

Neurologic Rehabilitation Institute of Ontario

Outcome Validation Study 2014

Executive Summary

Introduction

The Outcome Validation Study has been in operation in its current format since 1997 with a revised data collection instrument initiated in 2013. The focus of the study continues to address: post-injury/post-rehabilitation life activities; levels of support required; extent of social role return and the presence of interfering behavioral health and/or substance abuse problems. The domains are consistent with studies undertaken by: Kreutzer, DeJong, Dawson and Chipman, Thommsen, Cifu, Sanders, Kaponen, Ponsford, Silver and others. The Pediatric component of the study follows similar domains to the research of Max (University of Iowa) and Campbell. The year-to-year comparison of the Outcome Validation data demonstrates stability of outcome and minor variations in specific domains which is consistent with changes and shifts in the persons served by NRIO.

2014 Results

In 2014 the average age at injury in the Adult cohort was 36.2 which is above the average of 32.0 in the study. As compared to the benchmark Jones and Evans of 35.4; Community NeuroRehab at 36.3 and the Model TBI Systems at 36.0; there is little variation in age. The time from admission to injury increased to 35.5 months as compared to the average of 25.0 months in the prior years. As compared to the benchmark studies, NRIO clients exceeded the time from injury to admission in the referenced studies. The Mechanism of Injury was Motor Vehicle Accident at 90.9 which is consistent with prior years. The gender mix also remained consistent with prior years. The percent of individuals with a Glasgow Coma Scale <9 was 87.5% as compared to the average of 83.3% over the life of the study.

With regards to outcomes attained (2014 as compared to the study's average): 47.6% returned to employment, supported employment or vocational training as compared to 25%; 33.3% were discharged home with 2 hours of attendant care needs per day vs. 26.5%; 42.9% report "no change" in their primary social role vs. 21.9%; 33.3% report a negative change in their primary social role requiring support and/or modification vs. 27.6%; 17.6% report ongoing substance use/abuse problems vs. 29.3% and 19.05% report ongoing psychological and/or psychiatric problems vs. 27.5%.

The NRIO programs continue to produce effective outcomes in the long-term durability component of the study. Post-discharge improvements were observed in the areas of Vocational/Avocational pursuits (3 of 17); Social Role Return (5 of 17); Discharge Care Needs/Destination (7 of 17); Self-management of behavior (5 of 17) and Reduction in Physical Problems (5 of 17). Regression and additional supports were

required by 1 individual in the Vocational/Avocational domain and 1 individual in the Self-management of behavior. Overall, increases in care needs were minimal.

The Consumer Satisfaction component of the study examines Professional and Referral source and Client and Family responses to a questionnaire which has been consistent through the life of the study. Of the Professional and Referral Source cohort, 95.1% indicated they were satisfied/very satisfied on the aggregated measure with a range of 91.7-100% in the specific domains. The Client and Family Satisfaction aggregate score was 94.3% with a range of 70-100%.

The NRIO Outcome Validation Study also includes a Staff Satisfaction component. In 2014 the aggregate score was 87.5% with a range of 61.1-100% across 33 measured areas of workplace satisfaction.

Trending Implications

The 2014 Outcome Validation Study indicates stable results over the course of time and measurable improvement in the lives of the persons served in the areas of: reduction of care needs, vocational/avocational return, social role return, self-management of behavior and satisfaction with the services, communication, participation and effectiveness of the services they received at NRIO. In the durability of outcome component of the study we can observe lasting results and ongoing improvement.

With the forthcoming changes in the auto insurance legislation which will reduce the available benefits and redefine catastrophic injury further reducing access to benefits, NRIO is concerned that these changes will impact on individuals with brain injuries and through the reduction in benefits and the number of individuals able to access “catastrophic” benefits that people served by organizations like NRIO will experience reduced services and rehabilitation outcomes. Additional and ongoing services will fall on the already over-burdened public sector programs and families. This concern reaches far beyond the implications for NRIO’s programs and becomes a larger issue for brain injury advocacy organizations and potentially, for political action to restore auto insurance benefits.

Rolf B. Gainer, PhD

Founder and Chief Executive Officer

June 2, 2015