

Research Summary: Postsecondary Service Use and Outcomes Among Maine Division of Vocational Rehabilitation Clients

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Introduction

The connection between postsecondary education and positive employment outcomes is well-known. A Census Bureau study from 2002 estimated that high school graduates earn \$1.2 million over their working life, associate's degree holders earn \$1.6 million, and those who complete a bachelor degree earn about \$2.1 million.¹ The favorable association between postsecondary education and employment is even stronger among people with disabilities. For example, disabled individuals who have any amount of postsecondary education are employed at double the rate of those with just a high school diploma.²

Maine's Division of Vocational Rehabilitation (DVR) assists eligible individuals with disabilities to prepare for, achieve and retain employment in integrated community settings. Given the importance of education in obtaining a good job, it is not surprising that many participants in the DVR program choose to pursue a higher degree as the central focus of their vocational plan. In fact, postsecondary education is a large and growing part of services paid on behalf of individuals served by DVR. In Federal Fiscal Year (FFY) 2005, almost \$1.3 million dollars went to postsecondary education, representing about one fifth of all DVR service costs. And from FFY 2003 to 2005, total spending by DVR on college or university training increased by 19 percent.³

In theory, the growth in spending on post-secondary education in recent years should have led to improved employment outcomes. Over the same period, however, the number of successful (status 26) case closures fell from 857 down to 655, and the rehabilitation rate dipped slightly, from 51 to 48 percent.⁴

There are many factors that may have influenced the decline in successful closures -- including the ongoing shift in the Maine economy away from manufacturing and natural resource industries, growth in service sector employment, staff turnover in DVR, and a decrease in federal funding for the VR program. But the rise in postsecondary spending by DVR while employment was falling raises questions about the cost effectiveness of postsecondary services. Put another way, are the vocational goals of DVR participants being served best by increased postsecondary education?

This report attempts to answer this question by taking a closer look at the characteristics of DVR clients who used postsecondary services, at spending on postsecondary services, and at the relationship between postsecondary education and several employment outcomes. We use information on DVR clients whose cases closed in FFY 2004 (October 1, 2003 – September 30, 2004), limiting the analysis sample to 1,649 cases closed after the person received services under an Individualized Plan for Employment. This was to ensure that all people in the sample had an opportunity to benefit from the full range of services and supports offered by DVR.



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The views and opinions expressed in this report are the authors' and should not be attributed to the Maine Bureau of Rehabilitation Services, the CHOICES CEO project or the Muskie School of Public Service, University of Southern Maine.

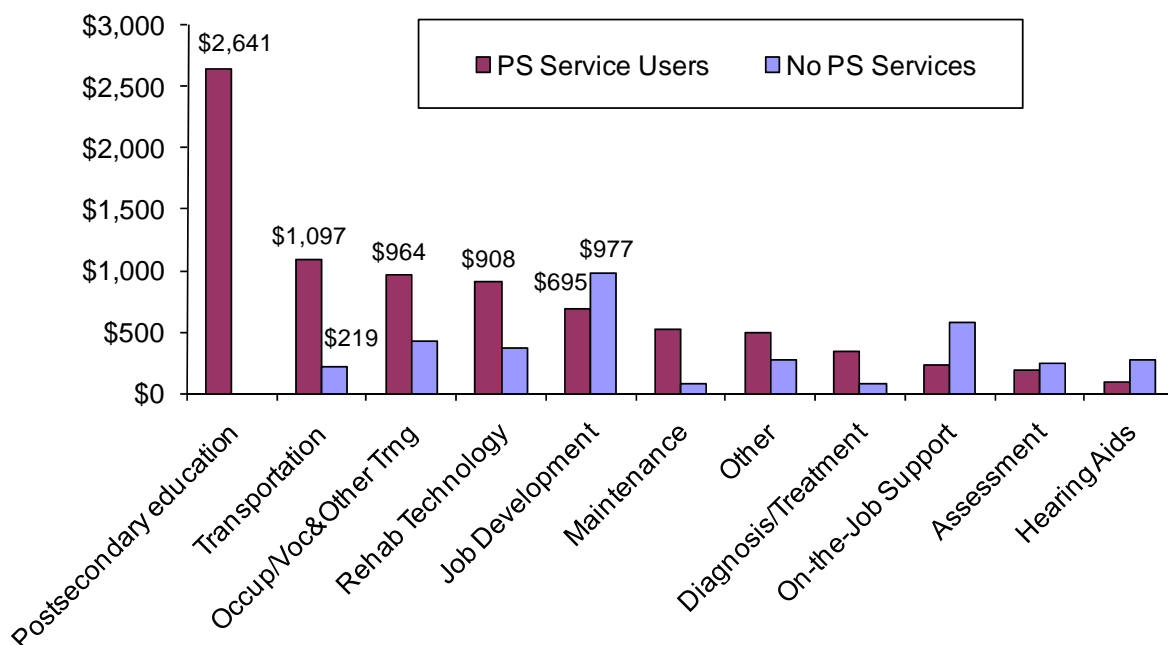
Description of Postsecondary Users and Spending

Of the 1,649 cases closed in FFY 2004, 1 in 5 used postsecondary services at some point during their time in the VR program. We found that postsecondary users⁵ (PS users) differed from those who did not use postsecondary services in several ways:

- The majority of VR clients enter the program with a high school education or less. But PS users are more likely to come in with at least some postsecondary experience; almost 30% of PS users had at least some postsecondary education at the time they applied for services, versus only 18% of non-PS users
- PS users were more likely to have a physical disability than non-PS users (35% versus 26%) and were more likely to have mental illness (36% versus 31%).
- PS users spend a much longer period of time in the VR program – averaging more than four years (49 months) from application to closure. Non-PS users averaged less than two and half years (31 months).

- Total case costs for PS users, driven in large part by their longer time of participation, were also much higher. Average DVR payments for PS users were \$8,195 per case, more than double the \$3,535 per case for those not receiving postsecondary services.
- Breaking out DVR payments by service category, we found that on average, DVR paid more than \$2,600 on postsecondary education expenses for each PS user (Chart 1). Transportation payments were also high for PS users, at an average of \$1,100 per closure. DVR payments for occupational and vocational training averaged \$1,000 per closure, and rehabilitation technology payments were about \$900. In each of these service categories, mean payments for PS users were significantly higher than for DVR clients who did not receive postsecondary services. For example, average transportation payments per closure were more than five times higher for PS users relative to non-PS users (\$1,100 versus \$220). Job development was one of the few service categories where non-PS users had higher average payments, at about \$1,000 per closure, compared with \$700 per closure for PS users.

CHART 1: Mean DVR Payments for PS Users and Non-users by Service Category



Educational and Employment Outcomes

We now turn to the question of whether or not the higher investment in PS users, both in terms of time and DVR payments, pays off in better educational and employment outcomes.

Not surprisingly, users of postsecondary services had better educational outcomes than other DVR participants. Almost half (47%) of all PS users increased their education level between the time they applied for VR services and the time their case closed⁶ (Chart 2). However, only 18 percent of PS users actually completed a postsecondary degree (Associate's, Bachelor's or higher) or certificate during their participation in the VR program.

With regard to employment outcomes collected by the VR program, we found no significant difference between PS users and non-users in terms of rehabilitation rates⁷ (Chart 3). But for those who did become employed, PS users were more likely to be working full-time (35 or more hours/week), and to have increased their earnings by more than \$200 per week from the time of application to closure. In other words, postsecondary education is associated with higher quality employment outcomes among DVR participants.

Using wage data from the Unemployment Insurance (UI) system, we again found no difference between PS users and non-users in the short-term likelihood of employment – as measured by the presence of UI wages at the time of case closure (Chart 4). Looking out over the 8 quarters after the case closed, we found that PS users had greater earnings potential over time; 34 percent of PS users earned more than \$20,000 in the two years after their case closed, versus only 22 percent of non-PS users. Further, total UI wages for the two years after case closure averaged \$16,200 for PS users, and only \$12,200 for all other VR participants.

CHART 2: Educational Outcomes

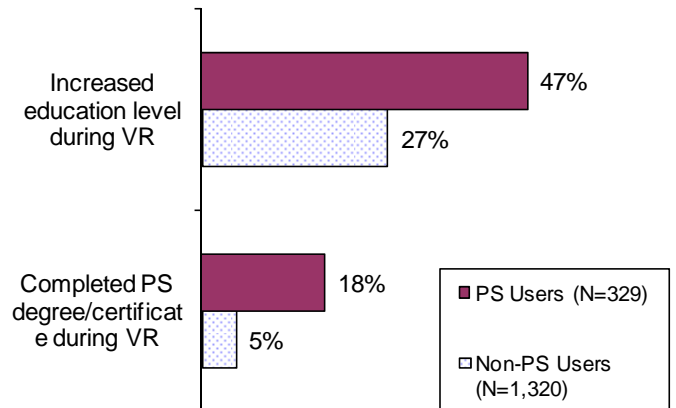
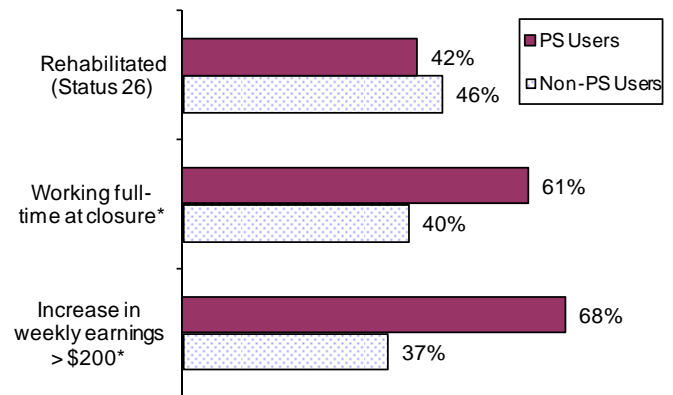
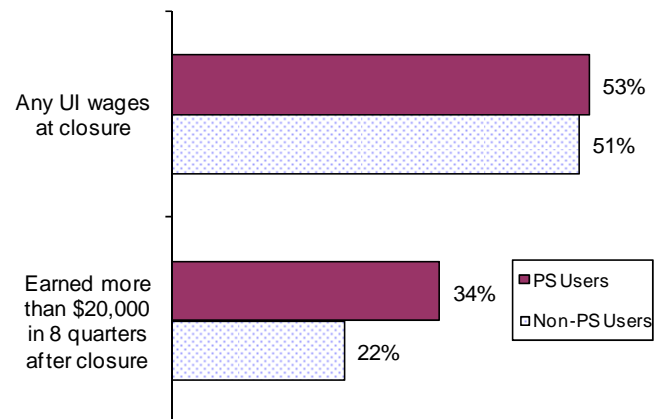


CHART 3: VR Employment Outcomes



* Percentages computed based only on Status 26

CHART 4: Unemployment Insurance Wage Outcomes



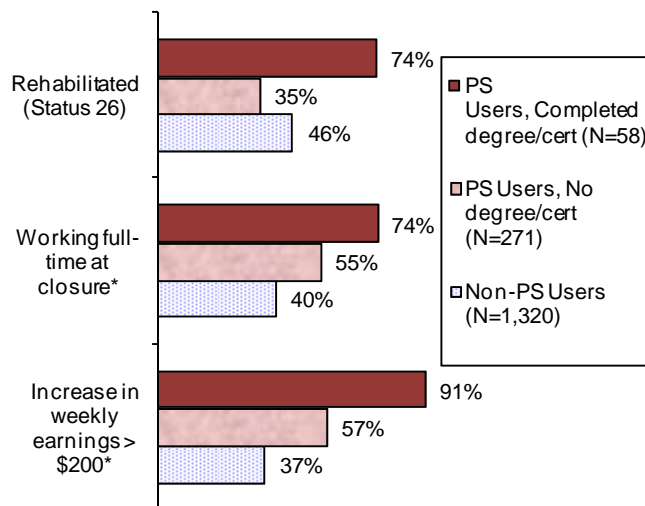
Outcomes Among Those Who Complete a Postsecondary Degree or Certificate

Closer inspection of the group of DVR participants who received postsecondary services revealed that the 58 people who successfully completed a postsecondary degree or certificate program had particularly favorable employment outcomes (Charts 5 and 6).

- Almost three quarters of PS users who completed a degree were successfully employed at case closure, as measured both by the rehabilitation rate and presence of UI wages at closure. And of those who were working, 74% were working full-time and 91% had increased their wages by more than \$200 per week over what they had been earning at application.
- Longer-term earnings for “degree completers” were also significantly higher than among PS users who did not complete a degree or certificate. 62 percent of PS users who completed a degree earned more than \$20,000 in the two years after their case closed, compared with only 28 percent of PS users who did not complete the degree. And average earnings for degree completers over that period were almost \$32,000 (or \$1,330 per month), versus less than \$13,000 (\$535 per month) for PS users who did not finish a degree or certificate program.
- Compared with non-postsecondary service users, PS users who did not complete a degree actually had a lower rehabilitation rate, and fared only marginally better in terms of long-term UI wage earnings. Average earnings over the eight quarters after closure were only \$621 higher for PS users who did not complete a degree—a statistically insignificant difference.

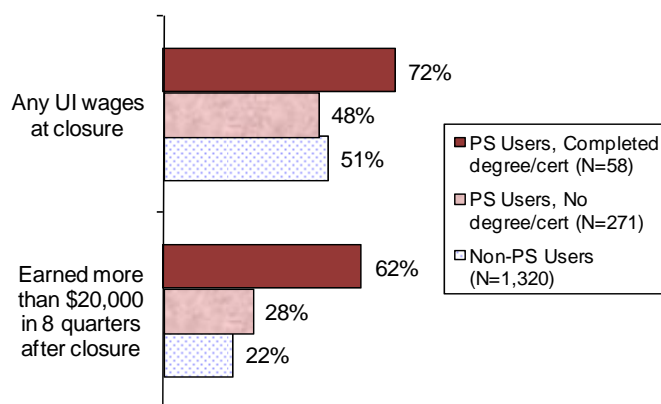
Taken together, these findings underscore the importance of degree completion in translating postsecondary training into employment and wage gains for DVR participants.

CHART 5: VR Employment Outcomes Among PS Users who Complete Degree/Certificate



* Percentages computed based only on Status 26 closures

CHART 6: Unemployment Insurance Wage Outcomes Among PS Users who Complete Degree/Certificate



Summary and Implications

Postsecondary education is a key component of the vocational plan for a significant minority of DVR participants. Of all cases closed in FFY 2004, twenty percent of clients used postsecondary services at some point in time. Compared with individuals who did not use postsecondary services, PS users were more likely to have already had some postsecondary education at the time they applied (30% versus 18%), and were more likely to have a physical or mental health disability.

College and vocational training is time- and resource-intensive for DVR and their clients. On average, DVR spent almost \$8,200 per case for PS users, more than double the amount for all other clients. And PS users stayed in the VR program for an average of more than four years (49 months); cases for non-PS users were open for an average of only two and a half years (31 months).

Educational and employment outcomes among PS users in DVR were mixed. Almost half (47%) of PS users increased their education level during their participation in the VR program, but half did not. Only 18 percent of PS users completed a vocational or technical certificate program, an Associate's degree, or higher degree. As a point of comparison, a national study found that 41 percent of postsecondary students with disabilities completed a degree or certificate within five years of enrollment.⁸

Our analysis showed that a critical factor for PS users in translating their education into positive employment outcomes is the completion of a degree or certificate. PS users who completed a degree or certificate during their participation in the VR program were more than twice as likely to have a successful (Status 26) case closure, were much more likely to be working full-time and to have higher wages relative to PS users who did not complete a degree or certificate. The short-term

employment advantages enjoyed by "degree completers" were even more pronounced when we looked at earnings over time. Sixty two percent of "completers" earned more than \$20,000 over the two years after their case closed, versus only 28 percent of non-completers. Average earnings for degree completers over that period were almost \$1,330 per month, versus only \$535 per month for PS users who did not finish a degree or certificate program. Finally, PS users who did not complete a degree fared no better on most employment measures than those who did not use PS services.

It is clear from these results that the substantial investment by clients and the DVR agency in postsecondary education does pay off in the form of better jobs and better pay, but that payoff is confined primarily to those who are able to complete a degree. Unfortunately, degree completers represent only a small fraction (18%) of all DVR participants who use postsecondary services.

To maximize the potential benefit of postsecondary services, the DVR agency needs to emphasize the identification of barriers that might prevent an individual from completing a degree. This could be accomplished during the comprehensive assessment of rehabilitation needs that DVR counselors conduct with each DVR participant as part of the VR process.

This document summarizes results from a full report on postsecondary outcomes among Maine DVR participants. For more information about this study, contact:

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Endnotes

¹ Day, J.C., and Newburger, E.C. (2002). The Big Payoff: Educational Attainment and Synthetic Estimates of Work-Life Earnings. (Current Population Reports, Special Studies, P23-210). Washington, DC: Commerce Dept., Economics and Statistics Administration, Census Bureau. <http://www.census.gov/prod/2002pubs/p23-210.pdf>

² Stodden, R., Dowrick, P. (2000). Postsecondary Education and Employment of Adults with Disabilities. *American Rehabilitation*, 22(3): pp19-23.

³ Maine Division of Vocational Rehabilitation Comprehensive Needs Assessment, May 2006.

⁴ Ibid

⁵ We identify postsecondary service users using information from the DVR case management system (ORSIS). Each payment in the system is assigned a service code, including a code for "College or University Training". We also examined the vendor field of each payment record and flagged vendors known to provide postsecondary services. We defined individuals a "Postsecondary Service User" if their case had one or more payments with a "College or University Training" service code OR one or more payments to a vendor that provides postsecondary services.

⁶ DVR participants report their education level at application, and again at case closure. Education level was coded into five categories: 1) Less than High School; 2) High School degree/GED; 3) Some postsecondary education, no degree; 4) Associate's degree or vocational/technical certificate; 5) Bachelor's degree or higher. If the participant reported a higher level of education at case closure, then they were coded as having increased their education level.

⁷ "Successful closures" (Status 26) are cases closed once the participant has worked for at least 90 days in an integrated setting. The rehabilitation rate refers to the total number of successful closures divided by the total number of closures (Status 26 + 28).

⁸ U.S. Department of Education. National Center for Education Statistics. *Students With Disabilities in Postsecondary Education: A Profile of Preparation, Participation, and Outcomes*, NCES 1999-187, by Laura Horn and Jennifer Berkold. Project Officer: Larry Bobbitt. Washington DC: 1999.

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