# **Outcome Validation Study 2018 Highlights**

The 2018 Outcome Validation Study represents the completion of the study's 21<sup>st</sup> year of operation making it one of the longest running post-acute brain injury studies in North America. The study focuses on the functional aspects of living with a brain injury including social role return, post-rehabilitation life activities (vocational return, avocational activities, and school, training and volunteering), levels of paid and unpaid supports and barriers created by mental health and substance abuse problems. The study also includes a Durability component, which examines the long-term durability of the outcomes attained by clients.

In consideration of the 21-year length of the study specific trends and shifts in the individuals served becomes apparent:

### Demographics

- 2018 Age at injury 29.8 vs. 32.1 over the life of the study
- 2018 Time from injury to program Admission 30.7 months vs. 27.8 over the life of the study
- 2018 Motor Vehicle causation 90.5 vs. 90.4 over the life of the study
- 2018 male/ female % 76.2/23.80 vs. 67.5/32.5 over the life of the study
- 2018 GCS <9 100.0% vs. 82.0% over the life of the study

In 2018, the organization treated a slightly older population with an average of a 2.5-year period from injury to post-acute admission. The level of severity of injury was greater than the average of the prior 12 years. These factors are important determinants of outcome following brain injury rehabilitation. Since the start of the organization the focus of the persons served has been individuals with severe brain injuries.

#### **Outcomes Attained**

- 2018 % employed/supported employment 28.6% vs. 27.9% over the life of the study
- 2018 % discharged with 2 hours/day of Attendant care 38.1% vs. 29.4% over the life of the study
- 2018% "No change in primary social role" 42.9% vs. 26.3% over the life of the study
- 2018 % "Negative change in status" 23.8% vs. 28.9% over the life of the study
- 2018 % Reporting Substance Use/Abuse Problems 9.5% vs. 27.2% over the life of the study
- 2018% Reporting "Psychological Problems" 19.0% vs. 22.7% over the life of the study

In 2018 return to employment and supported employment was considerably higher than the prior year but slightly lower than the average. The % of individuals reporting no change in primary social role was also significantly higher than the prior year. Similarly, the number of initials reporting Substance Use and Abuse and Psychological Problems were significantly reduced from the prior year. The relationship of a positive return to one's pre-injury social role and the reduction in the number of individuals reporting Psychological or Substance Abuse problems has a clear relationship with a high number of individuals returning to work or supported employment.

## **Customer Satisfaction**

The Outcome Validation Study uses satisfaction data from consumers, family members and professionals. This component of the study considers communication from the program professionals, involvement in treatment and discharge planning and quality of care as factors related to producing and maintaining quality rehabilitation outcomes. The organization is pleased to report that family members and consumers reported an overall satisfaction score of 96.5% in 2018 and referring professionals reported a 100% level of satisfaction.

## **Durability of Outcomes**

The durability component of the study followed 24 individuals 1-7 years from their respective discharges from the program and observed their functional status in work/avocational pursuits, social role return, care and assistance needs, self-management and physical problems.

- In Work and Avocational return 8.3% showed increased participation and 91.7% were stable in their discharge status.
- In Social Role Return 37.5% showed a stable or improved Social Role function and 62.5% were stable in their social role status since discharge
- In Discharge Destination 79.1% showed stable or fewer care needs and 20.8% required a higher level of care since discharge
- In Self-Management 95.8% showed stable Self-Management Skills and 4.2% showed an increase in their self-care functioning
- In Physical Care Problems 100% showed stable or improved physical health

In general, following discharge a significant number of former program participants demonstrated stable or improved performance, required less care and supervision and were able to engage in social role activates. Each year the Outcome Validation Study conducts a Durability Study. This aspect of the Outcome Validation process is an important aspect of using the study data to determine long-term effectiveness of the program and to determine how people living with a severe brain injury maintain their status after the end of formal rehabilitation.