lower rates in attaining and maintaining employment in comparison with their peers without disabilities.<sup>5–7</sup> Furthermore, in the United States rates of employment for persons with CP have been cited to be considerably lower than employment rates of people living with other disabilities.<sup>8</sup>

Studies suggest that educational achievement, vocational training/education, work disincentives, and socialization skills are important factors influencing employment outcomes of persons with CP. For example, in a study conducted in Denmark<sup>9</sup> comparing the educational achievement and employment status among participants with CP and a typical comparison group, participants with



CP were more likely to complete only primary and lower secondary school and less likely to attend college compared with the comparison group. Also, only 29% of the participants with CP were gainfully employed compared with 82% of the comparison group. Similarly, researchers in Israel examined the educational outcomes of 75 young people with CP<sup>10</sup> and found that 29% achieved complete matriculation and 23% were competitively employed. Studies also suggest that persons with CP have limited vocational education and training opportunities during primary, secondary, and tertiary schools. For example, Sillanpaa et al.<sup>11</sup> surveyed 86 individuals with CP between the ages of 15 and 27 years and found that 70% of the respondents had not received any type of formal vocational education or training. Work disincentives associated with US government programmes such as Social Security and Medicaid have also been cited as barriers to economic independence among persons with CP in the United States.<sup>7</sup> For example, Murphy et al.<sup>12</sup> found that of the 53% of adults with CP who were competitively employed, 22% earned an income high enough that advancement at work would cause financial loss through termination of disability benefits. Finally, studies suggest that individuals with CP experience increased social isolation (e.g. Michelsen et al.,<sup>9</sup> Murphy et al.<sup>12</sup>) and decreased psychosocial well-being<sup>13</sup> as a result of unsatisfying employment outcomes.

Although these studies point to possible factors contributing to low rates of employment among persons with CP, there is a dearth of research investigating factors associated with employment among adults with CP. Further, there are no studies investigating the impact of vocational rehabilitation services on employment outcomes among adults with CP. As such, the primary aim of this paper is to investigate the association between vocational rehabilitation services and employment outcomes among adults with CP using the US Department of Education's Rehabilitation Service Administration Case Service Report (RSA-911) database. The primary purpose of the state-federal vocational rehabilitation programme in the United States is to assist individuals with disabilities to obtain employment, consistent with the individual's current physical and/or psychological strengths and limitations. State vocational rehabilitation agencies have focused on facilitating employment and career development among people with various types of health conditions and disabilities since the 1920s,<sup>14</sup> therefore research in this area can better inform our understanding of what services are most beneficial in improving employment outcomes among persons with CP.

## METHOD

### Participants

Data for this study were extracted from the RSA-911 database. The RSA-911 data contain detailed information about demographics, disability, types of intervention services, and employment outcomes for all clients receiving

### What this paper adds

- This study provides a review of the current literature relevant to employment and living with CP.
- Five vocational rehabilitation services were found as predictors of employment outcomes among people with CP.
- The importance of vocational rehabilitation services to maximize the employability for people with CP is addressed.

state vocational rehabilitation services in the United States, and are renewed annually by state-federal vocational rehabilitation service agencies. In the fiscal year 2009, data from the RSA-911 were used for analyses because it was the most current dataset available at the time of study. Ethics approval was obtained from the social and behavioural science institutional review board of the University of Wisconsin-Madison.

The state-federal vocational rehabilitation programme is the oldest and most successful public programme in the United States, supporting the employment and independence of individuals with disabilities. In order to be eligible for services, an applicant for vocational rehabilitation services must meet the criteria presented in USC §102(a) (1) of the Rehabilitation Act of 1973: (1) an individual has a physical or intellectual disability that constitutes or results in a substantial impediment to employment; (2) an individual can benefit from the provision of vocational rehabilitation services to improve employment outcome; and (3) an individual requires vocational rehabilitation services to prepare for, enter into, engage in, or retain gainful employment.<sup>15</sup>

Only individuals who had been determined to be eligible for vocational rehabilitation services with an individualized plan for employment were included in this study. The individualized plan for employment delineated the rehabilitation goals and services needed to achieve these goals and must be jointly developed by the counsellor and the client with CP. The sample consisted of all 3162 individuals with CP aged between 16 and 54 years old whose cases were closed in the fiscal year 2009. Of these, 291 participants (9.2%) were diagnosed with an intellectual disability and 109 (3.4%) had co-occurring epilepsy. About 54% of the participants reported receiving cash benefits (e.g. supplemental security income [SSI], social security disability insurance [SSDI], and temporary assistance for needy families) and 60% reported receiving medical insurance (e.g. Medicare/Medicaid) from the government. Table I summarizes the demographic characteristics of the study sample.

### Variables

#### Outcome variables

Competitive employment was used as the outcome variable. According to the Rehabilitation Services Administration,<sup>15</sup> competitive employment is defined as working full time or part time in an integrated competitive setting, in self-employment or in a state-managed business enterprise programme with an income compensated at or above the minimum wage. Unsuccessful outcome is defined as being unable to find employment after receiving vocational rehabilitation service interventions.

**Table I:** Characteristics of the study sample (n=3162)

Variable	Males, n (%)	Females, n (%)	Total, n (%)
Age (y)			
16-20	763 (41.9)	532 (39.6)	1295 (41.0)
21-25	290 (15.9)	228 (17.0)	518 (16.4)
26-54	767 (42.1)	582 (43.4)	1349 (42.7)
Race			
European-American	1376 (75.6)	983 (73.2)	2359 (74.6)
African-American	238 (13.1)	210 (15.6)	448 (14.2)
Hispanic-American	135 (7.4)	95 (7.1)	230 (7.3)
Asian-American	49 (2.7)	36 (2.7)	85 (2.7)
Native-American	22 (1.2)	18 (1.3)	40 (1.3)
Education level at application			
Special education	263 (14.5)	169 (12.6)	432 (13.7)
Less than high school	543 (29.8)	383 (28.5)	926 (29.3)
High school	584 (32.1)	402 (30.0)	986 (31.2)
Post-secondary/associate	271 (14.9)	268 (20.0)	539 (17.1)
Bachelor degree or higher	159 (8.7)	120 (8.9)	279 (8.8)
Intellectual disability			
Yes	164 (9.0)	127 (9.5)	291 (9.2)
No	1656 (91.0)	1215 (90.5)	2871 (90.8)
Epilepsy			
Yes	62 (3.4)	47 (3.5)	109 (3.4)
No	1758 (96.6)	1295 (96.5)	3053 (96.6)
Medical insurance at application			
Yes	954 (52.4)	760 (56.6)	1714 (54.2)
No	866 (47.6)	582 (43.4)	1448 (45.8)
Cash benefits at application			
Yes	1066 (58.6)	831 (61.9)	1897 (60.0)
No	754 (41.4)	511 (38.1)	1265 (40.0)

**Predictor variables**

Three sets of predictor variables were used for the analysis, including demographic variables, work disincentive variables, and rehabilitation service variables. Demographic variables included sex, age (16–20y, 21–25y, or 26–54y), ethnic group (European-American, African-American, Hispanic-American, Asian-American, or Native-American), co-occurring disabilities (intellectual disability or epilepsy), and education level at client case application (special education, less than high school education, high school graduate, post-secondary education, or at least bachelor degree). Based on the regulation of the Rehabilitation Services Administration,<sup>15</sup> special education refers to an individual if who (1) is currently a special education student; (2) received special education and earned a certificate of completion or a high school diploma; or (3) received special education but did not receive a certificate or diploma. Intellectual disability is defined as impairments involving learning, thinking, processing information, and concentration. In addition, work disincentive variables include cash benefits and medical insurance. Cash benefits refer to cash payments made by federal, state, and/or local government for the reason of an individual's disability, mostly including SSI, SSDI, and temporary assistance for needy families. Medical insurance includes Medicaid and Medicare.

Rehabilitation service variables included assessment, diagnostics and treatment of impairments, vocational rehabilitation counselling and guidance, college or university training, occupational/vocational training, on-the-job

training, basic academic remedial or literacy training, job readiness training, augmentative skills training, miscellaneous training, job search assistance, job placement assistance, on-the-job support, transportation services, maintenance, and rehabilitation technology. A description of each vocational rehabilitation service is presented in Table II and the frequency of usage of vocational rehabilitation services by the study participants is presented in Table III.

**Statistical analysis**

Multivariate logistic regression analysis was used to examine determinants of employability for adults with CP receiving vocational rehabilitation services. In the first analysis, the effect of demographic and work disincentive variables on employment outcomes was computed. In the second analysis, the effect of demographic covariates and vocational rehabilitation services on employment outcomes was identified. The odds ratios (ORs) were presented with a 95% confidence interval (CI). Data analysis was computed using the Statistical Package for the Social Sciences version 19.0 (SPSS Statistics, IBM Corporation, NY, USA).

**RESULTS****Vocational rehabilitation services and employment outcomes**

In the fiscal year 2009, the cases of 3162 clients with CP aged between 16 and 54 years were closed. The mean time between eligibility and case closure was 41.16 months (SD 36.21). The mean number of service types was 4.52 (SD 1.60) and the median case expenditure US\$3031 (range 0–480544). Of the 3162 clients with CP, the cases of 1567 clients (49.6%) were closed as successful employment and the cases of 1595 clients (50.4%) were closed as unemployed. The successful group received significantly more

**Table II:** Frequency of usage of vocational rehabilitation services (n=3162)

Vocational rehabilitation service	Males, n (%)	Females, n (%)	Total, n (%)
Assessment	1271 (69.8)	952 (70.9)	2223 (70.3)
Diagnostics and treatment	540 (29.7)	403 (30.0)	943 (29.8)
Counselling and guidance	1211 (66.5)	873 (65.1)	2084 (66.9)
College or university training	368 (20.0)	332 (24.7)	700 (22.1)
Occupational or vocational training	158 (8.7)	122 (9.1)	280 (8.9)
On-the-job training	93 (5.1)	52 (3.9)	145 (4.6)
Remedial training	26 (1.4)	23 (1.7)	49 (1.5)
Job readiness training	283 (15.5)	203 (15.1)	486 (15.4)
Augmentative skills training	60 (3.3)	36 (2.7)	96 (3.0)
Miscellaneous training	259 (14.2)	193 (14.4)	452 (14.3)
Job search assistance	580 (31.9)	375 (27.9)	955 (30.2)
Job placement assistance	773 (42.5)	516 (38.5)	1289 (40.8)
On-the-job support	472 (25.9)	295 (22.0)	767 (24.3)
Transportation services	522 (28.7)	451 (33.6)	973 (30.8)
Maintenance	267 (14.7)	202 (15.1)	469 (14.8)
Rehabilitation technology	364 (20.0)	287 (21.4)	651 (20.6)

**Table III:** Description of services provided by state vocational rehabilitation agencies

Type of service	Description
Assessment	Services provided and activities performed to determine an individual's eligibility for vocational rehabilitation services, to assign an individual to a priority category of a state vocational rehabilitation agency that operates under an order of selection, and/or to determine the nature and scope of vocational rehabilitation services to be included in the individual plan for employment; included in this category are trial work experiences and extended evaluation
Diagnosis and treatment of impairments	Surgery, prosthetics and orthotics, nursing services, dentistry, occupational therapy, physical therapy, speech therapy, and drugs and supplies; this category includes diagnosis and treatment of mental and emotional disorders
Vocational rehabilitation counselling and guidance	Discrete therapeutic counselling and guidance services necessary for an individual to achieve an employment outcome, including personal adjustment counselling; counselling that addresses medical, family, or social issues; vocational counselling; and any other form of counselling and guidance necessary for an individual with a disability to achieve an employment outcome. This service is distinct from the general counselling and guidance relationship that exists between the counsellor and the individual during the entire rehabilitation process
College or university training	Full- or part-time academic training above the high-school level that leads to a degree (associate, baccalaureate, graduate, or professional), a certificate, or other recognized educational credential; such training may be provided by a 4-year college or university, community college, junior college, or technical college course
Occupational/vocational training	Occupational, vocational, or job-skill training provided by a community college and/or a business, vocational/trade, or technical school to prepare students for gainful employment in a recognized occupation; this training does not lead to an academic degree or certification
On-the-job training	Training in specific job skills by a prospective employer; generally the individual is paid during this training and will remain in the same or a similar job upon successful completion; this category also includes apprenticeship training programmes conducted or sponsored by an employer, a group of employers, or a joint apprenticeship committee representing both employers and a union
Basic academic remedial or literacy training	Literacy training or training provided to remediate basic academic skills needed to function on the job in the competitive labour market
Job readiness training	Training to prepare an individual for the world of work (e.g. appropriate work behaviours, methods for getting to work on time, appropriate dress and grooming, methods for increasing productivity)
Disability-related augmentative skills training	Service includes, but is not limited to, orientation and mobility, rehabilitation teaching, training in the use of low-vision aids, Braille, speech reading, sign language, and cognitive training/retraining
Miscellaneous training	Any training not recorded in one of the other categories listed, including general educational development (GED) or high-school training leading to a diploma
Job search assistance	Job-search activities that support and assist a consumer in searching for an appropriate job; may include help in preparing resumes, identifying appropriate job opportunities, and developing interview skills, and may include making contacts with companies on behalf of the consumer
Job placement assistance	A referral to a specific job resulting in an interview, whether or not the individual obtained the job
On-the-job support	Support services provided to an individual who has been placed in employment in order to stabilize the placement and enhance job retention; such services include job coaching, follow-up and follow-along, and job retention services
Transportation services	Travel and related expenses necessary to enable an applicant or eligible individual to participate in a vocational rehabilitation service; includes adequate training in the use of public transportation vehicles and systems
Maintenance	Monetary support provided for those expenses such as food, shelter, and clothing that are excess of the normal expenses of the individual, and that are necessitated by the individual's participation in an assessment for determining eligibility and vocational rehabilitation services
Rehabilitation technology	The systematic application of technologies, engineering methodologies, or scientific principles to meet the needs of, and address the barriers confronted by, individuals with disabilities in areas that include education, rehabilitation, employment, transportation, independent living, and recreation; includes rehabilitation engineering services, assistive technology devices, and assistive technology services

Information in this table was extracted from the RSA-911 code book ([www.ed.gov/policy/speced/guid/rsa](http://www.ed.gov/policy/speced/guid/rsa)).

service types (mean 4.88, SD 1.71) than the unsuccessful group (mean 4.15, SD 1.41) ( $t[3160]=-13.11$ ,  $p<0.001$ ). The median case expenditure for the successful group (US\$4764) was significantly higher than the unsuccessful group (US\$1800; Mann-Whitney  $U=898\ 456$ ;  $p<0.001$ ). However, there was no significant difference with regard to service time between the employed (mean 37.19mo, SD 34.73mo) and unemployed applicants (mean 45.05mo, SD 37.22mo).

#### Predictors of employment

To identify the important determinants of employment for clients with CP, hierarchical logistic regression was com-

puted with demographic characteristics, work disincentives, and rehabilitation service types as predictor variables and employment outcome as the dependent variable. In the first analysis, we were interested in examining demographic and work disincentive variables as predictors of employment outcome. Demographic variables include sex (with female as the reference category), age at application (with the 26–54y group as the reference category), ethnic group (with European-American as the reference category), education level (with bachelor degree or higher as the reference category), and co-occurring intellectual disability and epilepsy (both with 'No' as the reference category). Work disincentives include cash and medical benefits (both with 'No' as



the reference category). The omnibus test for the model was found to be statistically significant ( $\chi^2$  [15,  $n=3162$ ] =158.11,  $p<0.001$ ). The Nagelkerke  $R^2$  was computed to be 0.07. The results showed sex, age, education level, and cash benefits to be significant predictors ( $p<0.05$ ). Males were more likely (OR=1.33; 95% CI 1.15–1.54) than females to be employed. Clients in the 16-to-20 year group were less likely (OR=0.68; 95% CI 0.56–0.83) to find employment than those in the 26-to-54 year group. In addition, the results indicated that, in comparison with participants with a college education, those without a college education had significantly less chance of finding employment. The OR for cash benefits was computed to be 0.65 (95% CI 0.54–0.77), indicating a 35% reduction in the odds of clients receiving cash benefits to be employed than those without cash benefits. The result of the logistic regression analysis is presented in Table IV.

In the second analysis, we were interested in demographic covariates and types of vocational rehabilitation services as predictors of employment outcomes. Based on the first analysis, a dummy variable was created for education, with lower than bachelor degree as the reference category. The ethnic group categories were split into the European-, Asian-, and Hispanic-American group and the African-American and Native-American group. In addition, based on the purposeful selection criteria, only six vocational rehabilitation services (diagnostic and treatment of impairments, on-the-job training, job placement assistance, on-the-job support, maintenance services, and rehabilitation technology services) were entered into the model as predictors. Overall, the omnibus test for the model was found to be statistically significant ( $\chi^2$  [13,  $n=3162$ ] =538.87,  $p<0.001$ ). The Nagelkerke  $R^2$  was computed to be 0.21, indicating a relatively robust effect size. The results showed that, after controlling for the effect of demographic and work disincentive variables, five vocational

rehabilitation services significantly predicted employment outcomes ( $p<0.05$ ), with ORs greater than those who were not receiving that service. These were (1) on-the-job training (OR=1.53, 95% CI 1.04–2.25); (2) job placement assistance (OR=2.80; 95% CI 2.39–3.28); (3) on-the-job support (OR=2.33; 95% CI 1.93–2.80); (4) maintenance (OR=1.51; 95% CI 1.21–1.87); and (5) rehabilitation technology (OR=1.80; 95% CI 1.48–2.18). Additionally, sex, age, education level, and cash benefits remained significant predictors in this model. The results of the hierarchical logistic regression analysis are presented in Table V.

## DISCUSSION

This study found that specific demographic, work disincentive, and types of service variables were predictors of employment among individuals with CP who received vocational rehabilitation services. Specifically, adult males aged 26 to 54 years with a college education at application were more likely to obtain employment than those in other groups. Applicants who did not receive any disability-related benefits at application were more likely to obtain employment after receiving vocational rehabilitation services. Notably, receipt of disability benefits may be related to functional severity, and therefore could possibly be a proxy for severity, which could more directly be linked to unemployment. However, this area needs to be investigated further.

With respect to vocational rehabilitation services, the results also showed that, after controlling for the effect of demographic variables and disability-related benefits, the following were related to increased odds of employment: (1) on-the-job training; (2) job placement assistance to help individuals with CP find jobs; (3) on-the-job support to provide job coaching and job retention services to stabilize the placement; (4) support services such as maintenance services for basic living; and (5) rehabilitation assistive

**Table IV:** Demographic predictors of employment outcomes

	B	SE	df	$\rho$	Exp (B)	95% CI
Sex (with female as the reference category)	0.29	0.07	1	<0.001	1.33	1.15–1.54
Age at application (with 26–54y as the reference category)			2	<0.001		
16–20y	–0.38	0.10	1	<0.001	0.68	0.56–0.83
21–25y	–0.15	0.11	1	0.171	0.86	0.70–1.07
Race (with European-American as the reference category)			4	0.356		
African-American	–0.21	0.11	1	0.053	0.81	0.66–1.00
Native-American	–0.18	0.33	1	0.580	0.83	0.43–1.59
Asian	–0.08	0.23	1	0.724	0.92	0.59–1.44
Hispanic	0.05	0.14	1	0.712	1.05	0.80–1.39
Education level (with bachelor degree or higher as the reference category)			4	<0.001		
Special education	–1.05	0.18	1	<0.001	0.35	0.25–0.50
Less than high school	–0.97	0.17	1	<0.001	0.38	0.27–0.53
High-school graduate	–0.99	0.16	1	<0.001	0.37	0.27–0.50
Some college	–0.91	0.16	1	<0.001	0.40	0.29–0.56
Medical insurance (with 'No' as the reference category)	–0.11	0.07	1	0.126	0.90	0.79–1.03
Cash benefits (with 'No' as the reference category)	–0.43	0.09	1	<0.001	0.65	0.54–0.77
Intellectual disability (with 'No' as the reference category)	0.17	0.13	1	0.191	1.18	0.92–1.53
Epilepsy (with 'No' as the reference category)	0.10	0.20	1	0.612	1.11	0.75–1.64
Constant	1.18	0.15	1	<0.001	3.25	

B, logistic regression coefficient; CI, confidence interval; df, degrees of freedom; Exp (B), odds ratio; SE, standard error.

**Table V:** Demographic and vocational rehabilitation predictors of employment outcomes

	B	SE	df	p	Exp (B)	95% CI
Sex (with female as the reference category)	0.24	0.08	1	0.002	1.27	1.09–1.48
Age at application (with 26–54y as the reference category)			2	<0.001		
16–20y	–0.39	0.09	1	<0.001	0.68	0.56–0.81
21–25y	–0.15	–0.12	1	0.200	0.86	0.69–1.08
Race (with European-, Asian-, and Hispanic- American as the reference category)	0.13	0.11	1	0.225	1.14	0.92–1.42
Education level (with lower than bachelor degree as the reference category)	1.01	0.16	1	<0.001	2.74	2.02–3.71
Medical insurance (with 'No' as the reference category)	–0.12	0.07	1	0.105	0.89	0.77–1.03
Cash benefits (with 'No' as the reference category)	–0.61	0.10	1	<0.001	0.55	0.45–0.66
Diagnostics and treatment (with 'No' as the reference category)	0.16	0.09	1	0.058	1.18	1.00–1.39
On-the-job training (with 'No' as the reference category)	0.43	0.20	1	0.031	1.53	1.04–2.25
Job placement assistance (with 'No' as the reference category)	1.03	0.08	1	<0.001	2.80	2.39–3.28
On-the-job support (with 'No' as the reference category)	0.84	0.10	1	<0.001	2.33	1.93–2.80
Maintenance (with 'No' as the reference category)	0.41	0.11	1	<0.001	1.51	1.21–1.87
Rehabilitation technology (with 'No' as the reference category)	0.59	0.10	1	<0.001	1.80	1.48–2.18
Constant	–0.65	0.15	1	<0.001	0.52	

B, logistic regression coefficient; CI, confidence interval; df, degrees of freedom; Exp (B), odds ratio; SE, standard error.

technology for job accommodation and independent living. We also found that the successfully employed group received more services and had higher case expenditures than the unemployed group. In addition, the employed group spent less time in vocational rehabilitation services.

Several findings of this study call for further discussion. First, males with CP receiving vocational rehabilitation services were more likely to experience positive employment outcomes than woman. This finding is consistent with other studies which have suggested that males with disabilities are more likely to become employed and be competitive in the labour market than females with disabilities.<sup>16–18</sup> Randolph and Andresen<sup>19</sup> note that a greater proportion of females are unemployed in society in general, as are a greater proportion of persons with disabilities, resulting in dual discrimination for females with disabilities. Females with disabilities often experience multiple discriminations such as attitudinal barriers and sex bias, which may exacerbate environmental constraints such as inaccessibility.<sup>7</sup> The issue of sex disparity in employment rates for persons with disabilities needs further research in order to identify factors that facilitate employment for females with disabilities.

In this study, age at application was identified as an important factor influencing employment outcomes. Individuals in the 26-to-54 year group were more likely to be employed than those aged 16 to 20 years old and 21 to 25 years old. This result concurs with the study of Bottos et al.,<sup>20</sup> who reported that, owing to the prolonged needs for education and vocational training, a reduced employment rate for young adults with CP was generally found. In addition, education level at application played a critical role in gaining employment. The results indicated that individuals with a college education had a higher chance of becoming employed after receiving vocational rehabilitation services than those without a college education. This finding is consistent with previous research, suggesting that individuals with disabilities with at least a college education experienced better employment outcomes than indi-

viduals with less education.<sup>21,22</sup> In a sample of adults with CP aged 27 to 74 years, Murphy et al.<sup>12</sup> found that the most significant factor in achieving employment was education beyond high school.

Unfortunately, persons with disabilities have significantly lower rates of attending college. Recent data show that one in five people with disabilities aged 18 to 34 years do not finish high school, and of those who have earned a high-school degree, only 19% earn a college degree or higher.<sup>23</sup> For persons with CP, acquiring an education may be difficult because of the physical limitations associated with managing simultaneous courses. In addition, students with CP may have learning difficulties and communication problems, which can present additional challenges to the education process. Indeed, having both a physical and a cognitive disability creates educational barriers that can impact employment. Therefore, it is important to develop transition programmes in high schools and have vocational rehabilitation counsellors participate in individualized education programme meetings for students with CP. Collaboration between educators and vocational rehabilitation counsellors will assist young adults with CP in their early career development and job preparation, which may lead to more successful transition from school to work. Indeed, a successful transition programme is likely to allow young adults with CP to find a job that matches their interests and skill level, and thus increase successful employment opportunities.

The results also revealed the adverse effects of cash benefits on employment, with cash benefits (such as SSI and SSDI) in this study reducing the odds of employment. According to Shrey et al.,<sup>24</sup> fewer than one per cent of SSDI beneficiaries stopped receiving SSDI when provided with vocational rehabilitation services. Legislative efforts such as the Ticket to Work and Work Incentive Improvement Act of 1999, which provide social security beneficiaries incentives and supports, are needed to prepare for, attach to, or advance in work.<sup>25</sup> At present, SSI and/or SSDI recipients are now permitted to work for longer



periods of time with less reduction of financial and medical benefits.<sup>26</sup> Despite these legislative efforts, people with disabilities are not well informed about disability benefits and associated legislations; thus, they are often afraid of losing benefits owing to changes in their income and work status.<sup>7</sup> This lack of information, coupled with the fear-driven motivation to participate in these programmes, keeps people with disabilities in a cycle of poverty and unemployment. Indeed, persons with CP who are receiving SSI and/or SSDI benefits are at higher risk of unemployment, of not living independently, and of obtaining an additional disability.<sup>27</sup> Rehabilitation professionals need to assist persons with CP and their family members with access to benefits counselling and financial planning services offered by the Social Security Administration and state vocational rehabilitation agencies.

Among the many vocational rehabilitation services investigated in this study, on-the-job training, job placement assistance, on-the-job support, maintenance, and rehabilitation technology all played a central role in the employment success of people with CP. With regards to job placement assistance, our finding is consistent with the rehabilitation literature that shows that job placement services have a strong positive relationship with employment outcomes for persons with disabilities.<sup>28</sup> Our finding that on-the-job training is a predictor of employment is also consistent with the literature. On-the-job support includes work and social skill development tailored specifically to the context, workplace accommodations, and employee education and consumer advocacy. Addressing work and social skills is particularly important for developing the skills necessary to maintain employment. Wadsworth and Harper<sup>29</sup> noted that for people with and without disabilities, social skills are a critical factor in maintaining employment, and those who have both the necessary work and social skills are more likely to be hired and experience longevity and career advancement. In addition, identifying and facilitating the necessary accommodations (e.g. the use of augmentative communication devices) needed to reduce the impact of functional limitations on the job is critical for persons with CP. Employers often need education around *how* to accommodate an employee with CP. In addition, disability education and advocacy on behalf of the employee with CP by the vocational rehabilitation counsellor reduces the chances of poor performance, disability harassment, and unfair treatment in the workplace. The finding that maintenance services are important to successful employment outcomes is important to consider. Specifically, maintenance services (e.g. food, clothing, and shelter) and other services (e.g. emergency healthcare) were related to the employment outcomes in individuals with CP. It appears that providing persons with CP who have significant basic-service needs during rehabilitation might have allowed them to better engage in their vocational rehabilitation programme and further help them to achieve better employment outcomes.

Rehabilitation technology is an important service for people with sensory, communicative, and physical

disabilities, particularly with respect to being successful at work. For example, rehabilitation technology services such as a wheelchair, personal assistant, or augmentative communication devices are especially important to increasing the chances of being successful at work for persons with CP. In the study by McNaughton et al.,<sup>16</sup> participants with CP identified rehabilitation technology as an important support for obtaining and maintaining employment. Participants reported that augmentative and alternative communication systems were of particular importance at work, as many people with CP have significant speech impediments. Augmentative and alternative communication systems allow for persons with speech impediments to communicate better with employers and co-workers by improving the quality of speech production (i.e. pacing, pitch, intonation, and emphasis). Nonetheless, there is a dearth of research in this area; further investigation into the rehabilitation technology needs of persons with CP is needed.

Finally, we found that clients in the employed group received more services than clients in the unemployed group; it is possible that counsellors were more willing to spend money and provide services to clients who they thought had a higher chance of being successfully employed, reflecting a selection bias of the counsellors.

### Limitations

This study used archival data extracted from the RSA-911 database. A notable problem with using the RSA-911 database can be subjective recall bias. Rehabilitation counsellors handle and enter case service information at various stages in the rehabilitation process. For example, the information regarding type of disability is entered before an eligibility decision is made, and the wage and occupation data are entered when the case is closed. Thus, it is possible that counsellors may rely on recall without consulting the case file to verify which services were delivered. As a result, data on services could be influenced by recall bias. In addition, as with any administrative database, there may be possible input errors. Although the Rehabilitation Services Administration has developed 18 cross-checks to reduce the potential for such errors, an unknown number of errors may still exist. Moreover, the limited data in the RSA-911 database do not allow us to identify specific disability and service information related to CP, such as severity, types of CP, physical function, and types of assistive technology/accommodation services. Therefore, we are limited in our ability to study specific factors associated with employment. Finally, because this study used archival data and employs a cross-sectional design, causality cannot be inferred.

### CONCLUSION

In summary, work is a central element of human life and well-being.<sup>30</sup> Work is the way in which individuals define themselves in society and a means of participating in society. However, disability often affects work rela-

tionships, employability, and work performance. About 50% of persons with CP were successfully employed after receiving state vocational rehabilitation services compared with the 69% employment rate of people without disabilities. Rehabilitation professionals need to partner with allied health providers more effectively in the medical and educational arena during critical transition periods for persons with CP. Currently there is a gap between the medical and educational systems that serve persons with CP and the vocational rehabilitation service system, resulting in barriers towards receiving employment services and reaching optimal participation in the community.<sup>31</sup> Effective transition planning offers a natural structure for building important relationships between individuals with CP, their families, medical professionals, special educators, and vocational rehabilitation counsellors.<sup>32</sup> The vocational rehabilitation counsellor is a professional who 'assists persons with disabilities in adapting to the environment, assists environments in accommodating the needs of the individual, and works toward full participation of persons with disabilities in all aspects of society, especially work'.<sup>33</sup> Therefore, medical and health professionals and special educators need to invite vocational rehabilitation counsellors into treatment planning so that they can assist the person with CP to maximize their employability, to address their much

needed work adjustment skills, to establish independent living, and to eventually reach their full participation in society.

In addition, it is important for rehabilitation researchers to conduct research that continues to identify factors that contribute to successful employment for persons with CP, and examine factors that prevent, for example, the 30.3% of the unemployed persons with CP in this study, from obtaining and maintaining employment. Finally, it is important to acknowledge that not all individuals with CP are interested in gaining employment; considering each person with CP individually with respect to the appropriateness of this outcome in his or her rehabilitation plan is critical.

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