**Summary Report**

**Comparison of Actual CRP Costs of Providing Services**

**and Fees Paid for Services**

**Washington Division of Vocational Rehabilitation**

**February 23, 2016**

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**Introduction:** The Washington State Division of Vocational Rehabilitation (DVR) contracted with the Center for Continuing Education in Rehabilitation at the University of Washington to conduct a study to estimate the actual costs encumbered by Community Rehabilitation Programs (CRPs) when providing services to consumers of DVR. Costs were defined to include salary/wages paid to staff for time providing the services, all fringe benefits and payroll taxes, as well as unreimbursed travel costs borne while providing services. In addition, indirect costs incurred by CRPs, including such items as rent, insurance, administrative costs, etc., were estimated to ensure that the full cost of providing services to DVR consumers would become apparent. These estimated costs were then compared to the fees actually paid by DVR to the CRPs. Such a comparison will be useful in setting rates that adequately compensate CRPs at the same time ensuring that DVR is expending funds responsibly.

**Methodology:** The study year selected was the fiscal year from October 1, 2013 to September 30, 2014. DVR provided the study team with data identifying the services and costs for all services authorized during that year and the two previous years. Referral rates to CRPs were examined over the entire three-year period to determine how stable the rates were for the CRPs. It was assumed that those with a history of providing services over the three years would be more likely to make reasonable estimates of their costs. Service categories included:

1. Vocational Evaluation Services;
2. Job Placement Services, levels 1 to 3;
3. Intensive Training Services, levels 1 to 3;
4. Community Based Assessments, levels 1 to 3;
5. Trial Work Experience, levels 1 to 3;
6. Off-Site Psycho-Social Job Supports for Supported Employment, levels 1 to 3;
7. Off-Site Psycho-Social Job Supports for Non-Supported Employment, levels 1 to 3; and,
8. Job Retention Service, levels 1 to 3.

Thus, a total of 22 services were specifically targeted for cost estimation and comparison. All CRPs authorized to provide any of these services during the study year were invited to participate in the study. A total number of 123 CRPs were identified and offered a fee to cover their costs of compiling the data. A total of 46 (37%) both agreed to participate and submitted complete records to the study team. A list of participating CRPs is included in Table 16.

This was a retrospective study, asking CRPs to report on costs from up to 24 months earlier. Some CRPs had very accurate service records, while others needed to reconstruct the hours of service from case notes and similar records. At least 3 CRPs withdrew from the study at the point where they realized they were not going to be able to report on the requested data with any reliability.

**Instruments:** Two instruments were developed to collect the needed cost information from CRPs, one to determine the indirect costs borne by CRPs (Appendix A) and the second to specify the actual direct service costs incurred in providing specific services to DVR consumers (Appendix B). The instruments were designed with the help of an advisory group representing CRPs as well as staff of DVR.

**Sample:** It was agreed that the unit of analysis was the service provided to an individual consumer. DVR provided to the study team a complete set of data for the three-year study period, consisting of all CRP services authorized by DVR. A total of 45,470 unique records of services were included. Variables consisted of consumer identification numbers, service names, payment dates and amounts, DVR authorizing office, provider names, and a unique number identifying each service, labeled the AFP (authorization for payment) number. In addition, DVR provided information regarding the consumers served during this period, including birthdates, race, ethnicity, closure status, among others.

During the study year, the total number of consumers served and eligible for the study was 6,063. Initially, 63 CRPs agreed to participate and a 20% random sample, sufficient for deriving reliable estimates, was drawn for each one. If the sample drawn was less than ten, and if sufficient numbers of consumers were served, the sample for these CRPs was increased to ten. For CRPs who served ten or fewer DVR consumers, the entire population was selected. A total of 1,132 consumers was selected, slightly less than 19% of the total population.

After the study commenced, seventeen of the CRPs decided not to participate. This reduced the sample by 194, resulting in a total sample of 938. This represented 15.5% of the population of consumers served during the study year. Actual data was collected on services provided to 875 consumers. This is a response rate of 90% and represents 14.4% of the population.

Participating CRPs ranged in size from single person operations to multi-service agencies with hundreds of staff. Eleven CRPs serve counties in eastern and/or central Washington, six are statewide or serve both the east and west side, and 29 serve the west side. One or more participating CRPs provide services in all counties except Whitman, Asotin, and Garfield in the SE corner of the state.

**Results:**

**Table 1** (next page) provides summary statistics for all services. The statistics provide comparisons between the estimated costs of CRPs for providing each service and to the actual fees paid to them for the same services by DVR. Some services did not occur to the extent that reliable estimates could be calculated. For example, Trial Work Level 1 did not occur; nor did several of the levels under Psychosocial Supports.

**Table 2** (page 5) indicates how much, on average, the amount paid by DVR differed from the CRP costs. A positive number indicates by how much the fee was greater than the cost while a negative number indicates by how much the fee fell short of the costs. A percentage is also provided to indicate by how much above or below the fee paid was to the estimated cost. A percentage of 100% would indicate the fee exactly met the cost. A percentage greater than 100% means the costs of services were more than recovered, while percentages less than 100% indicate the fee paid was less than the cost. For nine of the services, fees were greater than costs while for six, fees were less than the costs. For the services most frequently provided, such as placement and community based assessments, CRP costs exceeded the fees.

**Table 3** (page 6) presents the hourly rates of the estimated costs, using both the mean and median. Hourly costs, consisting of wages and travel, are adjusted by including the percentage of costs attributable to fringe benefits, payroll taxes, indirect costs, and other direct costs not included in the hourly rates. The average (or mean) hours of service provided as well as the median are included are offered as well. The average and median costs are fairly consistent suggesting costs are normally distributed with few outliers. There is about an equal number of median hourly costs higher and lower than the average hourly costs, indicating also that there are not likely to be CRPs that have either higher or lower costs per hour than others across all services. However, the average hours served and median hours served display somewhat more divergence, with the medians tending to be lower than the average hours. This implies that there were more CRPs providing fewer service hours than the average than those which provided more than the average.

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| **Table 1: Provider and Fee-Based Statistics** | | | | | | |
| **Provider-Based Statistics** | | | | **Fee-Based Statistics** | | |
| **Service** | **N** | **Provider Based Mean Direct (Costs)** | **Total Cost with Indirect, Fringe and Other Direct (rate of 64.26%)** | **N** | **Total Served Mean (Fee Paid)** | **Total Served Median (Fee Paid)** |
| Vocational Evaluation Total Costs | 6 | $317.73 | $521.91 | 6 | $1,154.17 | $1,150.00 |
| Job Placement 1 Total Costs | 24 | $681.22 | $1,118.97 | 24 | $541.25 | $300.00 |
| Job Placement 2 Total Costs | 198 | $1,067.68 | $1,753.77 | 198 | $706.29 | $600.00 |
| Job Placement 3 Total Costs | 134 | $885.55 | $1,454.61 | 134 | $1,039.01 | $900.00 |
| Intensive Training 1 Total Costs | 11 | $704.39 | $1,157.03 | 11 | $818.18 | $1,125.00 |
| Intensive Training 2 Total Costs | 12 | $683.46 | $1,122.66 | 12 | $1,812.50 | $2,250.00 |
| Intensive Training 3 Total Costs | 27 | $1,371.79 | $2,253.30 | 27 | $2,472.22 | $3,375.00 |
| Community Based Assessment 1 Total Costs | 32 | $726.29 | $1,193.01 | 32 | $538.59 | $732.50 |
| Community Based Assessment 2 Total Costs | 164 | $628.62 | $1,032.58 | 164 | $982.32 | $300.00 |
| Community Based Assessment 3 Total Costs | 139 | $739.52 | $1,214.73 | 139 | $1,336.40 | $450.00 |
| Trial Work 2 Total Costs | 3 | $583.25 | $958.05 | 3 | $1,333.33 | $1,700.00 |
| Trial Work 3 Total Costs | 7 | $975.34 | $1,602.09 | 7 | $1,422.86 | $450.00 |
| Offsite Psychosocial Supp Emp 2 Total Costs | 1 | $189.17 | $310.73 | 1 | $2,250.00 | $2,250.00 |
| Offsite Psychosocial Non Supp Emp 2 Total Costs | 1 | $220.75 | $362.60 | 1 | $450.00 | $450.00 |
| Job Retention 1 Total Costs | 34 | $578.41 | $950.09 | 34 | $708.09 | $225.00 |
| Job Retention 2 Total Costs | 51 | $576.57 | $947.08 | 51 | $1,488.60 | $765.00 |
| Job Retention 3 Total Costs | 28 | $969.21 | $1,592.03 | 28 | $2,515.18 | $3,037.50 |

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| **Table 2: Differences between Provider Costs and Fees** | | |
| **Service** | **Mean Cost Difference** | **% Costs Recovered from Fees** |
| Vocational Evaluation Total Costs | $632.26 | 221% |
| Job Placement 1 Total Costs | -$577.72 | 48% |
| Job Placement 2 Total Costs | -$1,047.48 | 40% |
| Job Placement 3 Total Costs | -$415.60 | 71% |
| Intensive Training 1 Total Costs | -$338.85 | 71% |
| Intensive Training 2 Total Costs | $689.84 | 161% |
| Intensive Training 3 Total Costs | $218.92 | 110% |
| Community Based Assessment 1 Total Costs | -$654.41 | 45% |
| Community Based Assessment 2 Total Costs | -$50.26 | 95% |
| Community Based Assessment 3 Total Costs | $121.68 | 110% |
| Trial Work 2 Total Costs | $375.28 | 139% |
| Trial Work 3 Total Costs | -$179.23 | 89% |
| Offsite Psychosocial Supp Emp 1 Total Costs |  |  |
| Offsite Psychosocial Supp Emp 2 Total Costs | $1,939.27 | 724% |
| Offsite Psychosocial Supp Emp 3 Total Costs |  |  |
| Offsite Psychosocial Non Supp Emp 1 Total Costs |  |  |
| Offsite Psychosocial Non Supp Emp 2 Total Costs | $87.40 | 124% |
| Offsite Psychosocial Non Supp Emp 3 Total Costs |  |  |
| Job Retention 1 Total Costs | -$242.00 | 75% |
| Job Retention 2 Total Costs | $541.52 | 157 |
| Job Retention 3 Total Costs | $923.15 | 158% |

Note: figures for Offsite Psychosocial Supported Employment and Offsite Psychosocial Non Supported Employment Services represent 1 consumer each so have limited value.

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| **Table 3: Hourly Average Costs** | | | | | |
| **Service** | **Hourly Average Cost** | **Median Average Hourly Cost** | **Average Hours of Services** | **Median Hours of Services** |
| Vocational Evaluation | $48.18 | $48.72 | 10.5 | 8 |
| Job Placement 1 | $27.68 | $28.91 | 67.6 | 49.2 |
| Job Placement 2 | $32.00 | $31.82 | 105.5 | 78.2 |
| Job Placement 3 | $30.43 | $31.73 | 75.1 | 60.7 |
| Intensive Training 1 | $28.10 | $32.33 | 83.5 | 59.4 |
| Intensive Training 2 | $28.20 | $25.55 | 71.6 | 87.8 |
| Intensive Training 3 | $32.14 | $34.38 | 215.8 | 231.7 |
| Community Based Assessment 1 | $21.92 | $30.74 | 109.7 | 94 |
| Community Based Assessment 2 | $33.04 | $31.74 | 60.4 | 55.5 |
| Community Based Assessment 3 | $30.04 | $29.50 | 66.2 | 53.6 |
| Trial Work 1 | - | - |  |  |
| Trial Work 2 | $32.55 | $41.56 | 29.4 | 25 |
| Trial Work 3 | $27.44 | $22.87 | 58.4 | 66.4 |
| Offsite Psychosocial Supported Employment 1 | - | - |  |  |
| Offsite Psychosocial Supported Employment 2 | $33.59 | $33.59 |  |  |
| Offsite Psychosocial Supported Employment 3 | - | - |  |  |
| Offsite Psychosocial Non Supported Employment 1 | - | - |  |  |
| Offsite Psychosocial Non Supported Employment 2 | $32.96 | $32.96 |  |  |
| Offsite Psychosocial Non Supported Employment 3 | - | - |  |  |
| Job Retention 1 | $37.52 | $36.62 | 47.3 | 41 |
| Job Retention 2 | $34.80 | $31.31 | 70.5 | 49.5 |
| Job Retention 3 | $40.87 | $45.31 | 101.3 | 92.4 |

Note: figures for Offsite Psychosocial Supported Employment and Offsite Psychosocial Non Supported Employment Services represent one consumer each so have limited value.

The next series of tables examine the hours of services provided for three outcome groups, including those closed as rehabilitated (“rehab”), those closed as “other”, and those which remained open during the study year. These were identified as “open cases”. The chi-square statistic was calculated to determine if any significant differences occurred in the tables. **Table 4** provides the hours provided for Vocational Evaluation Services and all the levels of placement services. The “open cases” group was different from the other two outcome groups for placement service level 3 in receiving significantly more hours of service.

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| **Table 4: Hours of Voc Eval and Placement Services by Closure Outcomes** | | | | | |
| Closure Outcomes | | Vocational Evaluation Hours | Job Placement Level 1 Hours | Job Placement Level 2 Hours | Job Placement Level 3 Hours |
| Other | N | 4 | 1 | 17 | 12 |
| Mean | 8.0 | 11.0 | 40.5 | 26.5 |
| Median | 8.0 | 11.0 | 32.5 | 20.3 |
| Std. Deviation | 0.0 |  | 50.2 | 28.6 |
| Rehab | N |  | 6 | 29 | 10 |
| Mean |  | 20.5 | 50.1 | 25.6 |
| Median |  | 15.5 | 39.0 | 21.4 |
| Std. Deviation |  | 15.2 | 44.5 | 19.0 |
| Open Cases | N | 2 | 17 | 152 | 112 |
| Mean | 16.5 | 49.2 | 57.1 | 52.0 |
| Median | 16.5 | 35.0 | 39.9 | 41.4 |
| Std. Deviation | 12.0 | 41.7 | 63.5 | 41.7 |
| Total | N | 6 | 24 | 198 | 134 |
| Mean | 10.8 | 40.4 | 54.7 | 47.8 |
| Median | 8.0 | 28.5 | 37.0 | 37.6 |
| Std. Deviation | 6.9 | 38.2 | 60.0 | 40.5 |

**Table 5** presents the hours of Intensive Training Services provided across the three outcome groups. Significantly more hours of Intensive Training Level 3 were provided to the rehabilitation outcome group.

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| **Table 5: Hours of Intensive Training Services by Closure Outcome** | | | | |
| Closure Outcomes | | Intensive Training Level 1 Hours | Intensive Training Level 2 Hours | Intensive Training Level 3 Hours |
| Other | N |  |  | 1 |
| Mean |  |  | 36.0 |
| Median |  |  | 36.0 |
| Std. Deviation |  |  |  |
| Rehab | N | 4 | 3 | 3 |
| Mean | 43.7 | 27.7 | 156.6 |
| Median | 38.6 | 38.0 | 176.5 |
| Std. Deviation | 31.4 | 19.7 | 128.2 |
| Open Cases | N | 7 | 9 | 23 |
| Mean | 39.8 | 43.9 | 60.3 |
| Median | 20.8 | 49.8 | 56.0 |
| Std. Deviation | 33.9 | 21.4 | 43.2 |
| Total | N | 11 | 12 | 27 |
| Mean | 41.2 | 39.8 | 70.1 |
| Median | 20.8 | 44.8 | 56.0 |
| Std. Deviation | 31.5 | 21.4 | 61.9 |

**Table 6** presents the hours of Community-Based Assessment services provided across the three outcome groups. No group received significantly more of these hours.

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| **Table 6: Hours of Community-Based Assessment (CBA) Services by Closure Outcome** | | | | |
| Closure Outcomes | | CBA Level 1 Hours | CBA Level 2 Hours | CBA Level 3 Hours |
| Other | N | 11 | 69 | 57 |
| Mean | 65.8 | 30.3 | 41.7 |
| Median | 81.0 | 25.0 | 28.0 |
| Std. Deviation | 44.4 | 20.9 | 40.7 |
| Rehab | N | 9 | 20 | 12 |
| Mean | 52.4 | 29.5 | 25.5 |
| Median | 42.0 | 29.9 | 22.5 |
| Std. Deviation | 42.0 | 16.2 | 20.9 |
| Open Cases | N | 12 | 74 | 71 |
| Mean | 45.5 | 32.7 | 41.7 |
| Median | 28.3 | 25.0 | 34.5 |
| Std. Deviation | 42.4 | 28.0 | 28.4 |
| Total | N | 32 | 163 | 140 |
| Mean | 54.4 | 31.2 | 40.3 |
| Median | 42.0 | 25.8 | 32.4 |
| Std. Deviation | 42.5 | 23.9 | 33.6 |

**Table 7** presents the hours of Trial Work Services provided across the three outcome groups. No group received significantly more of these hours.

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| **Table 7: Hours of Trial Work Services by Closure Outcome** | | | |
| Closure Outcomes | | Trial Work Level 2 Hours | Trial Work Level 3 Hours |
| Other | N | 2 | 4 |
| Mean | 20.9 | 44.1 |
| Median | 20.9 | 45.6 |
| Std. Deviation | 12.9 | 38.1 |
| Open Cases | N | 2 | 2 |
| Mean | 38.0 | 87.0 |
| Median | 38.0 | 87.0 |
| Std. Deviation | 25.5 | 44.2 |
| Total | N | 4 | 6 |
| Mean | 29.4 | 58.4 |
| Median | 25.0 | 66.4 |
| Std. Deviation | 19.2 | 41.9 |

There were not enough cases available to calculate significance of the number of hours of Psychosocial Services provided to the three outcome groups. **Table 8** presents the hours of Job Retention Services provided across these three groups. No group received significantly more of these hours as these were primarily provided to the “open cases” group.

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| **Table 8: Hours of Job Retention Services by Closure Outcome** | | | | |
| Closure Outcomes | | Job Retention Level 1 Hours | Job Retention Level 2 Hours | Job Retention Level 3 Hours |
| Other | N |  |  | 1 |
| Mean |  |  | 31.5 |
| Median |  |  | 31.5 |
| Std. Deviation |  |  |  |
| Rehab | N | 1 | 3 | 1 |
| Mean | 22.0 | 43.3 | 63.3 |
| Median | 22.0 | 26.0 | 63.3 |
| Std. Deviation |  | 44.6 |  |
| Open Cases | N | 33 | 48 | 26 |
| Mean | 25.4 | 26.2 | 38.3 |
| Median | 18.0 | 22.9 | 29.0 |
| Std. Deviation | 25.1 | 19.0 | 28.3 |
| Total | N | 34 | 51 | 28 |
| Mean | 25.3 | 27.2 | 39.0 |
| Median | 19.0 | 23.5 | 29.5 |
| Std. Deviation | 24.8 | 20.9 | 27.7 |

The next series of tables examines the cost of services provided to the three outcome groups. The chi-square statistic was again calculated to determine statistically significant differences. **Table 9** presents Vocational Evaluation and Placement Services. Job Placement Level 2 approaches significance in that the “open cases” group cost was higher than the other two groups. The cost for serving the “open cases” group was higher across all of these services.

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| **Table 9: Cost of Vocational Evaluation and**  **Placement Services by Outcome Group** | | | | | |
| Closure Outcomes | | Voc Eval Total Costs | Job Placement Level 1 Total Costs | Job Placement Level 2 Total Costs | Job Placement Level 3 Total Costs |
| Other | N | 4 | 1 | 17 | 12 |
| Mean | $237.28 | $176.99 | $825.10 | $458.90 |
| Median | $237.28 | $176.99 | $600.02 | $350.96 |
| Std. Deviation | $0.00 |  | $1,133.29 | $426.27 |
| Rehab | N |  | 6 | 29 | 10 |
| Mean |  | $372.76 | $960.22 | $486.54 |
| Median |  | $328.68 | $808.92 | $408.14 |
| Std. Deviation |  | $281.12 | $865.33 | $325.09 |
| Open Cases | N | 2 | 17 | 152 | 112 |
| Mean | $478.64 | $819.75 | $1,115.31 | $966.89 |
| Median | $478.64 | $641.00 | $722.34 | $826.20 |
| Std. Deviation | $341.33 | $673.80 | $1,279.73 | $722.07 |
| Total | N | 6 | 24 | 198 | 134 |
| Mean | $317.73 | $681.22 | $1,067.68 | $885.55 |
| Median | $237.28 | $501.60 | $716.76 | $737.14 |
| Std. Deviation | $197.07 | $618.92 | $1,214.32 | $700.92 |

In examining Intensive Training Services, Level 3 was significantly different for the “rehabilitation” group, which was the most expensive. However, the distribution of cases across the training levels and outcome groups resulted in numerous cells with too few cases, thus, interpretation must be made with caution.

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| **Table 10: Cost of Intensive Training Services by Outcome Group** | | | | |
| Closure Outcomes | | Intensive Training Level 1 Total Costs | Intensive Training Level 2 Total Costs | Intensive Training Level 3 Total Costs |
| Other | N |  |  | 1 |
| Mean |  |  | $532.17 |
| Median |  |  | $532.17 |
| Std. Deviation |  |  |  |
| Rehab | N | 4 | 3 | 3 |
| Mean | $749.92 | $558.02 | $3,431.55 |
| Median | $712.81 | $640.00 | $3,758.49 |
| Std. Deviation | $502.29 | $176.90 | $2,995.20 |
| Open Cases | N | 7 | 9 | 23 |
| Mean | $678.37 | $725.28 | $1,139.63 |
| Median | $328.25 | $861.17 | $1,172.03 |
| Std. Deviation | $575.72 | $355.63 | $832.01 |
| Total | N | 11 | 12 | 27 |
| Mean | $704.39 | $683.46 | $1,371.79 |
| Median | $408.46 | $696.19 | $1,172.03 |
| Std. Deviation | $525.23 | $321.55 | $1,356.53 |

Community-Based Assessment Services (**Table 11**) were offered to many consumers across all outcome groups. However, no cost differences were found to be significant.

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| **Table 11: Cost of Community-Based Assessment Services by Outcome Group** | | | | | | | | |
| Closure Outcomes | | | | CBA Level 1 Total Costs | | CBA Level 2 Total Costs | | CBA Level 3 Total Costs |
| Other | | N | | 11 | | 69 | | 57 |
| Mean | | $817.77 | | $590.29 | | $717.00 |
| Median | | $972.00 | | $587.04 | | $576.25 |
| Std. Deviation | | $499.71 | | $384.92 | | $548.50 |
| Rehab | | N | | 9 | | 20 | | 12 |
| Mean | | $708.98 | | $597.04 | | $595.56 |
| Median | | $804.00 | | $579.96 | | $387.90 |
| Std. Deviation | | $482.17 | | $382.66 | | $454.93 |
| Open Cases | | N | | 12 | | 74 | | 71 |
| Mean | | $655.42 | | $672.90 | | $781.92 |
| Median | | $586.50 | | $434.75 | | $676.17 |
| Std. Deviation | | $514.03 | | $877.56 | | $526.77 |
| Total | | N | | 32 | | 163 | | 140 |
| Mean | | $726.29 | | $628.62 | | $739.52 |
| Median | | $786.00 | | $497.57 | | $587.22 |
| Std. Deviation | | $489.19 | | $654.24 | | $529.38 |

**Table 12** focuses on Trial Work Services. There were no cases for Trial Work Level 1 services and Trial Work Services were not provided to any case in the “rehabilitation” outcome study sample. Level 3 Trial Work Services approached significance in that its cost for the “open cases” group was proportionally higher than the “other” outcome groups.

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| **Table 12: Cost of Trial Work Services by Outcome Group** | | | |
| Closure Outcomes | | Trial Work Level 2 Total Costs | Trial Work Level 3 Total Costs |
| Other | N | 2 | 4 |
| Mean | 533.9 | 579.9 |
| Median | 533.9 | 605.6 |
| Std. Deviation | 395.6 | 399.6 |
| Open Cases | N | 2 | 2 |
| Mean | 632.6 | 1766.2 |
| Median | 632.6 | 1766.2 |
| Std. Deviation | 55.7 | 894.0 |
| Total | N | 4 | 6 |
| Mean | 583.3 | 975.3 |
| Median | 632.6 | 924.0 |
| Std. Deviation | 237.6 | 794.3 |

Again, as with the analysis of hours and outcomes, not enough cases were available to examine the relationship of the psychosocial services with outcomes.

**Table 13** presents Job Retention Services, which were primarily provided to the “open cases” group. Analysis revealed no significant differences.

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| **Table 13: Cost of Job Retention Services by Outcome Group** | | | | |
| Closure Outcomes | | Job Retention Level 1 Total Costs | Job Retention Level 2 Total Costs | Job Retention Level 3 Total Costs |
| Other | N |  |  | 1 |
| Mean |  |  | $2,236.00 |
| Median |  |  | $2,236.00 |
| Std. Deviation |  |  |  |
| Rehab | N | 1 | 3 | 1 |
| Mean | $451.18 | $834.28 | $1,146.76 |
| Median | $451.18 | $448.24 | $1,146.76 |
| Std. Deviation |  | $803.55 |  |
| Open Cases | N | 33 | 48 | 26 |
| Mean | $582.26 | $560.47 | $913.66 |
| Median | $396.00 | $446.45 | $765.27 |
| Std. Deviation | $720.78 | $462.41 | $736.25 |
| Total | N | 34 | 51 | 28 |
| Mean | $578.41 | $576.57 | $969.21 |
| Median | $423.59 | $448.00 | $813.74 |
| Std. Deviation | $710.14 | $480.68 | $751.99 |

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| **Table 14: Service Costs by Number of Employees** | **1 Employee** | **2-5 Employees** | **6-10 Employees** | **More than 10 Employees** | **Significance Level** |
| Vocational Evaluation Total Costs | \* | \* | \* | \* | \* |
| Job Placement 1 Total Costs | $535 | $553 | $687 | $1,008 | .598 |
| Job Placement 2 Total Costs | $796 | $507 | $928 | $1,454 | .003 |
| Job Placement 3 Total Costs | $783 | $682 | $737 | $1,032 | .11 |
| Job Placement Total Costs | $766 | $575 | $836 | $1,291 | .000 |
| Intensive Training 1 Total Costs | $1080 | \* | $671 | $560 | .472 |
| Intensive Training 2 Total Costs | \* | $517 | $719 | $683 | .848 |
| Intensive Training 3 Total Costs | $1815 | $2123 | $1098 | $1481 | .620 |
| Intensive Training Total Costs | $1,533 | $1,319 | $966 | $520 | .267 |
| Comm Based Assessment 1 Total Costs | $1,133 | $256 | $356 | $930 | .003 |
| Comm Based Assessment 2 Total Costs | $530 | $543 | $538 | $810 | .166 |
| Comm Based Assessment 3 Total Costs | $1,062 | $799 | $626 | $837 | .066 |
| Comm Based Assessment Total Costs | $830 | $615 | $562 | $842 | .005 |
| Trial Work 1 Total Costs | \* | \* | \* | \* | \* |
| Trial Work 2 Total Costs | \* | \* | \* | \* | \* |
| Trial Work 3 Total Costs | \* | \* | \* | \* | \* |
| Trial Work Total Costs | $254 | $659 | $1,343 | $840 | .733 |
| Offsite Psychosocial Supp Emp 1 Total Costs | \* | \* | \* | \* | \* |
| Offsite Psychosocial Supp Emp 2 Total Costs | \* | \* | \* | \* | \* |
| Offsite Psychosocial Supp Emp 3 Total Costs | \* | \* | \* | \* | \* |
| Offsite Psychosocial Supp Emp Total Costs | \* | \* | \* | \* | \* |
| Offsite Psychosocial Non Supp Emp 1 Total Costs | \* | \* | \* | \* | \* |
| Offsite Psychosocial Non Supp Emp 2 Total Costs | \* | \* | \* | \* | \* |
| Offsite Psychosocial Non Supp Emp 3 Total Costs | \* | \* | \* | \* | \* |
| Offsite Psychosocial Non Supp Emp Total Costs | \* | \* | \* | \* | \* |
| Job Retention 1 Total Costs | $2,259 | $784 | $430 | $384 | .002 |
| Job Retention 2 Total Costs | $599 | $222 | $736 | $496 | .349 |
| Job Retention 3 Total Costs | $1,550 | $984 | $1,426 | $586 | .138 |
| Job Retention Total Costs | $1,371 | $716 | $767 | $466 | .005 |
| Total CRP Service Costs | $937 | $627 | $738 | $985 | .000 |

**Table 14** examines the cost of services broken out by the number of employees of the CRPs. Analyses of variance were done to determine the extent of significant differences attributable to this factor. Where asterisks are inserted, the sample size was insufficient for calculating a reliable statistic. Analyses were done for each service level and then for the total service after aggregating for the levels within a service. Finally, the aggregated costs for the total set of services was analyzed. For purposes of interpretation, significance levels of .10 or less should be considered since samples were not very large for some of the service levels analyzed. For Job Placement services, CRPs with more than ten employees were the most expensive across all service levels. For Community-Based Assessment services, CRPs with one employee were the most expensive for two levels while those with ten or more employees was the most expensive for one level and for the overall cost of these services. For Trial Work Services, CRPs with five to ten employees were the most expensive. For Job Retention Services, CRPs with one employee were the most expensive in total and across all levels. Finally, the aggregated total costs reveal that the most expensive services were from CRPs with one employee, closely followed by CRPs with ten or more employees. The lowest cost services were provided by CRPs with 2 to five employees. The level of significance of the F statistic for this analysis was highly significant.

Table 15 examines the relationship between the number of locations a provider has to the costs for each of the services. The same analyses were done for this factor as for the number of

| **Table 15: Service Costs by Number of Locations** | **1 Location** | **2-5 Locations** | **More than 5 Locations** | **Significance Level** |
| --- | --- | --- | --- | --- |
| Vocational Evaluation Total Costs | \* | \* | \* | \* |
| Job Placement 1 Total Costs | $905 | $253 | $1,152 | .02 |
| Job Placement 2 Total Costs | $1,227 | $848 | $1,081 | .133 |
| Job Placement 3 Total Costs | $862 | $821 | $1,150 | .14 |
| Job Placement Total Costs | $1,088 | $798 | $1,114 | .028 |
| Intensive Training 1 Total Costs | $874 | $530 | $802 | .646 |
| Intensive Training 2 Total Costs | $649 | $751 | $552 | .762 |
| Intensive Training 3 Total Costs | $1,791 | $1,253 | $351 | .248 |
| Intensive Training Total Costs | $1,362 | $972 | $537 | .213 |
| Comm Based Assessment 1 Total Costs | $472 | $837 | $345 | .116 |
| Comm Based Assessment 2 Total Costs | $788 | $530 | $461 | .039 |
| Comm Based Assessment 3 Total Costs | $855 | $704 | $471 | .039 |
| Comm Based Assessment Total Costs | $800 | $640 | $458 | .007 |
| Trial Work 1 Total Costs | \* | \* | \* | \* |
| Trial Work 2 Total Costs | \* | \* | \* | \* |
| Trial Work 3 Total Costs | \* | \* | \* | \* |
| Trial Work Total Costs | $697 | $898 | \* | .657 |
| Offsite Psychosocial Supp Emp 1 Total Costs | \* | \* | \* | \* |
| Offsite Psychosocial Supp Emp 2 Total Costs | \* | \* | \* | \* |
| Offsite Psychosocial Supp Emp 3 Total Costs | \* | \* | \* | \* |
| Offsite Psychosocial Supp Emp Total Costs | \* | \* | \* | \* |
| Offsite Psychosocial Non Supp Emp 1 Total Costs | \* | \* | \* | \* |
| Offsite Psychosocial Non Supp Emp 2 Total Costs | \* | \* | \* | \* |
| Offsite Psychosocial Non Supp Emp 3 Total Costs | \* | \* | \* | \* |
| Offsite Psychosocial Non Supp Emp Total Costs | \* | \* | \* | \* |
| Job Retention 1 Total Costs | $753 | $400 | $414 | .368 |
| Job Retention 2 Total Costs | $562 | $650 | $365 | .386 |
| Job Retention 3 Total Costs | $1,004 | $937 | $853 | .955 |
| Job Retention Total Costs | $743 | $642 | $455 | .333 |
| **Total CRP Service Costs** | **$933** | **$723** | **$810** | **.003** |

locations. Asterisks are again used when insufficient data were available for a particular combination of location and service level. For Job Placement Services, providers with more than five locations were the most expensive while those with only one location were slightly less expensive. Job Placement Level 1 and the aggregate of all job placement costs had statistically significant differences across levels with providers with 2 to 5 locations being less costly. The analyses for Intensive Training are less reliable due to fewer data points. The pattern here is somewhat different with providers with one or 2 to 5 locations tending to be costlier. However, significant differences were not found except for Job Placement Level 1 services, where providers with only one location were the most expensive. This pattern held for Community-Based Assessment services. Providers with one location were the most expensive followed by those with 2 to 5 locations. In three of four analyses these differences were significant. For Job Retention Services no significant differences were found. The analysis of the total costs across all services found significance with providers with one location being the most expensive overall and those with 2 to 5 locations being the least costly.

We also investigated the relationship between the number of counties served by providers and outcome. There was not a significant relationship between these factors.

The final analysis related to financial transactions compares the percent of total revenue of participating CRPs that was derived from DVR during the study year. **Table 16** presents the data. Not all CRPs provided estimates of their revenues. The average number of authorizations paid during the study year was 193. The average revenue from DVR was $210,700 while the average overall revenue was $1,996,833. Thus, the average percent of revenue CRPs derived from DVR was 27%. However, there is a great deal of variation in overall revenue. The median overall revenue is $1,009,990, indicating that most CRP’s revenues are well below the average.

| **Table 16: Percent Revenue from DVR** | | |
| --- | --- | --- |
|  | **Authorizations Paid** | **Percent Revenue from DVR** |
| ADVANCEMENT NORTHWEST LLC | 47 | 51.9% |
| ARC SPOKANE | 12 | 1.7% |
| ARTISANS ARK THE | 10 | 0.44% |
| CAREER PATH SERVICES | 529 | 4.3% |
| CARES OF WASHINGTON | 185 | 9.0% |
| CASCADE CHRISTIAN SERVICES | 107 | 21.8% |
| CENTERFORCE | 25 | 5.9% |
| CHEUNG LOK-TIN | 28 | 100.0% |
| COLUMBIA INDUSTRIES | 139 | 10.0% |
| COMMUNITY PSYCHIATRIC CLINIC | 114 | 35.2% |
| CONCERNED CITIZENS | 94 | 2.7% |
| DOWNTOWN EMERGENCY SERVICE CTR | 98 | 62.3% |
| EASTER SEALS WASHINGTON | 94 |  |
| ELMVIEW | 254 |  |
| ENSO | 323 | 16.0% |
| ENTRUST COMMUNITY SERVICES | 185 | 12.5% |
| EXCEPTIONAL FORESTERS INC | 165 | 27.5% |
| FOSTER TIM J | 104 |  |
| FREEDOM CONSULTING LLC | 216 | 61.3% |
| GOLDMAN AND ASSOCIATES INC | 69 | 22.3% |
| GOODWILL INDUSTRIES OF INLAND NW | 455 |  |
| GOODWILL OF THE OLYMPICS RAINIER | 51 |  |
| GRANT COUNTY MENTAL HEALTHCARE | 9 | 26.0% |
| HARBORVIEW MEDICAL CENTER | 43 | 45.8% |
| HERO HOUSE | 35 | 10.0% |
| IKRON CORPORATION | 453 | 112.5% |
| INNOVATIVE SERVICES NW | 15 |  |
| KEYS TO ADVANCEMENT INC | 16 |  |
| LEWIS COUNTY WORK OPPORTUNITIES | 64 | 11.0% |
| LILLIE RICE CENTER INC | 49 | 2.9% |
| MORNINGSIDE | 834 | 24.5% |
| ORION INDUSTRIES | 461 | 69.8% |
| RELIABLE ENTERPRISES | 61 | 1.6% |
| SERVICE ALTERNATIVES FOR WA INC | 952 | 26.7% |
| SKILS KIN | 52 | 0.5% |
| SL START & ASSOCIATES LLC | 361 | 20.0% |
| SUNRISE SERVICES | 284 | 15.6% |
| TAHOMA ASSOCIATES | 10 | 0.9% |
| TRILLIUM EMPLOYMENT SERVICES | 229 | 9.3% |
| UNIV OF WA -UW REHAB MEDICINE | 26 | 7.8% |
| UW-NEUROLOGY VOCATIONAL SVS UNIT | 344 | 100.0% |
| VALLEY CITIES COUNSELING CONSULT | 71 |  |
| WASHINGTON VOCATIONAL SERVICES | 473 | 16.3% |
| WORK OPPORTUNITIES | 529 | 13.9% |
| YAKIMA SPECIALTIES INC | 172 | 40.3% |
| **Averages** | **193** | **27%** |

The next set of tables examines the relationship of key factors associated with case management processes with outcomes. The first explores how the total amount of funds expended on just those services selected for study relates to outcomes. **Table 17** presents the data. The highest level of cost is associated with the group with open cases achieved during the study year. The differences are significant.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Table 17: Closure Outcome and Total CRP Service Costs** | | | | | | |
| Closure Outcomes | N | Mean | Median | Std. Deviation | F | Sig. |
| Other | 179 | $656 | $553 | $570 | 4.803 | .008 |
| Rehab | 101 | $788 | $536 | $864 |  |  |
| Open Cases | 591 | $876 | $624 | $899 |  |  |
| Total | 871 | $820 | $593 | $842 |  |  |

**Table 18** looks at this relationship except the total fees expended by DVR are used rather than just the cost of services as reported by the CRPs. The same pattern occurs here with the Open cases group having the highest fees paid and the Other group the lowest by far. The difference is highly significant.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Table 18: Closure Outcome and Total WDVR Fees Paid** | | | | | | |
| Closure Outcomes | N | Mean | Median | Std. Deviation | F | Sig. |
| Other | 179 | $2054 | $2000 | $1449 | 72.24 | .000 |
| Rehab | 101 | $4556 | $3930 | $2820 |  |  |
| Open Cases | 589 | $5372 | $4320 | $3663 |  |  |
| Total | 869 | $4594 | $3500 | $3490 |  |  |

We also examined the length of time consumers were held in various statuses of the DVR case management process to see if any of these were related to outcomes. Days from application to determination of eligibility was not significant. Neither was days from plan development until closure. However, days from eligibility to plan development was significant. **Table 19** reports the results. Those rehabilitated are more likely to experience fewer days from eligibility to plan development.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Table 19: Closure Outcomes and Days from Eligibility to Plan Development\*** | | | | | | |
|  | | | Days from Eligibility to Plan | | | Total |
| 68 Days or Less | 69 to 162 Days | Greater than 163 Days |  |
| Closure Outcomes | Other | Count | 25 | 23 | 26 | 74 |
| % within Closure Outcomes | 33.8% | 31.1% | 35.1% | 100.0% |
| % within Days from Eligibility to Plan | 31.6% | 29.1% | 33.8% | 31.5% |
| Rehab | Count | 43 | 38 | 20 | 101 |
| % within Closure Outcomes | 42.6% | 37.6% | 19.8% | 100.0% |
| % within Days from Eligibility to Plan | 54.4% | 48.1% | 26.0% | 43.0% |
| Open Cases | Count | 11 | 18 | 31 | 60 |
| % within Closure Outcomes | 18.3% | 30.0% | 51.7% | 100.0% |
| % within Days from Eligibility to Plan | 13.9% | 22.8% | 40.3% | 25.5% |
|  | Total | Count | 79 | 79 | 77 | 235 |
| % within Closure Outcomes | 33.6% | 33.6% | 32.8% | 100.0% |
| % within Days from Eligibility to Plan | 100.0% | 100.0% | 100.0% | 100.0% |

\*Significant at the .001 level

**Table 20** presents the results of the analysis which relates total days in service, from application to closure, to outcomes. Those that were closed rehabilitated were in service longer than those closed as other. This is a significant difference.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Table 20: Closure Outcomes and Total Days in Service\*** | | | | | | |
|  | | | Days from Eligibility to Plan | | | Total |
| 274 Days or Less | 275 to 460 Days | Greater than 460 Days |  |
| Closure Outcomes | Other | Count | 72 | 57 | 50 | 179 |
| % within Closure Outcomes | 40.2% | 31.8% | 27.9% | 100.0% |
| % within Days from Eligibility to Plan | 75.8% | 62% | 53.8% | 63.9% |
| Rehab | Count | 23 | 35 | 43 | 101 |
| % within Closure Outcomes | 22.8% | 34.7% | 42.6% | 100.0% |
| % within Days from Eligibility to Plan | 24.2% | 38% | 46.2% | 36.1% |
|  | Total | Count | 95 | 92 | 93 | 280 |
| % within Closure Outcomes | 33.9% | 32.9% | 33.2% | 100.0% |
| % within Days from Eligibility to Plan | 100.0% | 100.0% | 100.0% | 100.0% |

\*Significant at the .006 level

Lastly, we looked at the relationship between age and outcome. No relationship between these factors was discovered.