



Ontario Acquired Brain Injury (ABI) Dataset Project

North Simcoe Muskoka Local Health Integration Network (LHIN)

Key Findings

Highlights:

Alternate Level of Care (ALC) Days, Length of Stay, Discharge Disposition of ABI Patients, Number of Episodes of Care, and LHIN Concordance



Research Team

Angela Colantonio, Principal Investigator
Senior Research Scientist, Toronto Rehabilitation Institute
Professor of Occupational Science and Occupational Therapy,
University of Toronto
416-978-1098, angela.colantonio@utoronto.ca
Lab: 416-946-8575, Fax: 416-946-8570

Vincy Chan, Research Analyst
Daria Parsons, Consultant
Rika Vander Laan, Consultant
Brandon Zagorski, Statistical Consultant

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- ❖ In 2009/10, the rate of TBI in North Simcoe Muskoka was 2.3 per 1000 and the rate of nTBI was 1.9 per 1000. The rates were higher than the provincial average (TBI – 1.8 per 1000, nTBI – 1.6 per 1000).

Alternate Level of Care (ALC) Days

- ❖ In 2009/10, 13% of TBI and 17% of nTBI acute care episodes had ALC days. From 2003/04 to 2009/10, the mean number of ALC days per ALC episode for TBI patients increased from 18 to 32 days and from 21 to 24 days among nTBI patients.
- ❖ The majority of patients with ALC days were 65 years and older (TBI – 69%, nTBI – 70%). Among TBI patients, 33% had psychiatric comorbidities and among nTBI patients, 15% had psychiatric comorbidities. North Simcoe Muskoka LHIN had the lowest percentage of ALC patients with psychiatric comorbidities.

Emergency Department (ED) Visits

- ❖ Between 2003/04 and 2009/10, there were 6,393 TBI and 3,954 nTBI cases recorded in the ED. From 2007/08 to 2009/10, there were more TBI episodes than nTBI episodes. During this period, 39% of TBI ED visits occurred in the <18 years age group and 29% of nTBI ED visits occurred in the 35 – 54 years age group.
- ❖ The mean length of stay (LOS) in the ED among TBI patients increased from 3 to 4 hours and remained relatively steady among nTBI patients (5 hours) from 2003/04 to 2009/10. The median LOS in 2009/10 was 2 hours for TBI patients and 4 hours for nTBI patients.
- ❖ From 2007/08 to 2009/10, the majority of TBI patients were discharged from the ED (89%) compared to 43% of nTBI patients. Half of nTBI patients were admitted to acute care compared to 8% of TBI patients.

Acute Care Admissions

- ❖ Between 2003/04 and 2009/10, there were 932 TBI and 3,401 nTBI cases in acute care. From 2007/08 to 2009/10, there were substantially more nTBI than TBI episodes. During this period, 37% of TBI admissions occurred in the 75+ years age group and 26% of nTBI patients were between the ages of 35 – 54 years.

- ❖ The mean LOS in acute care among TBI patients increased from 8 to 13 days and from 11 to 14 days among nTBI patients from 2003/04 to 2009/10. The median number of days among TBI patients in 2009/10 was 5 days and among nTBI patients, it was 7 days.

- ❖ Special care days is the sum of all days in all intensive care units. The mean number of special care days increased from 3 to 4 days among TBI patients and from 4 to 5 days among nTBI patients from 2003/04 to 2009/10. The median number of special care days among TBI and nTBI patients was 3 days in 2009/10.
- ❖ From 2007/08 to 2009/10, 50% of TBI patients were discharged home, 17% were transferred to long term care, and 11% died. Among nTBI patients, 31% were discharged home, 21% were transferred to long term care, and 24% died. North Simcoe Muskoka LHIN had the second highest percentage of nTBI patients discharged to long term care and the second lowest percentage discharged home. The percentages of nTBI patients discharged home and to long term care were lower than the percentage in Ontario (home – 40%, long term care – 15%).
- ❖ From 2007/08 to 2009/10, 5% of TBI patients and 8% of nTBI patients were readmitted to acute care within one month.

Inpatient Rehabilitation

- ❖ Between 2003/04 to 2009/10, there were 169 cases coded with brain dysfunction in inpatient rehabilitation. From 2007/08 to 2009/10, 39% were between aged 75+ years.
- ❖ The mean LOS among patients with brain dysfunction in inpatient rehabilitation decreased from 32 to 41 days from 2003/04 to 2009/10. The median number of days in 2009/10 was 28 days. The mean and median LOS in North Simcoe Muskoka LHIN were lower than the provincial mean (51 days) and median (38 days) in 2009/10.

LHIN Concordance

- ❖ The percentage of episodes within the LHIN of patients' residence in 2009/10 was 83% in ED, 92% in acute care, and 96% in inpatient rehabilitation, which were higher than Ontario (ED – 85%, acute care – 78%, inpatient rehabilitation – 61%).