

Research and Evaluation Brief

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Vocational Rehabilitation Program Pays Off

REPORT FOCUS

Evaluation of Massachusetts' Public Vocational Rehabilitation Program

Commonwealth Corporation's Center for Research and Evaluation conducted an independent evaluation of the Massachusetts Rehabilitation Commission's (MRC's) Public Vocational Rehabilitation Program (VR). This brief presents the findings of a net impact study and benefit-cost analysis of the VR program.

Notwithstanding major legislation to improve the quality of life of individuals with disabilities, the labor market participation and employment rates, as well as the labor market outcomes of people with disabilities in the U.S. have worsened over the last few years.

- According to recent reviews² of Census and Current Population Survey data for the 1989-2000 period, the employment rates for individuals with disabilities in the U.S. declined during a period when overall population employment rates remained steady or improved slightly.
- During this period, the U.S. employment rate for men with disabilities declined from 44% in 1989 to 33% in 2000, while the U.S. employment rate for men without disabilities declined only slightly, from 96% in 1989 to 95% in 2000.
- For this 1989-2000 period, the U.S. employment rate for women with disabilities declined from 38% in 1989 to 33% in 2000, while the U.S. employment rate for women without disabilities actually increased from 77% in 1989 to 81% in 2000.

- 1 *The Center for Personal Assistance Services of the University of California at San Francisco has compiled state and national data on the prevalence of overall disability and of self-care difficulty by gender, age, race and ethnicity, type of disability, family income, benefit reciprocity, employment status, and living arrangement.*
- 2 *Stapleton, David C., and Burkhauser, Richard V., Eds. The Decline in Employment of People with Disabilities: A Policy Puzzle. Kalamazoo, Michigan: W.E. Upjohn Institute of Employment Research, 2003.*

Context and Significance

According to Census data¹, there were 865,000 persons ages five and over with a disability in Massachusetts, representing about 15% of the population in this age group. Individuals' disabilities fell into one or more of the following categories: sensory disabilities (213,000), mobility disabilities (443,000), and cognitive disabilities (293,000). Of the 865,000 individuals who reported having one or more disabilities, 445,000, over half, were of prime working ages (18-64).

These individuals face multiple barriers to labor force participation, employment, job retention and career advancement.

- Only 219,000 (49%) of working age adults with disabilities were in the labor market, compared to 70% for the entire working age population.
- Of the 219,000 who were in the labor force, 194,000 were working and 25,000 were unemployed but looking for work, an unemployment rate of more than 11%, about two times the rate of the working age population in Massachusetts and the nation (2002).

MRC Program Description

The Massachusetts Rehabilitation Commission provides comprehensive services to individuals with disabilities to obtain and maintain employment and to live independently. The services evaluated in this study are those solely administered by the Massachusetts Rehabilitation Commission.

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The MRC VR program assists individuals with a variety of disabilities: psychological disabilities (33%), substance abuse (18%), orthopedic disabilities (16%), learning disabilities (7%), mental retardation (6%), deaf and hard of hearing (7%), neurological disabilities (3%), traumatic brain injuries (3%) and other disabilities (7%). The program offers a wide array of services to meet the individual needs of each consumer, including evaluation, counseling and guidance; adjustment and other training, college/university, business and vocational training; restoration services including technological assessment; and various other support activities.

Of the 35,000 consumers who have open cases, 25,000 actively participate during the program year. Length of service varies greatly given the different needs of consumers, with more than half of consumers receiving services for more than one year after being determined eligible, and 15%-20% of consumers receiving services for three years or more. The average length of services is approximately two and one half years.

During any given year, MRC consumers represent about 8% of all persons with disabilities of working age in the Commonwealth (i.e., 35,000 open cases out of 445,000 disabled persons of prime working ages [18-64] according to the 2002 American Community Survey).

Study Description and Design

The purpose was to determine the return on the investment of public resources in activities funded by the MRC VR Program. The study answered two broad research questions:

- What is the net impact of the MRC VR Program on future employment and earnings of participants?
- What are the public and private benefits and costs associated with the MRC VR Program?

The primary data were drawn from the Massachusetts Rehabilitation Commission's Case Service Report (annual RSA-911) for Fiscal Years 1999 and 2000. This data set contained consumer background, services, and outcome data for those individuals whose cases were closed in Fiscal Years 1999 and 2000. A second data set was created by the Massachusetts Division of Unemployment Assistance in response to Commonwealth Corporation's request for Unemployment Insurance (UI) wage record matching for the above individuals. This data set includes quarterly earnings from UI-covered employment for the period January 1995–September 2003, as reported by Massachusetts' employers to the Massachusetts Department of Revenue.

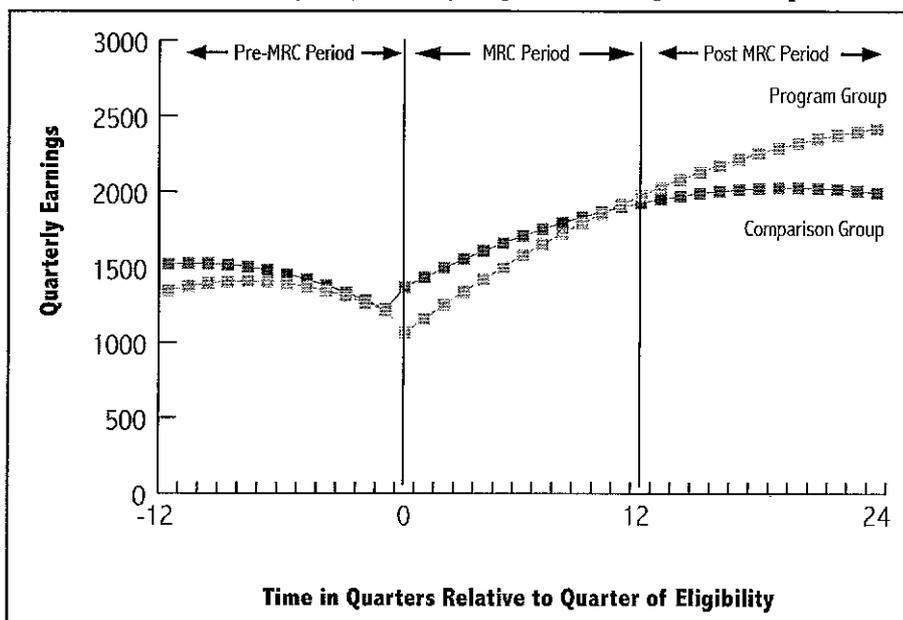
Key Findings: Net Impact

Earnings Impact

The first key finding is that there is a positive and quite large net impact of the MRC Vocational Rehabilitation Program on earnings from UI-covered employment in Massachusetts, using the data set of case closures from 1999-2000. The analysis involved three different methods, all with positive results:

- Using a simple comparison of means, the difference in observed earnings of those consumers who received services and the earnings of those who did not receive services after eligibility in the first year after closure averaged \$3,383. These differences continued over the second and third years after closure.

Figure 1: Projected Earnings Trajectories of Program and Comparison Group Members



- Using the second technique, which controlled for individual and labor market characteristics, and observable differences between program and comparison group members, the difference in regression-adjusted average annual earnings between the program and comparison groups was \$495 in the first year after closure, \$993 in the second year, and \$1,503 in the third year after case closure.
- Using the third technique, the net impact for the typical MRC consumer was \$2,075 in the third year after closure. This net impact (regression-adjusted) estimate shows that in the third year after closure consumers in the program group experienced average annual earnings increases of \$2,075 (38%) above those of the comparison group.

The net impacts of services for all consumers who received services, including those who did not successfully complete their program, varied by gender, race/ethnicity, and disability:

- The impact for women was \$2,510 and \$1,730 for men.
- For individuals with orthopedic disabilities, the net impact was \$4,783 whereas the impact for individuals with psychological disabilities was \$1,220.
- The net impact was \$2,151 for Whites. For Hispanics, the net impact was \$2,376 and for Blacks the net impact was \$1,288.
- If we include in the program group only those consumers who completed their plan of services

and were closed as *rehabilitated*, the net impact for these consumers was the greatest, at \$4,880.

Employment Impact

The second key finding confirms that MRC is achieving its mission-critical goal of improving employment prospects for its consumers. Specifically, the study shows that the effect of MRC services is mostly an effect on employment and not an effect on increased wages, at least not in the short-term. Specifically, the study results show that:

- The average quarterly (unadjusted) employment rates for individuals in the program and comparison groups in the quarter before MRC were 42.8% and 31.5%, respectively, a difference of 11.3 percentage points. In the quarter following exit from MRC, the average quarterly employment rate for the program group was 50.4%, and 31.8% for those in the comparison group, a difference of 18.6 percentage points.³ In the second post-MRC quarter, rates dropped slightly for both the program group and the comparison group.
- Using regression-based estimates of the net impact of MRC services on employment, the results indicate that the average net impact on annual employment rates of program consumers in the third year after closure was 12.3 percentage points. This impact varied by gender. It was 8.7 percentage points for men and 14.0 percentage points for women.
- The employment impact has an additional dimension.

The analysis suggests that the Public Vocational Rehabilitation Program slows down the overall decline in post-MRC employment, resulting in higher levels of workforce attachment for those who received services than the workforce attachment levels of similar individuals who did not receive services.

3 *UI-covered employment rates also varied by gender, race, and ethnicity (e.g., Black females). It is important to note that these differences were consistent with gender/race-based employment rate differentials found in the labor market as a whole.*

Figure 2: Findings from the Benefit Cost Analyses

Returns to Taxpayers (*Using 3% Discount Rate)	First 10 Years	Lifetime 30 Years (Until 65)
Program Cost (\$5,430) plus Loss of Taxes on Foregone Earnings (\$346)	\$5,776	\$5,776
Reduction in Public Assistance*	\$5,738	\$13,187
Increase Tax Revenues*	\$3,866	\$15,611
Total Benefits to Taxpayers	\$9,604	\$28,798
Benefit/Cost Ratio	1.7	5

The benefits of the MRC Public VR Program far outweigh its costs and the program pays for itself multiple times.

Key Findings: Benefits and Costs

The benefits of the MRC Public VR Program far outweigh its costs and the program pays for itself multiple times. Two methods were used to estimate the costs and benefits of the VR Program. Based on these analyses it is estimated that the average projected increase in lifetime earnings for consumers who received services is about \$60,000 per individual. The returns to society based on these projected increases in lifetime earnings for consumers who received services range from \$14 to \$18 for each \$1 invested in the MRC Public VR Program. The Benefit-Cost Analysis estimates that a range of \$5–\$7 is returned to the government in the form of increased taxes and reduced public assistance payments for every \$1 invested in the VR Program.

Additionally, the gross earnings gains of consumers in the first year after closure are about \$43 million, and these earnings might have a multiplier effect of \$48 million in indirect and induced economic outputs as a result of employer investments and increased household spending. This increase in economic activity may generate as many as 500 new jobs.

Implications and Recommendations

Study findings suggested that MRC services are cost-effective and valuable, particularly in assisting consumers in their search for employment and their efforts to maintain employment. The challenge for the Massachusetts Rehabilitation Commission is to realize these positive results for the many individuals it cannot serve due to resource constraints. The most critical policy implication of these positive results might be the importance of securing sufficient funding to serve all of those consumers in need who are requesting services from the MRC Public Vocational Rehabilitation Program.

Waiting list data indicate the demand for MRC services is much greater than the amount of services that

MRC can supply. The employment results suggest that increased resources to address the waiting list may be justified. It would also be beneficial to better understand the lack of earnings impacts for some subpopulation groups before building an earnings-based justification of service expansion.

The Massachusetts Rehabilitation Commission further has an opportunity to explore ways to make sure that the returns to services for certain subgroups are sustained and those for other subgroups are increased.

- The study revealed that net impact estimates varied by gender, race/ethnicity, disability, and length of services.
- The study was not designed to estimate the returns to different types of services. Future analyses of the effect of services by service type are likely to be useful for MRC, its consumers, and the public at large. As it stands, the average net impact of services appears to be known while service-based differentials in impact have yet to be thoroughly examined. MRC could benefit greatly from examining the variation in net impact estimates by gender, race/ethnicity, disability, and type and length of services with the staff at its local offices to either validate or disprove findings from this study drawing on the experiences of staff.
- Asking consumers about the possible reasons as to why services may have different effects among different populations will further deepen understanding of the issues. This will allow MRC to make changes in its policies and programs aimed at producing more advantageous results for specific subpopulations among its consumers.

For more information, please visit our web site at www.commcorp.org/crc for additional workforce development findings.

