**Massachusetts Commission for the Blind**

**Return on Investment Report**

**September 30, 2021**

**Public Consulting Group LLC**

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# Executive Summary

The Massachusetts Commission for the Blind (MCB) is the state agency that provides Vocational Rehabilitation Services (VR) to Massachusetts residents who are blind or who have low vision. VR programs are designed to give people who have disabilities the rehabilitation services they need to obtain and maintain meaningful employment.

On April 1, 2021, Public Consulting Group LLC (PCG) was contracted by MCB to produce a report of MCB’s VR program’s return on investment (ROI) to demonstrate the value and impact of VR programs and services to MCB consumers and stakeholders. PCG used a multipronged approach to conduct the study, including a literature review of existing VR programs and their ROI for consumers. PCG also conducted focus groups with MCB consumers in Massachusetts who had cases that were successfully closed. Finally, PCG analyzed RSA-911 data to assess the monetary ROI for VR services in Massachusetts

This study and report was not carried out to influence state funding decisions. According to the RFP put forth from MCB, the Commission simply seeks to demonstrate how valuable it is for those with blindness or visual impairments to have a job and the contribution that VR services can make in assisting consumers to reach their employment goals. The study sought to assess the effectiveness of the VR services that MCB provides by documenting both the financial and nonfinancial benefits of VR services.

In this report PCG has organized the findings and results of our data analyses (RSA, SSA reimbursement, Aware case management data, and state tax data), literature review, and focus groups into two categories – financial ROI and non-financial ROI. We grouped data by performance year (PY) 2015-2016 and 2017-2019 to account for WIOA modifications to certain RSA data collection procedures and elements. Our literature review included recently published articles relevant to VR-related ROI. We scheduled and conducted five focus groups with a total of twenty-six MCB consumers who had closed cases or were current MCB consumers participating in employment internship programs between July 15, 2021, and August 11, 2021.

## Financial Return On Investment

**Use of Public Supports**

**Finding 1: Overall, MCB Participants Showed Reduced Public Support** — For PY17-19, personal income as the primary source of support increased 64 percent from application to closure for closed rehabilitated cases while public support decreased by 58 percent and family and friends support decreased by 85 percent (as primary sources of support). For PY17-19, the number of participants receiving Medicaid at application and at case closure (closed rehabilitated cases) decreased by 37.5 percent.

**Wages and Hours Worked**

**Finding 2: Wages and Average Hours per Week Increased from Plan to Closure** — In PY 17-19, wages increased $6.58 on average from Individualized Employment Plan development to case closure for closed rehabilitated cases and 26 percent of consumers experienced an overall wage increase. In PY 17-19, participants earned an average of $22.77 per hour (approximately $35,994.81 annually, up from $23,841.79 in PY 15-16) and worked an average of 30.4 hours per week (up from 19.9 hours in PY15-16). On average, approximately 15 percent of MCB closed rehabilitated participants had been unemployed 27 or more weeks (identified as long-term unemployed) between PY 2017-2019 before MCB helped them secure employment.

**Overall Financial Return on Investment**

**Finding 3: The Overall Return on Investment is $11.02 per Dollar Spent** — By comparing the overall average annual cost of closed rehabilitated cases ($3,063.85) to the overall average annual wages ($29,259.70) for PY 2016-2019, we calculate an overall ROI of $11.02 for every dollar invested and $51.74 for every state dollar invested (21.3 %). These figures include an average social security reimbursement of $1,432.70 and an average income tax return of $3,072.27. (We excluded PY 2015 SS data due to data limitations).

**Long-Term Return on Investment**

**Finding 4: The Long-Term Return on Investment Extends to an Average of 18 Additional Working Years** — MCB closed rehabilitated consumers who exited services in PYs 15-19 will earn an estimated $519,142,342 additional dollars, on average, for their remaining working years (assuming retirement at age 65) *not including raises, increased hours, or income adjustments.*

## Non-Financial Return On Investment

**Health and Well-Being**

**Finding 5: MCB services give consumers greater confidence and independence** — Individualized MCB services enhanced consumers’ overall well-being. Increased confidence facilitated increased independence, leading to both expanded social and employment activities. Education, assistive technology devices, home accessibility and transportation assistance services were mentioned as the most helpful services.

**Finding 6: MCB services help to improve consumers’ mental and physical health** — The literature shows that rates of depression and anxiety are elevated in low vision populations. MCB helped the consumers in the focus groups share and normalize any feelings of insecurity while reducing isolation, anxiety and depression. By making their everyday lives easier, MCB helped consumers realize they can lead fulfilling lives. Many described how The Carroll Center for the Blind’s extensive peer support network, among other services, helped improve both their mental and physical health.

**Accessibility and Mobility**

**Finding 7: MCB provides services that give consumers the ability to live and travel independently** — Education and employment are important to and for consumers who are blind or who have low vision, but transportation issues negatively impact their ability to obtain or retain a job. MCB’s in-home and on-site mobility and orientation services helped consumers overcome their fears of performing tasks without assistance, such as cooking and traveling independently

. Services oriented towards independent travel increased their confidence, affording them more opportunities to engage in job and social activities.

**Social and Community Engagement**

**Finding 8: MCB services provide consumers with a network of peer support and friendships** — VR services can provide a social return on investment. Employment gives consumers a sense of community and social interaction via working towards shared goals. MCB consumers stated that witnessing others who are blind or who have low vision living active and independent lives was life changing for them. Emotional support provided by MCB counselors helped consumers build trust in and advocate for themselves. In turn, greater confidence has led to professional growth opportunities.

**Educational Access and Technical Training**

**Finding 9: MCB provides services and motivational support to consumers to advance their education and technical skills** — Consumers greatly appreciated MCB’s services related to researching, applying to, and completing college and/or gaining technical skills. Some indicated they would not have been able to advance their education without MCB’s help. Receiving technical training was empowering for consumers; witnessing others who are blind or who have low vision excel at tasks improved their confidence in their ability to pursue their goals. Focus group participants discussed how the confidence they gained from having support to access higher education and technical training opportunities was two-fold. Pragmatically, it allowed MCB consumers the opportunity to develop practical skills and knowledge to make them more marketable in the workforce. Holistically, it provided MCB consumers the opportunity to network with other individuals who are blind or have low vision. Focus group participants discussed how working with others who are also blind or have low vision and seeing them excel in their skill set allowed them to validate their belief they could also achieve their professional goals.

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# Introduction

This section provides background and context for the Return-on-Investment Report and the Massachusetts Commission for the Blind’s programs.

## Acronyms and Glossary

The following terms are used throughout this document. The description of each of these commonly used acronyms is provided here for reader ease of reference.

| **Acronym** | **Description** |
| --- | --- |
| AWARE | Accessible Web-Based Activity and Reporting Environment |
| BRM | Business Relations Model |
| IPE | Individual Plan for Employment |
| MCB | Massachusetts Commission for the Blind |
| MDRS | Mississippi Department of Rehabilitation Services |
| OIG | Office of the Inspector General |
| PCG | Public Consulting Group LLC |
| PY | Performance Year |
| ROI | Return on Investment |
| SGA | Substantial Gainful Activity |
| SSA/SS | Social Security Administration |
| SSDI | Social Security Disability Insurance |
| SSI | Social Security Insurance |
| SR | Social Rehabilitation |
| VR | Vocational Rehabilitation |
| WIOA | Workforce Innovation and Opportunity Act |

## Background And Purpose

### Background of MCB

The Massachusetts Commission for the Blind (MCB) was established under Section 129 of Chapter 6 of the Massachusetts General Laws, and serves approximately 26,000 Massachusetts residents. MCB is the point of entry for vocational and social rehabilitation services for residents of the Commonwealth who are declared to be legally blind by an eye professional. In addition, some people who have low vision and have been diagnosed with progressive visual impairments leading to legal blindness are eligible to receive vocational rehabilitation (VR) services. MCB partners with local agencies, healthcare providers, employers, and consumers to provide needed services. In addition, to its Vocational Rehabilitation Program, MCB has a separate Independent Living Social Services Program. Legally blind consumers may receive services as appropriate from either (or both) program.

### Purpose of Report

On April 1, 2021, Public Consulting Group LLC (PCG) was contracted by MCB to produce a report of MCB’s VR program’s return on investment (ROI) to demonstrate the value and impact of VR programs and services to MCB consumers, in the short-term and the long-term. The information contained in this report outlines the value and impact of MCB’s VR services using MCB’s employment data, financial data, and other nationally available data.

MCB does not intend to use this report to request additional funding for its programs, nor is MCB attempting to justify any limits to its program funding or services. MCB simply seeks to demonstrate how valuable it is for those with blindness or visual impairments to have a job. The sole intent of this project is to benefit MCB’s VR consumers by helping MCB improve programs (future services, new initiatives, etc.) and service delivery mechanisms that will have a positive, statewide impact on – and improve outcomes for – those who are blind.

# Methodology

In this section we explain how PCG collected and analyzed data to produce the results and recommendations in this report. PCG used a multipronged approach to conduct the study. We first analyzed RSA-911 data to assess the monetary ROI for VR services in Massachusetts. PCG also conducted focus groups with MCB consumers in Massachusetts who had cases that were successfully closed. Finally, PCG conducted a literature review of existing Vocational Rehabilitation (VR) programs and their return on investment (ROI) for consumers. We have also included the limitations of this methodology in this section of our report.

## Data Analysis

PCG collected and reviewed data from the federal Rehabilitation Services Administration’s Case Service Report (RSA-911), the administrative data collected by each state Vocational Rehabilitation (VR) agency on consumers closed in a fiscal year. RSA-911 data includes information on demographics, disability, service interventions, reason for case closure, sources of financial support, and employment status at closure. Limited work-related information (e.g., income and hours worked per week) is reported during application for services, and at service closure. PCG reviewed RSA-911 data for Performance Years (PY) 2015 through 2019 encompassing data from July 1, 2015 through June 30, 2020.

PCG also completed several scopes of work for the Massachusetts Commission for the Blind during 2019 – 2020, which included a Comprehensive Statewide Needs Assessment (CSNA) for Vocational Rehabilitation Services, and a Vocational Rehabilitation Needs Assessment. These specific reports were used to provide baseline data and a recap of vocational service needs.

In addition to RSA-911 data for PY 2015-2019, PCG analyzed Social Security Administration (SSA) reimbursement data and participant data from MCB’s Aware case management system. PCG reviewed SSA data for 2016-2019 that included outcome payment reimbursement amounts received for VR participants. Aware participant information reviewed included closed rehabilitated individuals and closed other than rehabilitated after plan individuals for PY 2015-2019. It also included application, eligibility, plan, and closure dates, disability priority, participant overall plan costs, closure outcome, and participant ID information.

PCG used general population information available from Mass.gov and taxfoundation.org to analyze overall income across tax revenue percentages. Percent Information from Mass.gov indicated that property taxes can vary depending upon county and an exemption opportunity for individuals who are legally blind, so PCG obtained additional tax information from taxfoundation.org. According to taxfoundation.org, the average state-local tax burden for Massachusetts in 2019 was 10.5 percent. PCG applied this average state-local tax rate to the average earnings of cases closed rehabilitated to calculate the average paid tax ROI.

Our data analysis was impacted by the implementation of the Work Investment Opportunity Act (WIOA, signed into law July 2014). WIOA changed certain RSA data collection procedures and elements, including adding / modifying data elements and changing reporting requirements from annually to quarterly. To account for these major data changes (fall 2017), and for analysis purposes, we grouped RSA-911 data into two separate buckets: the first for PY 2015-2016 and the second for PY 2017-2019.

PCG also contacted the RSA to discuss the best way to calculate average participant case cost. Since our goal was to calculate total participant spending, RSA recommended collecting service data for the VR life of the case for the target populations. PCG obtained from MCB total plan cost service data for the targeted populations to calculate average cost of services per participant.

### Data Limitations

PCG analyzed RSA-911 data collected for PY 2015-2016 using a count of participants by SSN. However, RSA-911 data collection later updated requirements making SSN an optional field replacing the requirement by using workforce ID, along with changing to quarterly reporting, so PCG analyzed data for PY 2017-2019 using unique counts of workforce ID’s by participant case(s).

In early calendar year 2018, MCB converted their case management data into their new Aware case management system. Because this change occurred during PCG’s analysis time period, subtle differences in the way case statuses were tracked in Aware may have impacted converted case statuses. However, because the RSA-911 was PCG’s primary data source, this change minimally impacted our analysis.

PCG excluded PY 2015 SSA data from our analysis because there were limitations in obtaining and using Social Security Administration (SSA) reimbursement information due to changes in tracking.

## Focus Groups

### Focus Group Participants

PCG conducted focus groups to gather information on the positive value and impact VR programs and services provide to MCB consumers and stakeholders. PCG conducted focus groups with individuals who were former MCB consumers who had received MCB’s vocational rehabilitation (VR) services in the past whose cases have closed, and individuals who were receiving MCB services and working as MCB interns.

PCG worked closely with MCB to identify focus group participants. MCB provided a list of past participants and contact information and PCG conducted direct outreach with them to schedule focus groups. MCB recruited participants and scheduled the intern focus group. PCG conducted five focus groups with MCB consumers who had successfully closed cases and one focus group comprised of current MCB interns. In addition, PCG conducted a one-on-one interview with an individual who was unable to attend one of our focus groups. We scheduled and conducted all focus groups between July 15, 2021, and August 11, 2021. A total of 26 individuals participated in our focus groups as seen in Table 1 below.

Table . Breakdown of Focus Group Participants

|  |  |
| --- | --- |
| **Focus Group** | **Number of Participants** |
| Past MCB Participants | 12 |
| MCB Interns | 14 |
| **Total** | **26** |

Due to the ongoing Covid-19 pandemic, PCG digitally conducted all focus groups using the Zoom videoconferencing software platform. We chose Zoom because of the relatively high degree of familiarity and accessibility for individuals who are blind or who have low vision.

### Focus Group Themes

PCG gathered and analyzed focus group information to illustrate how the services MCB provides to their consumers positively impacts individuals’ wellbeing. We touched upon the following themes in our focus groups so we could better understand the overall impact of MCB services on consumers:

* Increased confidence gained by consumers after receiving MCB services;
* Increased independence achieved by consumers after receiving MCB services;
* Impact MCB services had on consumers’ social and emotional wellbeing;
* Impact MCB services had on consumers’ physical wellbeing;
* Social ties developed by consumers through MCB services; and
* Networking opportunities developed by consumers through MCB services.

We have included our Focus Group Protocols for former MCB consumers and MCB interns in the Appendix section of this report.

## Literature Review

PCG conducted a literature review on previous return on investment (ROI) studies for VR-related programs and services. Our goal was to identify the most recently published articles relevant to VR-related ROI that included quantitative and / or qualitative data. We narrowed our search to more recent articles published between 2006 – 2020. Articles older than 15 years old were excluded to ensure the evidence base was relevant to current VR funding practices. Articles that discussed the cost-effectiveness, funding decision making, employment benefits, and consumers’ stated meaningfulness of vocational rehabilitation services were all included in the review and analysis.

We used the following keywords to search for electronic articles:

* Vocational Rehabilitation return on investment;
* Vocational Rehabilitation life improvements;
* Vocational Rehabilitation non-monetary benefits; and,
* Vocational Rehabilitation social return on investment.

Listed below are the articles we reviewed. We used information in these reports to understand financial and non-financial ROI study approaches and results, including comparison data from other VR programs, and quality of life improvements.

| **Articles Reviewed** |
| --- |
| Aetna. (2016). Vocational rehabilitation: an effective, cost-efficient solution to help employees back to work (White Paper). |
| Anderson, P., Bradshaw, H., Colvin, C., Dickerson, D., Evans, J., Johnson, G., ...Wood, J. (2006). The VR-Business Network: Charting your course. Thirty-second Institute on Rehabilitation Issues. Hot Springs, AR: University of Arkansas |
| Bell, E. C., & Mino, N. M. (2013). Blind and Visually Impaired Adult Rehabilitation and Employment Survey: Final Results. *Journal of Blindness Innovation and Research*, *3*(1). <https://doi.org/10.5241/2f1-35> |
| Clapp, C. M., Pepper, J. V., Schmidt, R., &amp; Stern, S. (2020). Overview of Vocational Rehabilitation Data about People with Visual Impairments: Demographics, Services, and Long-Run Labor Market Trends. *Journal of Visual Impairment & Blindness*, 114(1), 43–56. |
| Darensbourg, B.L. (2008). *An Investigation of the Variables Related to Competitive Employment and Earnings of Vocational Rehabilitation Consumers with Blindness or Visual Impairments* (3324837) (Doctoral dissertation, University of Texas at Austin). |
| Garcia, V., Porlier, S., Faleschini, S., & Boucher, N. (2016). The Meaning and Importance Attributed to Work for Visually Impaired People of the Metropolitan Area of Quebec. *Journal of Blindness Innovation and Research*, *6*(2). <https://doi.org/10.5241/6-84> |
| Giesen, J. Martin; Hierholzer, Anne (2016). Vocational rehabilitation services and employment for SSDI beneficiaries with visual impairments. Journal of Vocational Rehabilitation, 44 (2), 175-189. |
| Hopkins, B. (2019). Social Return on Investment: An Important Consideration for State Vocational Rehabilitation Programs. Journal of Rehabilitation Administration, 40(1), 11–16. |
| Lund, E. M., & Cmar, J. L. (2019). Factors Related to Employment Outcomes for Vocational Rehabilitation Consumers with Visual Impairments: A Systematic Review. *Journal of Visual Impairment & Blindness*, *113*(6), 518–537. |
| McDonnall, M. C. (2015). The Relationship Between Vocational Rehabilitation Professional’s Interactions With Businesses and Employment Outcomes for Consumers Who Are Blind or Visually Impaired. *Rehabilitation Counseling Bulletin*, *59*(4), 203–212. |
| Mississippi Department of Rehabilitation Services. (2018). (Rep). The Value of Vocational Rehabilitation Services. |
| Social Security Administration, Office of the Inspector General. (2017, October 20). The Cost-effectiveness of Vocational Rehabilitation Services (A-02-17-14048) (Audit Report). Social Security Administration, Office of the Inspector General. Retrieved July 7, 2021, from https://oig.ssa.gov/audits-and-investigations/audit-reports/A-02-17-14048 |
| Steinman, B. A., Kwan, N., Boeltzig-Brown, H., Haines, K., Halliday, J., & Foley, S. M. (2013). Agency Decision-Making Control and Employment Outcomes by Vocational Rehabilitation Consumers who are Blind or Visually Impaired. *Journal of Visual Impairment & Blindness*, *107*(6), 437–451. |
| Warren-Peace, P. (2009). Models that predict competitive employment outcomes in the United States federal/state vocational rehabilitation program for consumers who are blind and consumers with other disabilities. Dissertation Abstracts International: Section A. Humanities and Social Science,70(4-A),1181. |

# Findings and Results

This Findings and Results section of our report is divided into two main subsections – Financial Return on Investment and Non-Financial Return on Investment – and summarizes the overall findings and results from our data analysis (RSA, SSA reimbursement, Aware case management data, and state tax data), literature review, and focus group sessions. Findings are depicted in the table below, and organized by ROI Type (Financial or Non-Financial), Overall Theme, and Finding. These findings are described in detail in the narrative that follows

|  |  |  |
| --- | --- | --- |
| ROI Type | Overall Theme | Finding |
| **Financial ROI** | **Use of Public Supports** | **Finding 1:**  Overall, MCB Participants Showed Reduced Public Support |
| **Financial ROI** | **Wages and Hours Worked** | **Finding 2:**  Wages and Average Hours per Week Increased from Plan to Closure |
| **Financial ROI** | **Overall Financial Return on Investment** | **Finding 3:**  The Return on Investment is $11.02 per Dollar Spent |
| **Financial ROI** | **Long-Term Return on Investment** | **Finding 4:**  The Long-Term Return on Investment Extends on an Average to 18 Additional Working Years |
| **Non-Financial ROI** | **Health and Well-Being** | **Finding 5:**  MCB services give consumers greater confidence and independence  **Finding 6:**  MCB services help to improve consumers’ mental and physical health |
| **Non-Financial ROI** | **Accessibility and Mobility** | **Finding 7:**  MCB provides services that give consumers increased ability to live and travel independently |
| **Non-Financial ROI** | **Social and Community Engagement** | **Finding 8:**  MCB services provide consumers with a larger network of peer support and friendships |
| **Non-Financial ROI** | **Educational Access and Technical Training** | **Finding 9:**  MCB provides services and support to consumers to advance their education and technical skills |

## Financial Return On Investment

This section presents data for overall rehabilitated case closures for performance years (PY) 2015-2019. This information provided a baseline for our analysis, and from which our ROI findings were derived based on rehabilitated case closure counts and participant attributes (age, case cost, wages, hours, long-term unemployed).

To reiterate, our data analysis time-period encompassed the WIOA implementation timeframe. Because WIOA modified some RSA data collection procedures and elements, we grouped data by performance year (PY) 2015-2016 and 2017-2019 in order to delineate the major data element changes. We compared our findings with the overall number of cases rehabilitated during PY 2015-2016 and 2017-2019. Cases with a status of ‘closed rehabilitated’ represent vocational rehabilitation (VR) consumer cases that received services and exited with competitive integrated employment. Cases with a status of ‘closed other than rehabilitated’ are also listed in some tables and represent VR consumer cases that received services but exited without competitive integrated employment.

### Vocational Rehabilitation Case Closures

The data below displays the baseline data for closed vocational rehabilitation case counts and percentages by performance year. It further explores the financial return on investment (ROI) for cases closed rehabilitated including reduced public support, overall average wages plan versus exit, average wages at exit, overall average case cost, ROI compared to case cost alongside SSA reimbursement, state and federal taxes, and long-term ROI looking at age groups and number of working years post closure for rehabilitated closures.

Overall rehabilitation counts and percentages by PY 2015-2016 and PY 2017-2019 are displayed in the figures below. Of note, WIOA was implemented during the 2017 performance year. During the WIOA implementation, major changes were made to data collection procedures, regulation, guidance, and service provision. For example, a vocational goal of a ‘homemaker’ was no longer permitted, and as a result many agencies, especially those agencies that serve individuals with visual impairments, experienced a reduction in rehabilitated closures. The data below reflects this decrease in rehabilitated closures. Although these participants were still being served, those not seeking paid employment were referred to MCB’s Independent Living Social Services program (separate funding source and service staff). During this transition, resources and technical assistance were provided during prior and subsequent WIOA changeover years to help implement and refine the new processes. This is reflected throughout the data.

* For PY 2015 – 2016, there were 548 rehabilitated closures
* For PY 2017 – 2019, there were 416 rehabilitated closures

displays the count and percentage of VR case closures that received services for PY 2015-2016. Overall, there were 548 rehabilitated closures during this time period.

Figure . Closure Type By Performance Year Of Closure Date For Performance Years PY 2015-2016

displays the count and percentage of VR case closures that received services for PY 2017-2019. Overall, there were 416 rehabilitated closures during this time-period.

Figure . Closure type by Performance Year of Closure Date for performance years PY 2017- 2019

### Use of Public Supports

#### Finding 1: Overall, MCB Participants Showed Reduced Public Support

In reviewing financial gains as a ROI, it is important to review and compare the primary source of support at application with the primary source of support at closure (evaluating personal income compared to other sources of support, such as public support, family and friends, and other sources). In addition, comparing Medicaid coverage at application to Medicaid coverage at closure can highlight the impact of financial gains from MCB services in the context of reducing the overall need for public support.

***Highlights:***

* For combined PY15-16 averages, looking at rehabilitated closures, public support as a primary source of income decreased by 26 percent and family and friends (self-reported) as a primary source of support decreased by 58 percent. Furthermore, personal income as the primary source of support increased 55 percent from application to rehabilitated closure.
* For combined PY17-19 averages, looking at rehabilitated closures, public support as a primary source of support decreased by 58 percent and family and friends as a primary source of support decreased by 85 percent. Furthermore, personal income as the primary source of support increased 64 percent from application to rehabilitated closure.
* For PY15-16 averages, participants that had Medicaid at application versus cases closed rehabilitated decreased by 6 percent. For PY 17-19 averages, participants that had Medicaid at application versus cases closed rehabilitated decreased by 37.5 percent.

***MCB Participants Primary Source of Support Shifted from Public Support to Personal Income***

MCB participants are asked about their primary source of income support and whether they have Medicaid for insurance coverage during both the initial intake application and at case closure. The figures below display participant responses who were closed rehabilitated during the performance years noted.

Figure 3 displays primary sources of support at application for cases closed rehabilitated. Performance years 2015 and 2016 were similar: participants whose primary source of support was public support at application ranged from 29 percent to 32 percent and averaged 31 percent for both PYs.

Figure . Primary Source Of Support At Application For Participants Closed Rehabilitated By Each Performance Year Closed PY 2015-2016

Figure 4 displays primary sources of support at application for cases closed rehabilitated. Performance years 2017-2019 were similar: participants whose primary source of support was public support at application ranged from 20 percent to 27 percent and averaged 24 percent for the three PYs.

Figure . Primary Source Of Support At Application For Participants Closed Rehabilitated By Each Performance Year Closed PY 2017-2019

Figure 5 displays PY 2015-2016 primary source of support at closure for participants who are closed rehabilitated. Overall, 53 percent of cases closed rehabilitated participants reported personal income as their primary source of support at closure. 23 percent of participants noted ‘public support’ as their primary source of support at closure, while ‘family and friends’ averaged 10 percent and ‘other sources’ averaged 2 percent.

Figure . Primary Source Of Support At Closure For Participants Closed Rehabilitated By Each Performance Year Closed PY 2015-2016

***For PY17-19, public support as a primary source of income decreased by 58%***

Figure 6 displays PY 2017-2019 primary source of support at closure for participants who are closed rehabilitated. Overall, 65 percent of closed rehabilitated participants reported personal income as their primary source of support at closure. 10 percent of participants noted ‘public support’ as their primary source of support at closure, while ‘family and friends’ averaged 3 percent and ‘other sources’ averaged less than 1 percent.

Figure . Primary Source Of Support At Closure For Participants Closed Rehabilitated By Each Performance Year Closed PY 2017-2019

Figure 7 displays PY 2015-2016 primary source of support at application versus closure for closed rehabilitated participants. Overall, ‘public support’ decreased by 26 percent and ‘family and friends’ decreased by 58 percent as primary sources of income / support, and personal income as the primary source of support increased 55 percent from application to closure.

Figure . Comparison of primary source of support at application versus closure for closures rehabilitated PY 2015-2016

Figure 8 displays PY 2017-2019 primary source of support at application versus closure for closed rehabilitated participants. Overall, ‘public support’ decreased by 58 percent and ‘family and friends’ decreased by 85 percent as primary sources of income / support, and personal income as the primary source of support increased 64 percent from application to closure.

Figure . Comparison of primary source of support at application versus closure for closures rehabilitated PY 2017-2019

Findings from the literature review support the finding that MCB recipients have reduced reliance on public support. According to the literature, VR services provide a critical step for accessing employment for many and these services have been shown to increase the odds of employment compared to individuals with disabilities that do not use VR services (Clapp et al., 2020, Lund and Cmar, 2019, Darensbourg, 2008). Individuals that used VR services achieved competitive employment in 11.7 percent more cases than those that did not use VR services, when compiling data from three states (Clapp et al., 2020). After two years, the increased rate of employment could still be seen with those that used VR services achieving competitive employment at a rate 7.2 percent higher than those that did not use services (Clapp et al., 2020). MCB has shown decreases in consumer reliance on public support at case closure compared to case application.

***MCB Participants Showed a Reduction in Medicaid Coverage***

Figure 9 displays PY 2015-2016 comparison of Medicaid coverage at application versus cases closed rehabilitated. Overall, PY15-16 Medicaid at application versus cases closed rehabilitated decreased by 6 percent.

Figure . Percentage Of Rehabilitated Participants With Medicaid At Application Compared To Closure At Exit PY 15-16

Figure 10 displays PY 2017-2019 comparison of Medicaid coverage at application versus closure for cases closed rehabilitated. Overall, PY 17-19 Medicaid at application versus closure for cases closed rehabilitated decreased by 37.5 percent..

***For PY17-19, participants with Medicaid insurance coverage at application versus closure decreased by 37.5%***

Figure . Percentage Of Rehabilitated Participants With Medicaid At Application Compared To Medicaid At Exit PY 17-19

### Wages and Hours Worked

#### Finding 2: Wages Increased from Plan to Closure and Average Hours per Week Increased

***Highlights:***

* For PY 17-19, wages increased $6.58 on average from development of Individualized Plan for Employment (IPE) to case closure for cases closed rehabilitated.
* For PY 17-19, 26 percent of participants experienced an overall wage increase from development of IPE to case closure for cases closed rehabilitated.
* For PY 15-16, participants averaged $23.04 per hour, working an average of 19.9 hours per week. Using these figures, participants earned approximately $23,841.79 annually ($23.04 x 19.9 x 52 weeks).
* For PY 17-19, participants averaged $22.77 per hour, working an average of 30.4 hours per week. Using these figures, participants earned approximately $35,994.81 annually ($22.77 x 30.4 x 52 weeks).
* On average, approximately 15-16 percent of cases closed rehabilitated in PY 2017-2019 identified as long-term unemployed *(Long-term unemployed is defined as any individual that has been unemployed for 27 or more consecutive weeks).*

***Average Wages at Plan versus Exit Increased***

WIOA implementation required the collection of a new data element collecting wages at plan. This element captures the participants wages at the time of the development of an Individualized Plan for Employment (IPE). The figures below show average hourly wages at plan compared to average hourly wages at exit for PY 2017-2019 cases.

Figure 11 shows average hourly wages at plan compared to average hourly wages at exit for cases closed rehabilitated cases. Overall, PY 17-19 wages increased an average of $6.58 for participants at closure compared to wages at plan.

Figure . Average Hourly Wage At Plan Compared To Average Hourly Wage At Exit By Closure Performance Year For Cases Closed Rehabilitated With Competitive Employment PY 2017-2019

Table 2 displays the percent of cases closed rehabilitated participants who experienced a wage increase. Overall, 26 percent of participants experienced an overall wage increase from plan to exit. Generally, participants reporting wages at plan are participants that require VR services to maintain employment. On average, at application 53 percent of VR participants are self-sufficient earning personal income. At closure of VR services 87 percent of VR participants earn personal income to independently support themselves,. This accounts for a 35-percentage point increase in self-sufficiency for VR consumers who receive services.

Table . Participants Who Exited With Employment Who Experienced A Wage Increase From Plan To Exit For PY 2017-2019

| **Employed Applicants Needing VR Support** | **percent** |
| --- | --- |
| Participants who had employment wages at plan and exited experiencing a wage increase | 26 percent |

***Average Hours and Annual Salary Increased***

Figure 12 displays average hourly wages and weekly hours of case closed rehabilitated participants for PY 15-16. Overall, cases closed rehabilitated averaged $23.04 per hour and worked an average of 19.9 hours per week.

Figure . Average Hourly Wage and Weekly Hours Of Participants At Exit By Performance Year Exited For Cases Closed Rehabilitated PY 2015-2016

Table 3 displays the average annual salary for cases closed rehabilitated for PY15-16. Overall, participants earned an average of $23,841.79 annually.

Table . Average Annual Salary For Participants Closed Rehabilitated PY 2015-2016

| **Combined PY 2015-2016 Average Hourly Wage** | **PY 2015-2016 Average Weekly Hours** | **Overall Average Annual Wages** |
| --- | --- | --- |
| $ 23.04 | 19.9 | $23,841.79 |

Figure 13 displays average hourly wage and weekly hours for participants who were closed rehabilitated for PY 17-19. Overall, cases closed rehabilitated averaged $22.77 per hour and worked an average of 30.4 hours per week.

Figure . Average Hourly Wage and Weekly Hours At Exit By Performance Year Exited For Cases Closed Rehabilitated PY 2017-2019

displays the average annual salary for cases closed rehabilitated for PY17-19. Overall, participants earned an average of $35,994.81 annually.

Table . Average Annual Salary For Participants Closed Rehabilitated PY 2017-2019

| **Combined PY 2017-2019 Average Hourly Wage** | **PY 2017-2019 Average Weekly Hours** | **Overall Average Annual Wages** |
| --- | --- | --- |
| $ 22.77 | 30.4 | $35,994.81 |

Figure 14 displays the percentage of cases closed rehabilitated who identified as long term unemployed at plan, meaning the participant was unemployed for 27 or more consecutive weeks prior to receiving MCB services. On average, approximately 15 percent of MCB closed rehabilitated participants had been unemployed 27 or more weeks (identified as long-term unemployed) between PY 2017-2019 before MCB helped them secure employment.

***On average, MCB helped 15% of closed rehabilitated participants who identified as long-term unemployed (any individual that has been unemployed for 27 or more consecutive weeks) secure employment***

Figure . The Percentage And Count Of Participants Closed Rehabilitated By Exit Whom Were LongTerm Unemployed At Plan PY 2017-2019

As the data suggests, MCB has been able to achieve increased wages and hours for consumers that used VR services. According to the literature, similar increases in wages have been seen in other VR programs across the country, with one article finding that on average, after case closure consumers earned $810 more per quarter in the first 1.5 years after case closure than those that applied for, but did not participate in, VR services. (Clapp et al., 2020) VR consumer earnings increased to an average of $940 per quarter *more than* non-VR consumers over the next three and a half years. (Clapp et al., 2020). The results from earnings analyses indicate that consumers with visual impairments that use VR services see higher earnings after exiting the program.

### Overall Financial Return on Investment

#### Finding 3: The Return on Investment is $11.02 per Dollar Spent

***Highlights:***

* By comparing the overall average annual cost of closed rehabilitated cases ($2,897.46) to the overall average annual wages ($29,918.30) for PY 2015-2019, we calculate an overall ROI of $10.32 for every dollar invested and $48.48 for every state dollar invested (21.3 %) *not including social security reimbursements, income tax paid, and other benefits.*
* The 2019 state-local Massachusetts tax burden of 10.5 percent (Tax Foundation) applied to the average earnings of closed rehabilitated cases equals a total average tax return of $3,141.42 back to Massachusetts for PY15-19.
* Massachusetts achieved a net gain of $2,021.97 in PY 15-16 *(average tax gain of $2,503.38 minus $481.41 average cost per case)* and a net gain of $3,026.54 in PY17-19 *(average tax gain of $3,779.45 minus $752.91 average cost per case)* in average annual revenue for each closed rehabilitated case.
* Social Security reimbursed MCB an average of $289,732.88 per year (or $2,064.60 per consumer) for substantial gainful activity (SGA) for PY17-19.
* By comparing the overall average annual cost of closed rehabilitated cases ($3,063.85) to the overall average annual wages ($29,259.70) for PY 2016-2019, we calculate an overall ROI of $11.02 for every dollar invested and $51.74 for every state dollar invested (21.3 %). These figures include an average social security reimbursement of $1,432.70 and an average income tax return of $3,072.27. (We excluded PY 2015 SS data due to data limitations).

Table 5 displays the overall average case cost per VR case for PY 2015-2019 for cases ‘closed rehabilitated’ and cases ‘closed other than rehabilitated after plan’. Cases ‘closed other than rehabilitated’ with a plan had a slightly higher average cost than cases closed rehabilitated. This finding is similar to other states where service costs can be higher for individuals who have more difficulty finding and keeping a job and may require more services and training over a longer period of time. Overall, the average cost for PY 2015-2019 is $3,089.56 for both closure types.

Table . The Average Cost Per VR Case PY 2015-2019

| **Average Cost Per Case** | **Closed Rehabilitated** | **Closed Other Than Rehabilitated (Exited after IPE)** | **Combined Cost for both Closed Rehabilitated and Closed Other than Rehabilitated after IPE** |
| --- | --- | --- | --- |
| 2015-2016 | $2,260.13 | $3,011.71 | $2,635.92 |
| 2017-2019 | $3,534.79 | $3,551.60 | $3,543.19 |
| **Overall Total Average** | **$2,897.46** | **$3,281.66** | **$3,089.56** |

We evaluated return on investment using a multitudinal approach. This included comparing average case costs to average wages and closed rehabilitated case counts, state portion percentages versus overall costs, reviewing Social Security (SS) reimbursement to MCB for participant costs, and average overall state taxes paid on earnings costs.

***Average Salary Exceeds Case Cost for Rehabilitated Closures***

Although some participants were employed at plan (employed when they began receiving VR services), it is important to note in order for these participants to meet eligibility criteria, they would have required MCB services to maintain their employment. Furthermore, of those cases closed rehabilitated 15-16 percent were identified as long-term unemployed, meaning unemployed for 27 weeks or longer.

Table 6 displays federal and state averages for the initial first year ROI for closed rehabilitated cases for PY 2015-2019. This table compares the average case cost to average annual wages. This table also factors state portion of 21.3 percent (to the federal dollar match) to determine the state portion of the overall ROI. The overall return on investment was $10.32 for every dollar invested and $48.48 for the state portion (21.3 %) of every dollar invested for average cost of cases closed rehabilitated compared to overall average annual wages for PY 2015-2019. Note: Due to limitations in wage data for cases closed other than rehabilitated with a plan, only cases closed rehabilitated were evaluated.

Descriptive column headings are:

* One Year ROI Analysis for Cases Exited as Rehabilitated
* Average Case Cost - Cases Exited as Rehabilitated
* State Portion (21.3 %) of Average Case Cost (Cases Exited as Rehabilitated)
* Average Annual Wages
* Cost ROI (Average Annual Wages divided by Average Case Cost)
* State ROI (Average Annual Wages divided by State Portion of Average Case Cost)

Table 6. One-Year Return On Investment For Cases Closed Rehabilitated PY 2015-2019

| **Cases Exited as Rehabilitated** | **Average Case Cost** | **State Portion of Average Case Cost** | **Average Annual Wages** | **Cost ROI** | **State ROI** |
| --- | --- | --- | --- | --- | --- |
| Averages for PY 2015-2016 | $2,260.13 | $481.41 | $23,841.79 | $10.54 ROI per dollar invested | $49.52 ROI per state dollar invested |
| Averages for PY 2017-2019 | $ 3,534.79 | $752.91 | $35,994.81 | $10.18 ROI per dollar invested | $47.81  ROI per state dollar invested |
| **Total Averages for PY 2015-2019** | **$2,897.46** | **$617.16** | **$29,918.30** | **$10.32 ROI per dollar invested** | **$48.48 ROI per state dollar invested** |

*\*Does not include social security reimbursements, income tax paid, and other benefits.*

As seen above, on average, individuals closed rehabilitated earned $23,841.79 during PY 15-16 and $35,994.81 during PY 17-19 annually. Through this net income, MCB contributes to the state economy in several ways – through state income taxes paid by participants, local income and sales taxes, and property taxes. According to statistics from Tax Foundation, the state-local tax burden for Massachusetts in 2019 was 10.5 percent. By applying this tax rate to the average earnings of cases closed rehabilitated, we can calculate the paid tax ROI to the state. We used the 2019 Massachusetts tax burden of 10.5 percent as a proxy for the Massachusetts tax burdens in PY 15-18 (earlier MA tax burdens were not included in Tax Foundation statistics).

Table 7 shows average taxes paid (10.5 percent of earnings) on overall average annual wages for cases closed rehabilitated for PY15-16 and PY17-19. The total average tax return to the state for PY15-19 was $3,141.42.

Table shows the average state taxes based on earnings for PY 15-16 and PY 17-19

| **ROI Analysis for Cases Exited as Rehabilitated** | **Average Annual Wages** | **Approximate Tax Return to the State Using Average Annual Wages and MA Tax Burden (10.5 %)** |
| --- | --- | --- |
| Averages for PY 2015-2016 | $23,841.79 | $2,503.38 |
| Averages for PY 2017-2019 | $35,994.81 | $3,779.45 |
| **Total Averages for PY 2015-2019** | **$29,918.30** | **$3,141.42** |

The state portion (21.5 %) of the average case cost of closed rehabilitated cases is $481.41 for PY15-16 and $752.91 for PY 17-19. Comparing the state portion of the average case cost (closed rehabilitated) to the average annual state taxes collected, MA earned $2,021.97 ($2,503.38 taxes collected minus $481.41 participant cost) for PY 15-16 and $4,026.54 ($3,779.45 taxes collected minus $752.91 participant cost) for PY 17-19 in average annual revenue per rehabilitated participant.

The above does not include additional revenue received for Social Security Reimbursements. These averaged $289,732.88 per year or $2064.60 per participant (PY17-19 combined average) and $100,741 per year or $393.51 per participant for PY 16\*. The chart below captures the additional benefits from average state taxes paid and Social Security (SS) Reimbursement averages for each performance year.

Table 8 displays Social Security (SS) reimbursements received in PY 2016 for participant closures who met SSA criteria, which includes participants obtaining above Substantial Gainful Activity (SGA) for reimbursement payments. Due to data limitations, we were unable to obtain PY 2015 SS information. Overall, in PY 2016 MCB received $100,741.00 in reimbursements.

Table 8*.* Social Security Reimbursement For Participant Costs For Performance Year 2016

| **Social Security Reimbursements for Program Year** | **Overall Average Annual Wages** | **Count of Participants Exiting Rehabilitated in Program Year** | **Average Reimbursement per Rehabilitated Exit** |
| --- | --- | --- | --- |
| 2016 | $100,741.00 | 256 | $393.51 |

*\*Due to limitations in SS data for PY 2015, PY 2015 data was excluded in the above table.*

Table 9 displays the Social Security (SS) reimbursements received in PY 2017-2019 for participant closures. In 2019 changes occurred in MCB’s electronic data exchange system which contributed to increased reimbursement viability. In 2019 MCB implemented a new, electronic data exchange with the Department of Revenue and Social Security Administration (run bi-weekly on all VR cases in MCB’s case management system). MCB identifies and initiates review of claim viability for all VR claim eligible cases in all statuses that meet the two required logics. As a result of this change, MCB was able to identify older closed VR cases and claim reimbursement on these cases. Overall, in PY 2017-2019 received an average of $289,732.88 in reimbursements annually.

Table . Social Security Reimbursement for Participant Costs By Performance Year 2017-19

| **Social Security Reimbursements for Program Year** | **Overall Average Annual Wages** | **Count of Participants Exiting Rehabilitated in Program Year** | **Average Reimbursement per Rehabilitated Exit** |
| --- | --- | --- | --- |
| 2017 | $104,304.00 | 156 | $668.62 |
| 2018 | $446,718 | 139 | $3,213.80 |
| 2019 | $318,176.20 | 126 | $2,525.21 |
| **Total Average PY 2017-2019** | ***$289,732.88 per year*** | **140** | **$2,064.60** |

Table 10 displays the ROI for closed rehabilitated cases. It compares average annual wages to overall case, state portion of case cost, average SS reimbursement, and tax earnings to determine both overall and state ROI per dollar. By comparing overall case cost and average wages of closed rehabilitated cases to state tax earnings and SS reimbursement, the average ROI for PY16-19 was $11.02 ($51.74 if just looking at the state dollar portion of 21.3 %).

Descriptive column headings are:

* ROI Analysis for Cases Exited as Rehabilitated
* Overall Average Annual Wages
* Overall Rehabilitated Exit Average Case Cost
* State Portion 21.3 percent of Rehabilitated Exit Average Case Cost
* Average SS Reimbursement per person Rehabilitated (PY divided by # of Rehab Participants)
* Approximate Tax Return to the State Based on Average Earnings and Taxes (10.5 percent of earnings)
* Overall ROI (Annual Wages + Avg SS Reimbursement + Approx. Tax Return divided by Overall Case Cost)
* State Portion ROI (Annual Wages+ Avg SS Reimbursement + Approx. Tax Return divided by State Portion of Case Cost)

Table . return on investment analysis for cases closed rehabilitated for PY 2016-2019

| ROI Analysis for Cases Exited | Overall Average Annual Wages | Overall Exit Average Case Cost | State Portion 21.3 percent of Exit Average Case Cost | Average SS Reimbursement per person Rehabilitated | Approximate Tax Return to the State | Overall ROI | State Portion ROI |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Averages for PY 2016\* | $22,524.58 | $2,592.91 | $552.29 | $393.51 | $2,365.08 | $9.75 | $45.78 |
| Averages for PY 2017-2019 | $35,994.81 | $ 3,534.79 | $752.91 | $2,064.60 | $3,779.45 | $11.84 | $55.57 |
| **Total Average PY 2016-2019** | **$29,259.70** | **$3,063.85** | **$652.60** | **$1,432.70** | **$3,072.27** | **$11.02** | **$51.74** |

*\*Due to limitations in SS data for PY 2015, PY 2015 data was excluded in the above table.*

The table above displays reimbursements and taxes paid for average salaries of closed rehabilitated cases. However, it does not include additional ROI including:

***In PY17-19 Medicaid at application vs. Medicaid at closure decreased by 37.5% for rehabilitated participants***

* Overall reduction in the use of public support. The charts above show a reduction in the percent on public support as the primary source of income at exit.
* Subsequent years of continued employment and income for cases that are closed rehabilitated.

### Long-Term Return on Investment

#### Finding 4: The Long-Term Return on Investment Extends on an Average of 18 Additional Working Years

The ROI for VR services notably exceeds the initial year of services. For MCB rehabilitated closures, the benefits to both the individual and the state and federal government continue as the participant maintains employment. As such, it is important to evaluate the impact of subsequent working years when calculating overall ROI. The following figures and tables display the overall ROI for closed rehabilitated cases with employment using the average number of continued working years and broken down by age group.

***Overall, for PY17-19 closed rehabilitated cases, personal income as the primary source of support increased 64% from application to closure.***

***Highlights:***

* For PYs 2015-2016, age group 55-64 was represented highest in these two performance years at 26 percent, followed by age group 45-54 at 25 percent.
* For PYs 2017-2019, age group 55-64 was represented highest (21 percent average for the three PYs), closely followed by age group 45-54 (20 %) and 25-34 (both 20 %).
* The overall average age of rehabilitated closures for combined PYs 15-19 is 47 years.
* When looking at the age of cases closed rehabilitated, overall average annual wages, and approximate overall return on investment for remaining working years (assuming working until age 65) rehabilitated participants who exited in PYs15-19 will earn an additional $519,142,342, on average, for their remaining work years. *Note: This does not include raises, increased hours, or income adjustments.*

Figure 15 displays PY 2015-2016 rehabilitated participants by age group and PY exit. For PY15, the highest age group exiting was ages 55-64 (29 %), followed by ages 45-54 (24 %). For PY 16, the highest age group exiting was ages 45-54 (27 %) followed by ages 55-64 (22 %).

Figure . Percentage Of Participants By Age Group And By Exit Who Exited Rehabilitated PY 2015-2016

displays the combined average age groups for cases closed rehabilitated for PY 2015-2016. As shown, age group 55-64 was represented highest in these two performance years at 26 percent, followed by age group 45-54 at 25 percent.

Figure . Combined Average Age Group For Cases Closed Rehabilitated In PY 2015-2016

shows the overall average age of closed rehabilitated cases in combined PY 15-16 is 49 years.

Table Overall Average Age Of Rehabilitated Closures PY 15-16

| **Performance Years** | **Average Age of Rehabilitated Closures** |
| --- | --- |
| Average Age for PY 2015-2016 | 49 |

displays PY 2017-2019 rehabilitated participants by age group and PY exit. In PY17, the highest age group exiting was ages 45-54 at 25 percent. For PY 18, age group 55-64 was highest at 24 percent. For PY 19, age groups 35-34 and 55-64 were tied at highest at 21 percent.

Figure . The Percentage And Count Of Participants By Age Group And By Exit Who Exited Rehabilitated PY 2017-2019

displays the combined average age groups for closed rehabilitated cases for PY 2017-2019. Age group 55-64 was represented highest (21 percent average for the three PYs), closely followed by age group 45-54 (20 %) and 25-34 (both 20 %).

Figure shows combined average age group for cases closed rehabilitated in PY 17-19

In , the overall average age of rehabilitated closures for PY 17-19 combined is 46 years.

Table . Overall Average Age Of Rehabilitated Closures PY 17-19

| **Performance Years** | **Average Age of Rehabilitated Closures** |
| --- | --- |
| Averages for PY 2017-2019 | 46 |

Table 13 shows that rehabilitated participants who exited in PYs 15-19 will earn an additional $519,142,342, on average, for their remaining work years (assuming retirement at age 65). *Note: this does not include raises, increased hours, or income adjustments.*

Table PYs Grouped And Totaled As An Average For Approximate Return On Investment Annually And For The Continued Remaining Average Working Years, Working To Age 65

| **Performance Years** | **Average Age of Rehabilitated Closures** | **Approximate Working Years if Remained Employed** | **Overall Average Annual Wages** | **Approximate Return on Investment if Employed to Working Age 65 per Participant** | **Number of Rehabilitated Participants for the PY’s** | **Overall Average Return on Investment for PYs through Working Age** |
| --- | --- | --- | --- | --- | --- | --- |
| Averages for PY 2015-2016 | 49 | 16 | $23,841.79 | $381,468.64 | 548 | $209,044,815 |
| Averages for PY 2017-2019 | 46 | 19 | $35,994.81 | $683,901.39 | 416 | $284,502,978 |
| **TOTAL Averages for PY 2015-2019** | **47** | **18** | **$29,918.30** | **538,529.40** | **964** | **$519,142,342** |

***Race/Ethnicity Data***

While we were able to pull data from the 2020 CSNA regarding case closure reason by race, PCG did not analyze successful closed cases for race and ethnicity as a component of the ROI study. Nonetheless, the CSNA found notable differences when examining MCB case closures by race and ethnicity. The graphics below show the rates of successful and unsuccessful case closures for each race and ethnicity group. Individuals who are identified as Hispanic are notably less likely to have their case closed as a successful, competitive, integrated employment outcome. Individuals who identified as white are more likely to close their case successfully – except individuals who identified as Native American, which represent a small number of cases. To some degree, these factors also compound with non-Hispanic whites having similar, but slightly improved, rates of closed successful cases.

Case Closure Reason by Race

|  | **Closed Successful** | **Closed Unsuccessful** | **Ineligible** |
| --- | --- | --- | --- |
| Native American | 50.0 percent | 50.0 percent | 0.0 percent |
| White | 47.1 percent | 34.2 percent | 18.7 percent |
| Black | 38.5 percent | 38.5 percent | 23.1 percent |
| Asian | 37.8 percent | 37.8 percent | 24.3 percent |
| Multiple races | 16.7 percent | 66.7 percent | 16.7 percent |
| Pacific Islander | 0.0 percent | 50.0 percent | 50.0 percent |
| Unknown | 0.0 percent | 1.7 percent | 98.3 percent |

*N=756*

Case Closure Reason by Ethnicity

|  | **Closed Successful** | **Closed Unsuccessful** | **Ineligible** |
| --- | --- | --- | --- |
| Non-Hispanic White | 47.5 percent | 33.2 percent | 19.3 percent |
| All other | 38.5 percent | 41.0 percent | 20.5 percent |
| Unknown | 0.0 percent | 1.7 percent | 98.3 percent |

*N=756*

## Non-Financial Return on Investment

As part of this ROI study, PCG assessed how MCB services positively impacted consumers quality of life in more holistic, qualitative ways. Of specific interest was how MCB services impacted consumers’ overall quality of life.

Using the Quality of Life Supports Model, PCG assessed the impact that MCB services had on consumers by posing the question “In what ways (other than assisting with finding gainful employment) has MCB improved consumers’ quality of life? We posed this overarching question to our focus group participants and categorized the information they provided to us into four categories consistent with the Quality of Life Supports Model: Health and Well-Being; Accessibility and Mobility; Social and Community Engagement; and Education Access and Technical Training.

### Health and Well-Being

#### Finding 5: MCB services give consumers greater confidence and independence

MCB provides a large number of diverse services to consumers tailored to each individual’s needs. Aside from employment assistance, MCB also offers a host of wrap-around services to help consumers become more independent in employment and in the community. These services include[[1]](#footnote-2):

* Low-vision Evaluations and Services;

***“The return on investment of MCB services are more nuanced but much higher than initially expected. They had a way of making my home life easier, and services have given me the ability to have more mental head space to spend time working on looking for jobs, or even going out and having a social life. It has allowed me to build confidence through self-advocacy.”***

***- Focus Group Participant***

* Orientation and Mobility Training;
* Rehabilitation Training;
* Assistive Technology;
* Peer Support; and,
* Rehabilitation Counseling.

MCB consumers who participated in focus groups noted that they found that many of the MCB-provided services enhanced their well-being. Participants indicated that continued education – including support for tuition, books, and accessibility supplies – were among the most helpful services provided. In addition, MCB also provided consumers with assistive technology devices and training on how to use them. Also mentioned as incredibly helpful by focus group participants were the MCB services geared towards making homes more accessible and safer. For example, installing tactile markings on appliances with visual displays helps consumers to function in the kitchen safely. MCB also provides information and referral to various transportation assistance services and many connections to social networks and events.

Focus group participants stated that the MCB services they received improved their overall quality of life and well-being in a holistic way. Specifically, the combination of all the individualized services provided by MCB counselors helped consumers to increase their independence. Moreover, the emotional support and encouragement, provided by counselors also gave consumers increased confidence. This confidence has made them more comfortable participating in activities such as applying and interviewing for jobs, signing up for clubs (for example, the church choir), playing music, including the keyboard and drums, and attending events such as descriptive art installations.

A literature review focused on the impact of VR services on consumers revealed theoretical pathways through which consumers may see improvement in their lives. Consumers who achieve employment may gain a sense of self-worth from their job and feel pride as they are able to grow and be challenged on the job (Hopkins, B, 2019). Careers can provide purpose in consumers’ lives as they set, work towards and achieve their goals. While some careers are not the consumers’ ideal job, working can provide motivation to maintain self-sufficiency.

***“MCB helped me to understand it’s okay to be scared and they will walk through that fear with you to teach you skills to reduce the fear and build that confidence. And now I believe I can do everything anybody who doesn’t have a visual impairment can do as well.”***

***- Focus Group Participant***

#### Finding 6: MCB services help to improve consumers’ mental and physical health

Rates of depression anxiety, and risk of suicide are elevated in a wide range of visually impaired populations.) Despite the higher prevalence of these conditions, those with visual impairments remain largely untreated for these conditions. Vision loss is associated with self-reported anxiety, worry, frustration, social withdrawal, and embarrassment. Those with vision loss may develop negative self-perceptions because of social stigma. (Demmin and Silverstein 2020

Current formal approaches to treating mental health conditions in those with visual impairments include self-management interventions, problem-solving interventions, vision rehabilitation, cognitive behavioral interventions, and stepped care interventions. Literature suggests that increased screening for mental health issues could benefit the visually impaired, and emphasis put on reducing poor treatment adherence. (Demmin and Silverstein, 2020)

Working with MCB and meeting other individuals who are blind has helped consumers both share and normalize feelings of insecurity. MCB helps consumers understand that it is possible to be both blind and independent, and reduces their feelings of isolation, anxiety and depression. Consumers stated they were able to address their vision loss and blindness through receiving MCB personal adjustment to blindness services. This allowed them to take steps to gain the skills needed to be successful in life and employment and not shy away from their condition. In addition, MCB services made consumers’ everyday lives easier.

***“I have the capacity now to support myself in more basic ways, so I have more time to spend working on more robust aspects of my life. I feel more confident in doing basic tasks that could otherwise stress me out or provide frustration, which can snowball to a level of much less productivity. Because at the end of the day not having accessibility to basic independence skills is exhausting.”***

***- Focus Group Participant***

Many consumers noted that the Carroll Center for the Blind was particularly helpful for improving their mental and physical health. MCB provides this service so that consumers can attend The Carroll Center offers diverse services for youth, teens and adults. For example, consumers noted that Mobility and Orientation training gave them better ability to participate in more physical activities such as baseball, biking, skiing, and kayaking. This improved both their physical and mental well-being. The Carroll Center also offers an extensive peer support network, providing individuals with the opportunity to participate in adaptive sports activities.

***“When I came to Carroll Center I was blind for 3 years. Prior to going I was depressed, and my confidence was non-existent – going to the Center and getting the training was important. But more important to me, and I know I’m not the only one, is it allowed me to do some much needed emotional healing.”***

***- Focus Group Participant***

### Accessibility and Mobility

#### Finding 7: MCB provides services that give consumers improved ability to live and travel independently

Our literature review highlighted how education and employment is important to consumers. However, consumers must also have the skills to safely reach their job. Transportation issues are often cited as a limitation for those with visual impairments, negatively impacting their ability to obtain or retain a job. Transportation to and from a workplace may not be accessible, or the amount of time needed to safely travel to and from the workplace may be exorbitant. (Bell and Mino, 2013)

In 2020, PCG also conducted a Comprehensive Statewide Needs Assessment (CSNA) Study and a Vocational Rehabilitation Needs Assessment for MCB. MCB clients who participated in focus groups, and who were interviewed and surveyed also cited transportation as a significant barrier to achieving their employment goals. Transportation was also cited as the biggest barrier to receiving pre-ETS services and employment in the VR Needs Assessment.

***“MCB services had a huge positive impact on my well-being where I don’t have to think about the barriers to basic needs anymore because MCB has taken care of them. Even reaching out to them outside of employment needs for mobility or accessibility services and having that as a resource at a point in time to not have to worry about the little things has been really beneficial for me.”***

***- Focus Group Participant***

MCB provides both in-home and on-site mobility and orientation services to consumers. MCB counselors help consumers make their homes more accessible by installing tactile markings on appliances and suggesting furniture placement so individuals can move around freely. In addition to helping consumers qualify for free or reduced cost public transportation, MCB counselors also provide training to consumers on how to use public transit systems.

MCB helps consumers create travel routes in their community, providing them with the safest routes for commuting independently to work, doctor visits, and social gatherings. Consumers recounted how MCB services helped them overcome their fears of performing tasks on their own without assistance, such as cooking and traveling independently. MCB services oriented towards helping consumers travel independently for employment purposes had an additional benefit of affording them more opportunities to engage in social activities, as it gave them the confidence to travel to meet friends and attend events.

### Social and Community Engagement

#### Finding 8: MCB services provide consumers with a network of peer support and friendships

An article by Hopkins (2019) stated that VR services have the potential to provide a social return on investment. Consumers that achieve employment can often feel a sense of community at their job. Jobs provide a place for social interaction with co-workers that are also working towards the same goals.

While social interactions in the workplace are an important aspect of professional growth, peer connections and social and community engagement are equally crucial to overall well-being. Focus group participants stated that working with MCB was instrumental in exposing them to other individuals who are also blind or who have low vision. The peer support network and friendships gained via MCB services allowed consumers to share their experiences and struggles with other individuals encountering similar experiences. Focus group participants said this helped them reduce their feelings of isolation by showing them they are not alone.

***“I was ready to accept the cards I was dealt and that made me be much more open in expressing what my struggles and needs were, and advocate for myself and being with my peers. I had never met another blind person, but dealing with people from all walks of life you naturally just open up and it becomes easier to say hey It’s not a big deal to express this feeling I’m having because they understand, and you draw strength from their struggles as well.”***

***- Focus Group Participant***

Participants also discussed how witnessing others who are blind or who have low vision living active and independent lives was life changing for them. Many MCB consumers have gone on to become ambassadors, mentoring other individuals who may be struggling with their blindness or visual impairment, and bringing awareness to the challenges these individuals face. In addition, emotional support provided by MCB counselors helped consumers build trust in themselves, making it easier for them to socialize with other individuals. This gave consumers the confidence to advocate for themselves. In doing so, focus group participants noted they are more comfortable socializing in employment settings. This has had the added benefit of affording them professional growth opportunities.

### Educational Access and Technical Training

#### Finding 9: MCB provides services and motivational support to consumers to advance their education and technical skills

In addition to providing direct VR and employment services, MCB also provides training services and assistance to consumers who need to advance their education and / or technical training skills. In turn, individuals gain additional qualifications that can help them obtain more robust employment opportunities.

***“Being able to go away to college and feel comfortable living along at school has helped me to be exposed to more social opportunities, which has led me to grow as a person overall. My counselor has listened to all of my ups and downs and encourages me to have healthy relationships.”***

***- Focus Group Participant***

Focus group participants greatly appreciated MCB’s assistance with researching and applying to colleges, offering assistive technology like scanners and video magnifiers, and providing financial assistance for tuition and books. Some even indicated that they would not have been able to advance their education without MCB’s help. In addition to the above, MCB counselors provided emotional support to consumers transitioning to – or newly enrolled in – college, helping them acclimate to school by encouraging them to join clubs and explore their professional interests.

MCB consumers also indicated that the technical training they received was empowering. Focus group participants explained that being able to witness other people who are blind or who have low vision excel at tasks (for example, typing and computer coding) was inspiring. This exposure positively impacted their psyche and improved their confidence in their ability to develop these skills for themselves.

# Literature Review

As we described in the Methodology section of this report, PCG conducted a literature review of return on investment (ROI) studies for VR-related programs and services. This section summarizes those findings and is organized by three topic areas:

1. Vocational Rehabilitation Outcomes
2. Monetary Return on Investment
3. Practical Implications/ System Opportunities

## Vocational Rehabilitation Outcomes

A Vocational Rehabilitation (VR) agency assists qualifying individuals who have a disability that is an impediment to employment by increasing their access to employment, helping them maintain a position, or helping them return to employment. VR goes beyond connecting a consumer with a job to understanding an individual consumer’s strengths, skills, vocational ambitions, and needs, and using this understanding to create a manageable set of goals for the consumer to work towards.

Individuals with disabilities, including those with visual impairments, are employed at lower rates than those without disabilities. Employment has a vast array of tangible and intangible benefits, such as income and insurance, and creating purpose and structure in a person’s life. VR services provide critical support for accessing employment for many, and have been shown to increase the odds of employment for individuals with disabilities vs. those that do not use VR services. (Clapp et al., 2020, Lund and Cmar, 2019, Darensbourg, 2008) In addition, use of VR services, including workplace modifications, is associated with a reduction in return-to-work time and a lower duration of sick leave. (Aetna, 2016) Individuals returning to work more quickly creates more financial security for the worker and less employee turnover for the employer. The impact of workplace modifications extends beyond time away from work; individuals that were offered workplace modifications were also less likely to enroll in short and long- term disability. (Aetna, 2016).

The benefit of VR services and workplace modifications is not equal across all populations. Historically, in the United States VR services do not provide the same outcomes across all disabling conditions. The rate of competitive employment has been much lower at case closure among VR consumers who are blind or visually impaired compared to those with other disabling conditions. (Warren-Peace, 2009) While many individuals with different types of disabilities qualify for VR services, those that are legally blind have a higher rate of non-competitive closures (29.5 %) compared to those with other disabilities (1.5 %). (Warren-Peace, 2009) Data in the United States has shown that about 37 percent of those with visual impairments are employed, with an average annual income around $35,000. (Warren-Peace, 2009, Bell and Mino, 2013)

***VR Customers that are legally blind have a higher rate of non-competitive closures (29.5%) compared to those with other disabilities (1.5%)***

People with visual impairments face a set of unique challenges when navigating the employment process. Employers may harbor prejudices about hiring someone with a visual impairment due to their assumptions about how that person is able or unable to complete the duties required by the position. VR services work to build the skills and connections a person with a visual impairment needs to find and sustain competitive employment. These services often include building relationships with employers to help the employer establish a more positive employer attitude towards – and develop better perceptions about – hiring workers that are blind or visually impaired. (McDonnall, 2017) Another often cited limitation to employment is a lack of accessible transportation to and from the workplace. (Bell and Mino, 2013) Public transportation may not be reliable or accessible, making it difficult to achieve and retain employment.

One important VR service goal is competitive employment at case closure. Achievement of competitive employment after VR case closure is associated with a variety of sociodemographic and employment factors. The odds of competitive employment after the closure of VR services have been positively associated with male gender, ages less than 36, less severe vision loss, higher educational attainment, and more social support and earnings at application. (Lund and Cmar, 2019, Darensbourg, 2008)

Both previous employment and employment at application was seen to be predictive of employment at case closure. The impact of previous employment extended beyond employment at application and into youth for consumers with visual impairments. Individuals that had at least two employment experiences prior to the end of high school were two times as likely to be employed as adults compared to those that did not have employment before the end of high school. (Garcia et al., 2016)

Another set of factors shown by the research to be associated negatively with employment at the close of VR services included secondary disabilities, legal blindness, and the receipt of Social Security Insurance (SSI) or Social Security Disability Insurance (SSDI). (McDonnall,2017, Lund and Cmar, 2019) While many of these factors overlap with the odds of employment among the general public, the degree of disability and the intersectionality of these factors creates a unique set of facilitators and barriers to employment for each VR consumer. Clapp et al. (2020) found disparate results when analyzing employment among VR consumers from three states over the two years following case closure. Employment rates decreased over the two years following case closure for all VR applicants. However, employment rates among those that completed an individualized plan for employment (IPE) and used VR services remained higher than those that neither used VR services nor completed an IPE. (Clapp et al., 2020) Longitudinal study results were documented during a recession, which may account for part of the decrease in employment rates among both groups.

It is important that competitive employment (jobs) secured at case closure provide consumers with stable earnings. Research has shown that the characteristics that predict the odds of employment among VR consumers overlap with the characteristics associated with higher earnings. Consumers with a higher education level, higher earnings at application, who were male, and who did not receive SSDI or SSI higher earnings at case closure (Darensbourg, 2008).

***Vocational Rehabilitation consumers employed at case closure earned $810.00 more per quarter than those who did not have access to VR services***

Overall, consumers that received substantial services and were employed after case closure earned on average $810 more per quarter in the first 1.5 years after case closure than those that applied for, but did not participate in, VR services. (Clapp et al., 2020) VR consumer earnings increased to an average of $940 per quarter *more than* non-VR consumers over the next three and a half years. (Clapp et al., 2020). These positive earnings are indicative of VR consumers with visual impairments being better connected to the labor market. (Clapp et al., 2020) The results from earnings analyses indicate that consumers with visual impairments that use VR services see higher earnings after exiting the program, yet these outcomes are primarily the result of increased earnings from those that were employed at entry and not changes in employment rates.

## Monetary Return on Investment

Monetary return on investment (ROI) can be calculated using an array of methodologies, for example, by using control groups or looking at program specific data. ROI calculation methodology can also depend upon the availability of data elements. Some ROI studies may allow for comparison using a control group, such as individuals who applied for services but were not eligible or individuals working with another human services program.

One Mississippi Department of Rehabilitation Services (MDRS) study used the control group methodology. In 2018, the MDRS Office of Vocational Rehabilitation (OVR) and the Office of Vocational Rehabilitation for the Blind (OVR) requested an update to the LifeTracks study entitled ‘*The Value of Vocational Rehabilitation Services*’. This report merged MDRS data with state unemployment insurance data to track service use, demographics, employment, and earnings information. For this study, MDRS reviewed program participants from October 1, 2012 to September 20, 2013 and compared them to individuals not in the program to determine program benefit. In their research, MDRS applied mixed fixed effect models to control for the impact of demographic, service type, and type of disability on the likelihood of employment between those enrolled in services and the control group (individuals not in the program).

Overall, MDRS found the impact of VR services can be seen past obtaining initial employment. The average age of MDRS VR program participants in the above time period evaluated was 38 years. Securing employment at age 38 could lead to an additional 28 or more years during a participant’s working lifetime. On average, MDRS consumers receiving OVR / OVR services earn $1,188 more annually and $47,510 more over a working lifetime than those who do not receive services. Using the same data set, October 1, 2012 to September 20, 2013, by calculating remaining working years from average age of securing employment, OVR / OVR found it contributes a total of $275,225,430 to the state economy from the net income earned by MDRS consumers receiving OVR / OVR services over a working lifetime.

***Additional findings indicated MDRS consumers receiving Office of Vocational Rehabilitation (OVR) or Office of Vocational Rehabilitation for the Blind (OVRB) services were 2.2 times more likely to gain employment than their counterparts who do not receive services.***

Regarding specific ROI ratios, MDRS determined that the individual ROI is 6.0. Meaning that for every state dollar invested in an individual who receives OVR / OVR services, an estimated additional $5.00 is returned to the state in the form of tax gains and public assistance savings. Furthermore, MDRS found that the state ROI is 2.8. In other words, for every Mississippi state dollar invested in OVR / OVR, an estimated additional $1.80 is returned to Mississippi in the form of state tax gains and public assistance savings. When looking at the average age of individuals in the study, and assuming they will continue to work 28 years beyond case closure, the state and federal tax return on investments were calculated based on the increase of salary, as OVR / OVR participants made $47,510 more, on average, than those that did not receive services. Using this calculation, overall, the total net benefit to the state in the data set October 1, 2012 to September 20, 2013, was estimated at $30,991,739, including $23,669,387 in state tax gains and $7,322,352 in public assistance savings (for the participants evaluated in the time period, and additional 28 average working years). Lastly, MDRS found that there were also federal returns on investments as well. Findings calculated a federal ROI of 1.3. That is, for every federal dollar invested in OVR / OVR, an estimated additional $0.30 is returned to the federal government in the form of federal tax gains. MDRS estimated the overall federal total net benefit as $62,338,560 from the participants in this study (calculating the additional income from the remaining 28 average working years).

Other studies have similar return on investment findings, indicating an overall benefit on both the state and federal level. According to Aetna (2016), states have reported ROIs ranging from $21.95 (Alabama) to $5.20 (Oregon). Each state uses a different ROI calculation. However, Aetna, which looked at overall wages and benefits to VR staff and claims over time, found a 11:1 ROI for their VR services. A 2017 study completed by the Social Security Administration (SSA), Office of the Inspector General (OIG), calculated savings based on forgone benefits of participants who returned to work after they exited VR services, who earned greater than the amounts SSA paid for the VR services. The study also found that the number of beneficiaries who had substantial gainful activity (SGA) level work activity increased after they exited VR services. While each State's VR programs were cost effective, this study found that some states served their beneficiaries more cost-effectively than others. For example, The Agency saved $1.28 for every $1 it paid Mississippi for VR services, the lowest State savings rate.

***SSA saved $3.71 for every $1 it paid Massachusetts for VR services, the highest State savings rate.***

Overall, ROI studies conducted on VR services, regardless of the methodology used in the approach, generally find substantial state and federal savings (and a great range of ROI) for VR programs. Based on previous research, ROIs were found to be anywhere from S5.20 to $21.95 per dollar spent, not including benefits to other programs such as SSA.

## Practical Implications/System Opportunities

VR services for individuals with visual impairments vary widely from state to state, as do the administrative structures that govern them. Universally, providing VR services is a multidisciplinary effort. Counselors must understand both the physical and psychological impact of the disabling condition, comprehend the social system of supports, know about the local economy, regulations, and available training programs, and be able to guide a person to navigate the employment process.

VR success requires active consumer participation combined with the cultivation of relationships with employers by VR staff on behalf of the VR consumers. The Business Relations Model (BRM) or Dual Customer Approach focuses on the development of lasting relationships with businesses that can yield multiple employment opportunities for VR consumers at the same place of employment. (Anderson, 2006) Increased use of the BRM by VR staff has been associated with increased odds of employment for individuals with visual impairments who were not employed during application for VR services. (McDonnell, 2017) Although the effect size is small, indicating that the increase in odds of employment does not increase substantially, these are promising results. The development of lasting business relationships focused on employing consumers with visual impairments requires a tailored approach. VR staff use relationship building techniques that are specific to those with visual impairments. Approaches include educating potential employers about how people who are blind or who have low vision can function on the job, exposing employers to successfully employed individuals who are blind or who have low vision, and providing employers with referrals to businesses that employ people who are blind or who have low vision.

VR services have an opportunity to increase collaboration within their states with other state programs that serve their consumers, including SSI and SSDI. Based on analyses of employment outcomes, VR consumers with visual impairments had lower odds of employment after exiting VR if they received SSI or SSDI. (McDonnall,2017, Lund and Cmar, 2019) Service patterns were found among those with visual impairments that were receiving both VR services and SSI. Individuals on SSI/SSDI that engaged in job centered VR services, such as counseling, guidance, job placement, job search and job trainings had higher odds of employment. (Giesen and Hierholzer, 2016) Those that used reader services, augmentative skills training, assessments, and interpreter services had lower odds of employment. (Giesen and Hierholzer, 2016) The patterns of service use shed light on the needs of consumers that receive SSI and VR services and how they may find competitive employment. A better understanding at a state level of how consumers utilize SSI / SSDI, and employment services could provide an opportunity to better harmonize the resources for individuals with visual impairment, as both programs serve this overlapping population.

# Opportunities and Trends to Watch

This section includes opportunities and trends to watch from the overall findings and results of this report.

Throughout this analysis, PCG identified opportunities and trends that allow for continued and expanded growth and improvement. MCB has the opportunity to build on strengths and successes found throughout this report to aid in strengthening services to participants served.

## Rehabilitation Rates and Quality Employment Outcomes

Over the last several years there have been significant changes RSA reported data, particularly oriented around performance measures, data collection procedures, regulations, guidance, and service provisions. Within these changes, in addition to the recent pandemic, there has been a notable decrease in the overall rehabilitation rate. The largest impact of this decrease is most likely contributed to the vocational goal of a ‘homemaker’ being no longer permitted as a vocational goal option, and as a result many agencies, especially those agencies that serve individuals with visual impairments experienced a reduction in rehabilitated closures. It is notable in Massachusetts, however, these participants remained being served. If they were not seeking paid employment, these individuals were referred to MCB’s Independent Living Social Service program which maintains a separate funding source and staff for services. Furthermore, there was a shift from employment to career oriented long-term employment, along with marketable and measurable skill gains to assist participants in being competitive in the labor market.

### Opportunities:

* **Set strategies to continue to improve overall opportunities to improve employment outcomes.** This should include regional and statewide supports for partnerships, training initiatives, and relationship building.
* **Strengthen partnership opportunities** with Workforce Development to better identify labor market information for high wage and high need job industries.
* **Continue to develop relationships with employers** with high skill and high wage positions.
* **Consider additional training for counselors on ways** to increase education and training opportunities for participants consistent with the local labor market.

### Trends:

* Although overall rehabilitation rates have decreased in the last few performance years, which is most likely contributed to WIOA changes and the recent pandemic, MCB participants closed rehabilitated:
  + **Continued to show a decrease in public support as primary source of support and an increase of primary income as the primary source of support.** *For Py17-19 ‘public support’ decreased by 58 percent and ‘family and friends’ decreased by 85 percent as primary sources of income / support, and personal income as the primary source of support increased 64 percent from application to closure.* PY 2017-2019 comparison of Medicaid coverage at application versus closure for cases closed rehabilitated. Overall, PY 17-19 Medicaid at application versus closure for cases closed rehabilitated decreased by 37.5 percent.
  + **Continued to show a decrease in Medicaid coverage at application versus at closure for rehabilitated closures.** For PYs 2017-2019, in comparison of Medicaid coverage at application versus at closure for cases closed rehabilitated decreased by 37.5 percent.
  + **Continued to show an increase in overall average annual salary.** For PY 17-19, participants earned approximately $35,994.81 annually.
  + **Participants unemployed 27 or more weeks (Long-term unemployed) continue to see successful results with the assistance of MCB services.** On average, approximately 15 percent of participants closed rehabilitated had been unemployed 27 or more weeks (identified as long-term unemployed) between PY 2017-2019.

## Additional Data for Future ROI Analysis

As MCB continues to refine processes, data collection tools, and collect additional data for WIOA performance measures, this will provide additional opportunities to measure return of investments in additional ways.

### Opportunities:

* Plan a future return of analysis study to include new data collected for RSA 911. This information should include:
  + **Measurable Skill Gains and Educational Goals**-Continue to refine data sharing and collection in these data elements to capture the overall educational measures also obtained while participating in MCB services.
  + **Second and Fourth Quarter Wages After Exit**- Continue to collect this data, including use of State Wage Interchange Systems (SWIS) data to monitor overall long-term employment retention.
  + **Continue to Maximize State-Federal Match Funding**- to maintain budgetary needs to provide services to participants, continued state funding matches to maximize federal funding should be prioritized when considering ongoing return on investments for the program. and possible additional funding (if available annually).

### Trends:

* **Due to being relatively new data collection elements during the period of analysis**, data was limited for measurable skill gains, educational goals, second and fourth quarter wages after exit.

## Average age of rehabilitated participants

### Opportunities:

* **Continued outreach to younger populations**- MCB should continue to expand outreach to engage younger populations, as well as expanding opportunities such as work experiences to assist in serving this population early and improving overall success to reach an employment outcome.

### Trends:

* **Average age is 47 years old** – For rehabilitated closures between PYs 15-19 the average age of participants was 47 years old.

# Appendices

## Appendix 1: Correspondence / Communication

**Language for Focus Group Recruitment**

***Language for Focus Group Recruitment – People who Have Received MCB Services in the Past***

*MCB is collaborating with Public Consulting Group LLC (PCG) to determine the effectiveness and impact of our programs and services. We take tremendous pride in serving our consumers, and many of you have gone on to achieve great success in obtaining and maintaining meaningful employment, furthering educational and training endeavors, and generally improving quality of life. We are using this study to measure the benefits our programs and services provide, and to identify any opportunities to improve services for people in Massachusetts who are blind or visually impaired. How can you help? As part of this study, PCG is conducting two focus groups with consumers who have received MCB’s Vocational Rehabilitation services in the past. These two focus group cohorts will consist of 1) people whose cases have closed between five and ten years ago, and 2) people whose cases have closed more than ten years ago.*

**Focus Group 1: Your case closed between June, 2011 – June, 2016 (your case closed between 5 and 10 years ago)**

**When**: Tuesday, July 20 at 9:00 am OR Wednesday, July 28 at 6:00 pm

**Where**: Zoom meeting

**Focus Group 2: Your case closed before June, 2011 (your case closed more than 10 years ago)**

**When**: Wednesday, July 21 at 9:00 am OR Tuesday, July 27 at 6:00 pm

**Where**: Zoom meeting

*If you would like to participate, please contact Tina Williams at* [*tiwilliams@pcgus.com*](mailto:tiwilliams@pcgus.com) *to be added to a focus group time slot that works for you. We will send you all the details (including the Zoom link) once you confirm your availability. If you’re unable to attend one of the scheduled times, please reach out to Tina and we can work to determine an alternate method to receive your feedback.*

***Language for Focus Group Recruitment – MCB Interns***

*MCB is collaborating with Public Consulting Group LLC (PCG) to determine the effectiveness and impact of our programs and services. We take tremendous pride in serving our consumers, and many of you have gone on to achieve great success in obtaining and maintaining meaningful employment, furthering educational and training endeavors, and generally improving quality of life. We are using this study to measure the benefits our programs and services provide, and to identify any opportunities to improve services for people in Massachusetts who are blind or visually impaired. How can you help? As part of this study, PCG is conducting a focus group with consumers who are currently interns at MCB.*

**When**: TBD

**Where**: Zoom meeting

*If you would like to participate, please contact Tina Williams at* [*tiwilliams@pcgus.com*](mailto:tiwilliams@pcgus.com) *to be added to a focus group time slot that works for you. We will send you all the details (including the Zoom link) once you confirm your availability. If you’re unable to attend one of the scheduled times, please reach out to Tina and we can work to determine an alternate method to receive your feedback.*

***Reminder for Employed Past Participants***

I am following up on our phone call a couple of weeks ago where I asked you to participate in a focus group with Public Consulting Group (PCG) to help us determine the impact of MCB’s programs and services. I understand Tina Williams from PCG has reached out to you via email to ask for your participation and she will also be reaching out by phone within the next day or so. If you haven’t already, please reach out to her and let her know which focus group time slot works best for you. Thank you in advance for your help with this project!

***Reminder/Date Change for Intern Focus Group***

I am following up on an email I sent you asking you to participate in a focus group with Public Consulting Group (PCG) to help us determine the impact of MCB’s programs and services. The focus group will take place immediately following our meeting on August 10 (MCB ADD TIME). Please reserve an hour of your time to attend this very important focus group. Thank you in advance for your help with this project!

## Appendix 2: Past Participant Focus Group Protocols

**Massachusetts Commission for the Blind   
Focus Group Moderator Protocol**

|  |  |
| --- | --- |
| **Time** |  |
| **Date** |  |
| **Location** |  |
| **Facilitator** |  |
| **Quality Assurance** |  |

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| --- | --- |
| **Participants** | **Other Notes** |
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**General Instructions**

* Feedback is not to be provided—positive or negative
* Ask clarifying, open ended questions
* Solicit feedback from all participants
* Collect data and responses without judgement
* Do not change people’s words: record what they say and the way they say it
* The purpose of this session is to record data and stories, but not to influence opinions
* Do not share your experiences

**Format Notes**

* Estimated Duration: 1 hour
* Estimated Participants: 5-10
* Participant Population: MCB Consumers with closed cases
* Staff: 1 facilitator, 1 quality assurance staff (and note taker)
* Software Needed: Teleconferencing software, note taking software
* Record group electronically

**Introduction Script**

Welcome! Thank you for joining us today. Today, I am working with the Massachusetts Commission for the Blind or MCB to learn more your experiences working with Massachusetts Commission for the Blind. My name is (NAME), and I am from Public Consulting Group (PCG) and will be facilitating this meeting on behalf of Massachusetts Commission for the Blind. (NAME) is here to record and summarize your responses. We will talk about how services helped you with employment, and if things could have been better. Massachusetts Commission for the Blind is excited to partner with you to help capture information for their project.

There are no right or wrong answers, and you do not have to answer any questions that you do not feel comfortable with. We want to hear about your experiences no matter what they are.

We would like to hear from everyone. It is important that we treat each other with respect. Please let people finish speaking, and if you disagree with something someone says, remember that they are talking about their own experiences. You will have an opportunity to talk about your experiences too. It does not mean anyone is wrong if there are differences in opinions.

We are very interested in learning more about all of you and your experiences with the Massachusetts Commission for the Blind. The information that you share will help us learn about what is working, and how services have impacted your lives.

I would like you to know that we are recording this. This will allow us to have a more active discussion. Nothing you say here, positive or negative, will have an impact on services you receive. Your names will not be attached to anything you share.

Now, with all that out of the way, let us go around the room and introduce ourselves. Please share your first name and one thing about yourself that you think is important for us to know.

***Help participants go around the room to introduce themselves.***

Thank you, it is nice to meet everyone. Now, all of you have worked with the Massachusetts Commission for the Blind at some point, or is working with them now, right? Or do you represent or support a person who has used Massachusetts Commission for the Blind services?

**Introduction to Services**

Let’s get started. Think about the kinds of services you received from Massachusetts Commission for the Blind. By services, I mean anything that MCB has helped you with. MCB helps people get different kinds of service based on what they need. It could be things like helping you obtain training or education, help with finding a job, help getting assistive technology such as braille services, or help with mobility training that helps you do your job. What stands out in your memory about the services you have received?

**Achievements**

When thinking about the services you received from MCB, what do you think those services have helped you achieve in your life? *Probe: Greater confidence and self-assuredness? Improved physical well-being? Improved emotional well-being? Increased education credential? Better access to basic needs?*

**Independence**

How have MCB services helped you become more independent? What can you do on your own now that you may not have been able to otherwise?

**Social and Emotional Well-Being**

How have the services you received from MCB helped improve your social and emotional well-being.? *Probe: Better connections with friends and family? Decrease in depression or anxiety? Decreased substance use? Less stress? Improved perceptions of quality of life?*

**Physical Well-Being**

How have the services you received from MCB helped you improve your physical health? *Probe: Fewer doctors’ visits? Less medication? Greater life expectancy?*

**Social Ties**

How have the services you received from MCB helped you participate more in social activities or in your communities?

**Groups**

What sorts of groups are you involved with? This could be formal groups of people, or just groups of friends. Bowling leagues, game groups, community groups, other social gatherings, anything like that- how do you now participate in social life?

**COVID**

It became much harder to participate socially last year. I know MCB does a lot of work with technology – how did MCB services help you cope over the last year? *Probe: Safety measures? Access to healthcare professionals? Remote work opportunities? Shopping for groceries or other basic necessities? Maintaining social connections?*

**Final Thoughts Question**

What was the overall impact MCB services had on the way you’ve dealt with or experienced your visual impairment? What have been the most significant changes in your life as a result of receiving MCB services?

**END**

That was our last question. Thank you very much for participating in the focus group today. Do you have any questions?

## Appendix 3: Intern Focus Group Protocols

**Massachusetts Commission for the Blind   
Intern Focus Group Moderator Protocol**

|  |  |
| --- | --- |
| **Time** |  |
| **Date** |  |
| **Location** |  |
| **Facilitator** |  |
| **Quality Assurance** |  |

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| **Participants** | **Other Notes** |
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**General Facilitator Instructions**

* Facilitators should not provide feedback—either positive or negative
* Ask clarifying, open ended questions
* Solicit feedback from all participants
* Collect data and responses without judgement
* Do not change people’s words: record what they say and the way they say it
* The purpose of this session is not to influence opinions, but to record data and stories
* Facilitators need not share their own experiences

**Format Notes**

* Estimated Duration: 1 hour
* Estimated Participants: 5-10
* Participant Population: MCB consumers who have participated in the internship program
* Staff: 1 facilitator, 1 quality assurance staff (and note taker)
* Software Needed: Teleconferencing software, note taking software
* Record group electronically

**Introduction Script**

Welcome! Thank you for joining us today. My name is (NAME). I work with Public Consulting Group (PCG) and will be facilitating this meeting on behalf of the Massachusetts Commission for the Blind (MCB). My PCG colleague (NAME) is here with me to record and summarize your responses. Before we get started we’re going to talk about the purpose of this initiative, review session guidelines, and introduce ourselves to one another.

***Purpose of this Initiative***

MCB is conducting a study to measure the benefits of its programs and services on those who are blind or visually impaired. Many of you who have received – or are currently receiving – MCB services have achieved great success in the MCB Internship Program, furthering your education and training, and improving your quality of life. Today we want to learn more about how MCB services have impacted your lives and helped you achieve your goals. The information you share today will help us learn more about what is and isn’t working, and identify opportunities for MCB to improve services for people in Massachusetts who are blind or visually impaired.

***Session Guidelines / “Housekeeping”***

Before we get started, let’s review our session guidelines:

1. There are no right or wrong answers. You don’t have to answer any questions that you don’t feel comfortable with. We want to hear about your experiences no matter what they are.
2. Our goal is to give everyone the opportunity to talk about their experiences.
3. There may be differences in opinions, but it’s important that we treat each other with respect. If you disagree with what someone says, remember that they’re talking about their own experiences.
4. PCG is recording this conversation, but nothing you say here, whether positive or negative, will have any impact on the MCB services you receive now, or in the future. Your name will not be attached to anything you share.
5. Please keep your microphone on “mute” unless you’re speaking. This will help us minimize background noise.
6. Feel free to use the “raise hand” or “comments” features in Zoom. We’ll do our best to answer all questions and call on everyone who wishes to speak.

***Participant Introductions***

Now let’s go around the room and introduce ourselves. When I call you, please share your name and confirm that you or the person you are representing today has been an intern for MCB. Feel free to share a few words about yourself if you’d like. Let’s start with (NAME). *Facilitator goes around the room to introduce everyone.*

**Introduction to Services**

Let’s get started. Think about the kinds of services you received before and while interning for the Massachusetts Commission for the Blind. By services, I mean anything that MCB has provided you with. It could be things like helping you obtain training or education, help with finding a job or internship, or help getting assistive technology. What stands out in your memory about the services you have received?

**Achievements**

When thinking about the services MCB provided while you interned with them or before, what do you think those services have helped you achieve in your life? *Probe: Greater confidence and self-assuredness? Improved physical well-being? Improved emotional well-being? Increased education credential? Better access to basic needs?*

**Independence**

How have MCB services helped you become more independent? What can you do on your own now that you may not have been able to otherwise?

**Social and Emotional Well-Being**

How have the services you received from MCB helped improve your emotional, social, and mental health? *Probe: Better connections with friends and family? Decrease in depression or anxiety? Decreased substance use? Less stress? Improved perceptions of quality of life?*

**Physical Well-Being**

How have the services you received from MCB helped you improve your physical health? *Probe: Fewer doctors’ visits? Less medication? Greater life expectancy?*

**Social Ties**

How have the services consumers received from MCB helped you to participate more in social activities or in your community?

**Groups**

What sorts of groups are you involved with? This could be formal groups of people, or just groups of friends. Bowling leagues, game groups, community groups, other social gatherings, anything like that- how do you now participate in social life?

**COVID**

It became much harder to participate in in-person events last year. I know MCB does a lot of work with technology – how did the services you received from MCB help you cope over the last year?

**END**

That was our last question. Thank you very much for participating in the focus group today. Do you have any questions or thoughts to share?

1. <https://www.mass.gov/social-rehabilitation-sr> [↑](#footnote-ref-2)