Trends in Canadian Inpatient Rehabilitation Outcomes Following Traumatic Brain Injury

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Results

Admission and Discharge Total Function scores (FIM®) decreased over time (Figure 1). Patients in the least resource intensive group had the highest median Total Function Score (FIM®) at discharge (112 points), while patients in the most resource intensive group had the lowest median Total Function Score (FIM®) at discharge (91 points). There was an increase in Active Length of Stay (median 85 days) for clients in the least resource intensive group compared to the most resource intensive group (median 23 days).

Function Change (FIM®) and Active LOS over time (Figure 2). Clients in the least resource intensive group had the highest median Function Change (FIM®) at discharge (23 points), while clients in the most resource intensive group had the lowest median Function Change (FIM®) at discharge (13 points). There was a decrease in Active Length of Stay (median 85 days) for clients in the least resource intensive group compared to the most resource intensive group (median 23 days).

Discharge Total Function Score (FIM®) and Active LOS by RCG (Figure 3). Clients in the least resource intensive group had the highest median Discharge Total Function Score (FIM®) (112 points), while clients in the most resource intensive group had the lowest median Discharge Total Function Score (FIM®) (91 points). There was a decrease in Active Length of Stay (median 85 days) for clients in the least resource intensive group compared to the most resource intensive group (median 23 days).

Summary of findings

Clients in the most resource intensive group tended to:
- Be younger (median age 41);
- Have higher onset days (median 97 days);
- Have longer active lengths of stay (median ALOS = 95 days);
- Spend more time waiting for discharge (median 24-day wait for those who waited any days);
- Have the lowest probability of return home (88% returned home) after IR.

Clients in the moderate resource intensive group tended to:
- Experience the highest functional gains (median Total Function Score [FIM®] Change of 23 points);
- Be more likely to return home (88% returned home) after IR.

Clients in the least resource intensive group tended to:
- Be more likely to return home (88% returned home) after IR;
- Experience the highest functional gains (median Total Function Score [FIM®] Change of 23 points);
- Have the lowest probability of return home (88% returned home) after IR.

Discussion

MIS data can be used to facilitate more proactive discharge planning conversations. By calculating a client’s RCG score and analyzing outcomes associated with that RCG, clinicians can gain a better understanding of the range of possible outcomes, anticipated lengths of stay and can better tailor to discharge.

Over the past 5 years, TBI clients were accepted into IR at continually lower functional levels and were discharged from IR at slightly lower functional levels. A statistically significant improvement in total function change was observed, and lengths of stay did not increase to achieve this improvement.

TBI clients are discharged from IR with relatively high levels of function, which corresponds with modified independence and 5 minutes of care required for activities of daily living.

For more information

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References