



Ontario Acquired Brain Injury (ABI) Dataset Project

North East 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



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- ❖ In 2009/10, North East LHIN had the highest rate of nTBI (2.3 per 1000) and the third highest rate of TBI (2.5 per 1000), which 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 16% 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 32 to 46 days and from 23 to 37 days for nTBI patients, which were higher than the provincial average in 2009/10 (TBI – 24 days, nTBI – 20 days). North East LHIN had the second highest median number of ALC days among TBI patients (17 days).
- ❖ The majority of patients with ALC days were 65 years and older (TBI – 69%, nTBI – 63%) and a notable percentage had psychiatric comorbidities (TBI – 33%, nTBI – 17%).

Emergency Department (ED) Visits

- ❖ Between 2003/04 and 2009/10, there were 8,732 TBI and 5,756 nTBI cases recorded in the ED. From 2007/08 to 2009/10, there were more TBI episodes than nTBI episodes. During this period, 33% of TBI ED visits occurred in the <18 years age group and 28% 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 5 hours and remained the same (5 hours) for nTBI patients from 2003/04 to 2009/10. The median LOS among TBI and nTBI patients in 2009/10 was 3 hours.
- ❖ The majority of TBI patients was discharged from the ED (82%) compared to 43% of nTBI patients. More than 50% of nTBI patients and 15% of TBI patients were admitted to acute care.

Acute Care Admissions

- ❖ Between 2003/04 and 2009/10, there were 2,243 TBI and 6,192 nTBI cases in acute care. From 2007/08 to 2009/10, there were substantially more nTBI than TBI episodes. During this period, 26% of TBI admissions occurred in the 75+ years age group while 25% of nTBI occurred in the 35 – 54 years age group.

- ❖ The mean LOS in acute care among TBI patients was 11 days in 2003/04 and 14 days in 2009/10. The mean LOS among nTBI patients was 18 days in 2003/04 and 16 days in 2009/10. The median LOS among TBI patients in 2009/10 was 5 days and 7 days for nTBI patients.
- ❖ Special care days is the sum of all days in all intensive care units. The mean number of special care days remained relatively stable from 2003/04 to 2009/10 among both TBI and nTBI patients (6 days). The median number of days in 2009/10 was 4 days for TBI and 3 days for nTBI patients.
- ❖ From 2007/08 to 2009/10, among TBI patients, 59% were discharged home, 13% were transferred to long term care, and 9% died. Among nTBI patients, 39% were discharged home, 13% to long term care, and 24% died. North East LHIN had the highest percentage of TBI patients discharged home.
- ❖ The percentage of nTBI patients (9%) readmitted to acute care within one month was more than twice the percentage of TBI patients (4%) from 2007/08 to 2009/10.

Inpatient Rehabilitation

- ❖ Between 2003/04 and 2009/10, there were 469 cases coded with brain dysfunction in inpatient rehabilitation. From 2007/08 to 2009/10, 37% of brain dysfunction cases occurred in the 40 – 64 years age group.
- ❖ The mean LOS among patients with brain dysfunction in inpatient rehabilitation decreased from 2003/04 (47 days) to 2009/10 (44 days). The median LOS was 33 days in 2009/10. The mean and median LOS in North East LHIN were lower than the provincial numbers (mean – 51 days, median – 38 days) in 2009/10.

LHIN Concordance

- ❖ The percentage of episodes within the LHIN of patient's residence in 2009/10 was at least 95% across all three health care settings, which were higher than the percentage in Ontario (ED – 85%, acute care – 78%, inpatient rehabilitation – 61%).