

Using Returning Participants to Evaluate the Vocational Rehabilitation Program

Killian Hoyt

What is the Vocational Rehabilitation Program?

Opportunities for Ohioans with Disabilities (OOD) provides services to eligible individuals with disabilities to assist them with obtaining and maintaining employment. The Vocational Rehabilitation (VR) program assists more than 40,000 participants annually, offering a wide range of services to individuals aged 14 and above. Participants can return for OOD services as many times as they wish, with some individuals having multiple cases.

Questions to be Answered

This investigation sought to identify:

- What are the trends within OOD’s casework data among returning participants?
- Are participants advancing in employment when they return for OOD services?

Exploring these elements will help OOD better predict and understand the participant population.

Who are Returning Participants?

Using data from OOD’s case management system, this investigation looked at 174,000 unique VR participants over the past ten years, with a total of 227,000 unique cases. This leaves an average of 1.3 cases per participant. Of these 174,000 participants, 47,000 have returned for at least a second case. To account for data purges, the analysis has been limited to only cases that have been active in the ten-year period starting October 1, 2014.

On average, 30.9% of participants who open and close their first case will go on to have a second case, after an average of 969 days (over 2.5 years).

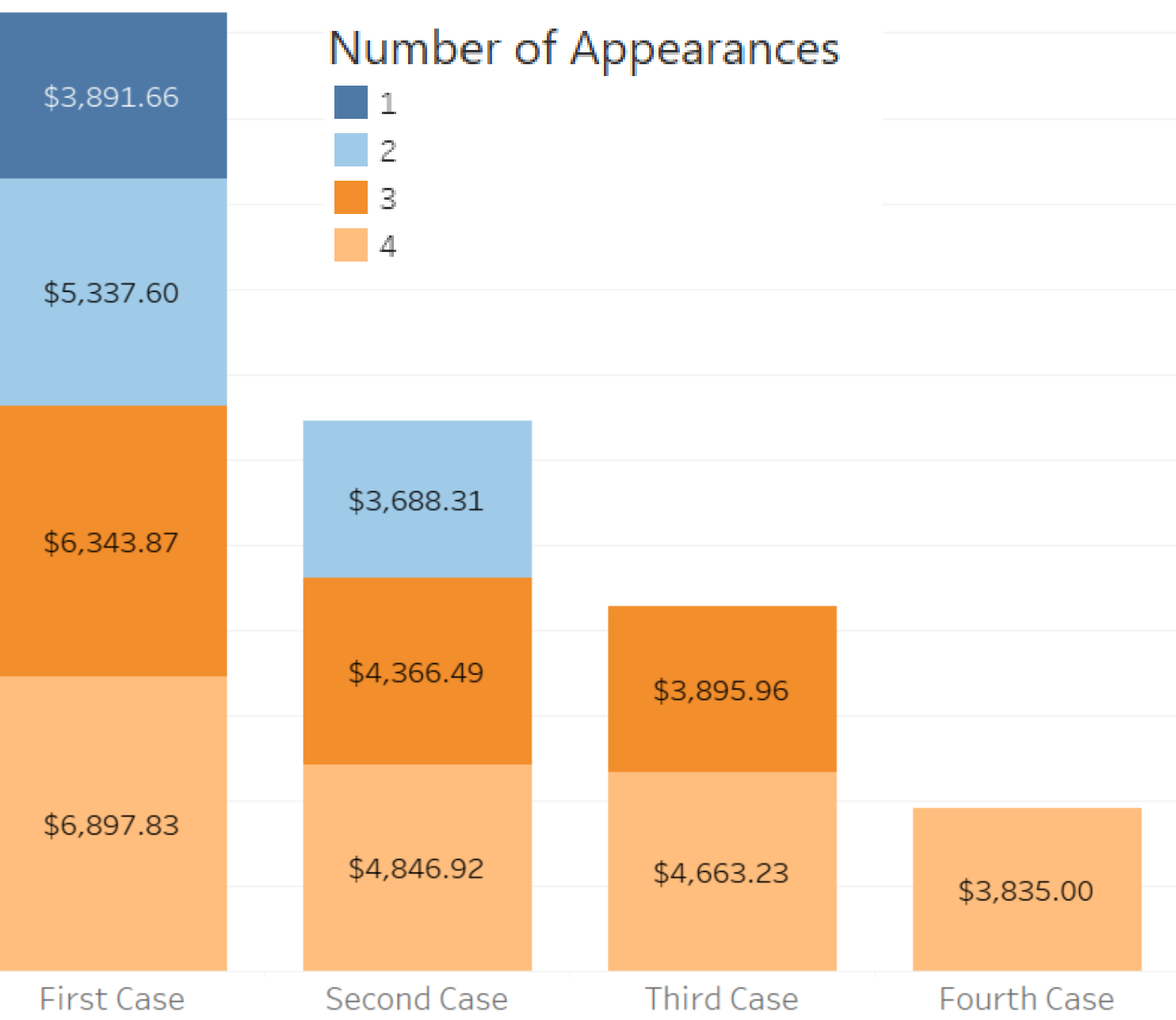
Returners vs. Non-Returning Participants

Average Cost per Case Analysis

OOD tracks the total cost paid per each case, which is useful in identifying if returning participants have a greater cost associated with their provided services.

- The average cost per case is the least for non-returners, who average \$3,800, and the greatest for returners with four cases.
- First cases are the most expensive for all returners, compared to their subsequent cases.
- Non-returners likely have the least expensive cases on average because, overall, the cohort comprises of fewer people who have the most significant disabilities and require less extensive services. Only 45% of non-returners are Most Significantly Disabled (MSD), compared with 55% of returning participants.

Amount Paid for Services to Returning Participants



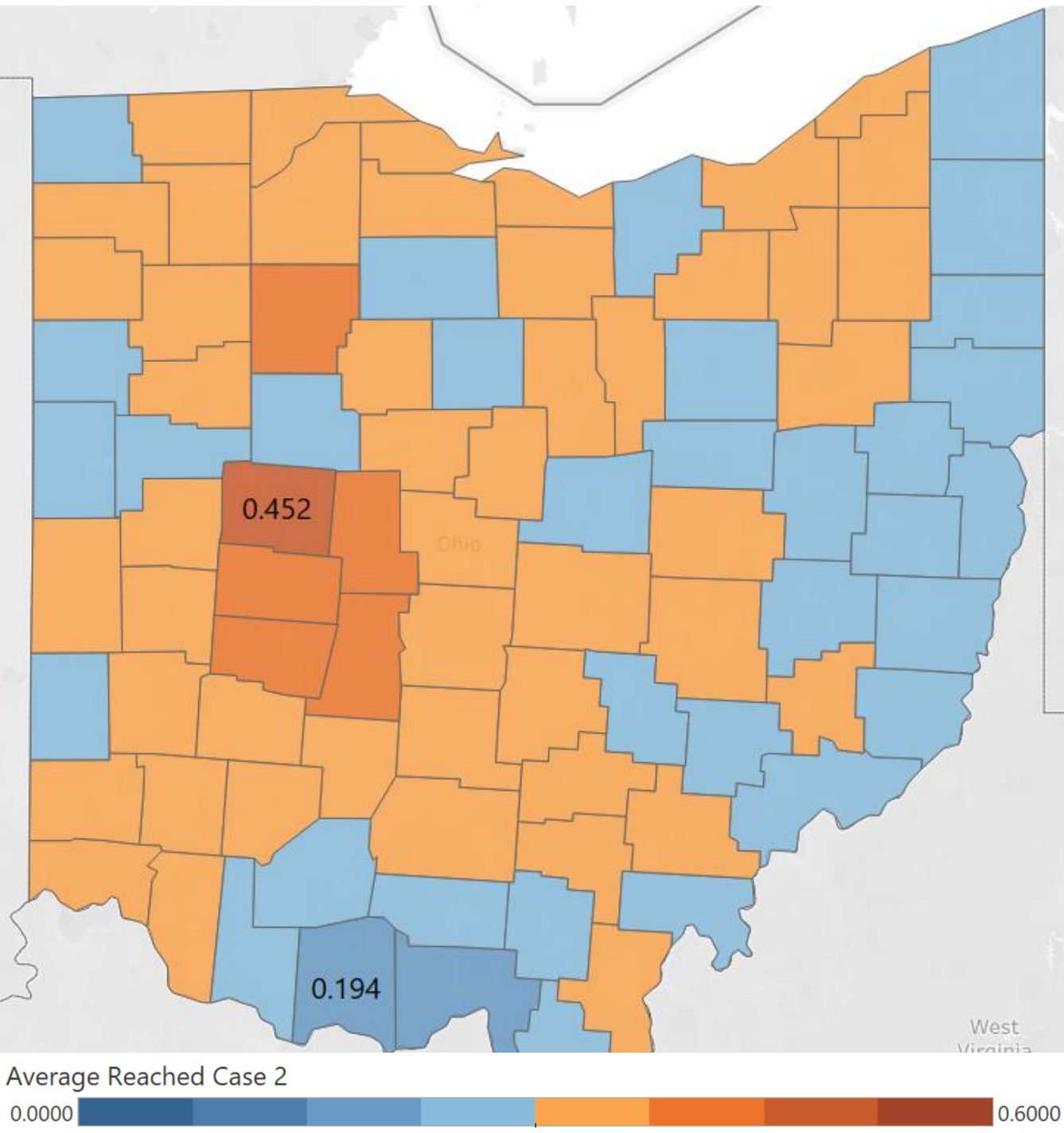
The average cost per case can be valuable for forecasting the amount OOD could expect to pay for a given participant, based on their previous number of cases. On aggregate, this could also help forecast the total amount the agency or region might pay, based on the makeup of its caseload.

Returners not only differ by average amount paid per case, but also the services provided on each case. For example, the number of Job Readiness Training services drop by half, proportionally from first cases to second cases.

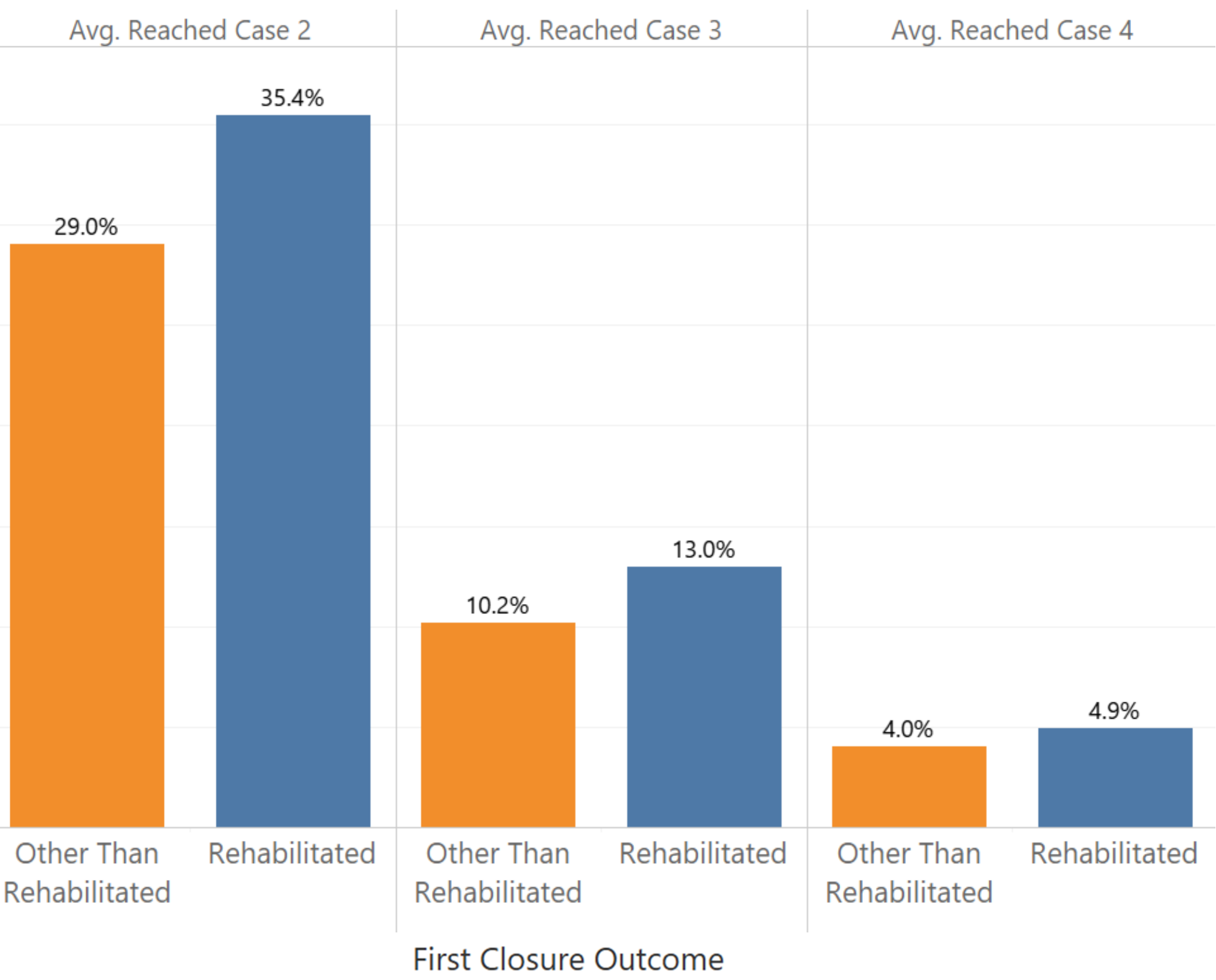
Return Rate

Return rate is the proportion of individuals who make it to a second case, or their likelihood of returning for OOD services.

Return Rate by County



Return Rate by First Case Closure Outcome



Closing a case as “Rehabilitated” means that an individual found employment, whereas a case closed as “Other” includes all possible alternatives for a participant choosing to close their case.

An individual’s likelihood of returning is also impacted by their case closure outcome. A participant’s return rate to a second case is six percentage points higher if their first case closes as rehabilitated, than if that case closes for other reasons.

Employment Advancement for Returners

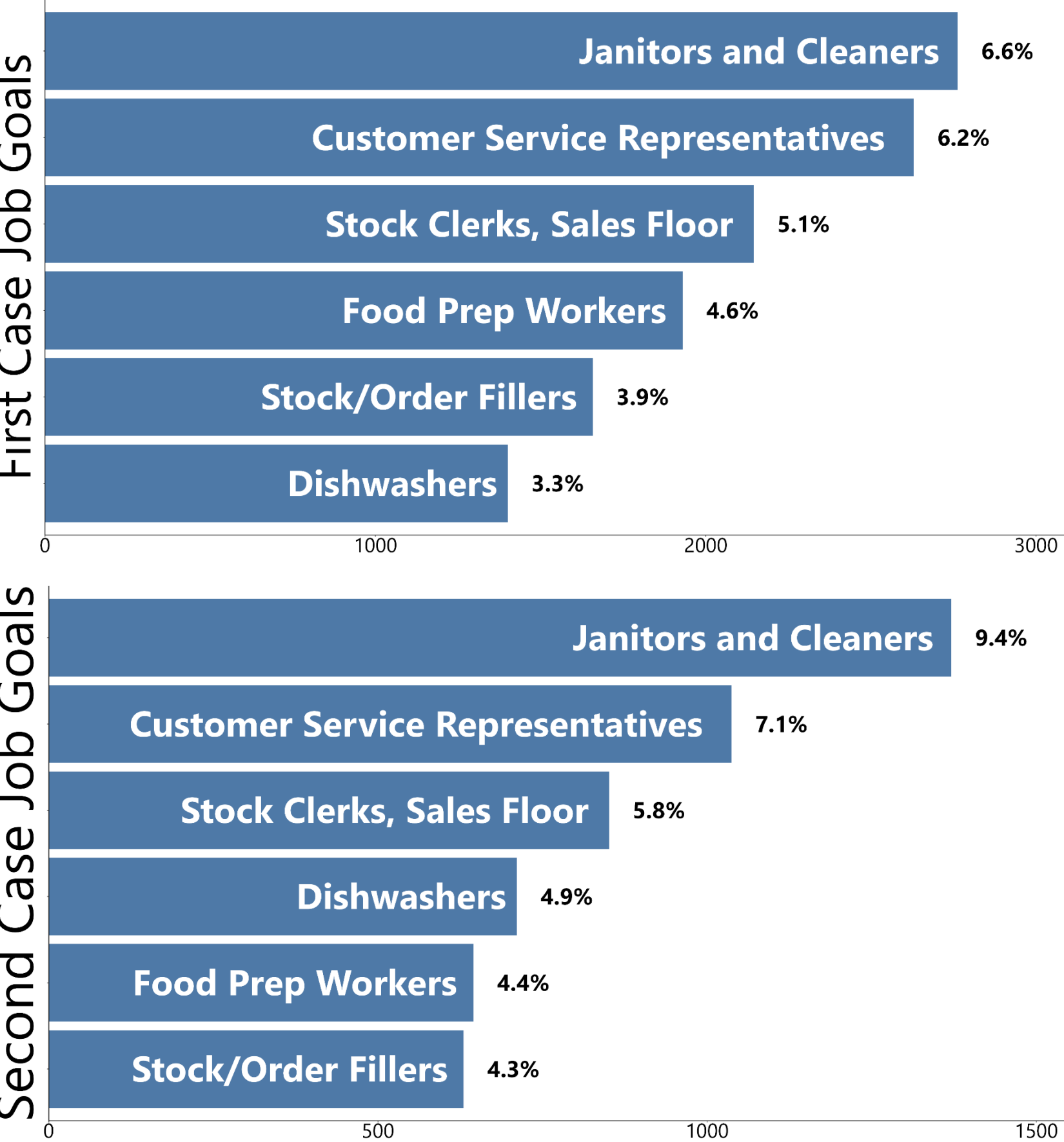
Employment Goals

After exploring the trends and demographics of returning participants, the next consideration is if these individuals are achieving improved employment outcomes after they receive VR services. In this case, R was used to match individuals’ job goals on their first case and their second case, which indicate the field and occupation they wish to work toward.

Among participants with job goals on both cases, 50% remained in the same occupational field (matching by major SOC code). 25% of these participants with both goals had an exact job match, meaning 75% changed occupations between cases.

In terms of employment advancement, which, among other definitions, can mean moving to a higher position in a company or achieving a higher pay, only 2% of those with two goals changed into a management position goal. Further, when aggregating all OOD job goals on first and second cases, there seems to be no trend toward management positions or white-collar occupations.

First and Second Case Job Goals



The bar chart above shows the aggregate first and second case job goals for the top six occupations.

This analysis also revealed the inflation-adjusted average hourly wage for those who are successfully employed drops from \$17.12 on first cases to \$15.48 on second cases. OOD also records “Lowest Accepted Hourly Wage” for those participants who complete their time in service and are job ready. This lowest accepted wage also drops Case 1 to Case 2, from \$12.43 to \$12.08, accounting for inflation.

Conclusion

For as little as \$4,000 a case, OOD can encourage a successful job placement. When some of these individuals return, the vast majority try new occupations, with half of their second job goals being in a completely new field.

Future analysis on returning VR participants could focus on any potential gaps in OOD services, where individuals, on average, are not advancing in employment nor are they obtaining higher wages on their second case. Identifying which participants increase their hourly wages as they return and how OOD served these individuals are two recommended areas of exploration.

Overall, this analysis highlights the scope of the VR program and opens a new area of investigation into returning participants.

Acknowledgements

OERC: Ceanna Burnheimer, Dr. Josh Hawley, Xiangyu Ren
OOD: Becky Halstead, and VR Data & Reporting Team
Fellow Interns: Zachary Howes, Floria Liu, Yaqi Zhang