



Ontario Acquired Brain Injury (ABI) Dataset Project

Central 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, the rate of TBI and nTBI in Central East was the same (1.5 per 1000) and was lower than the provincial average (TBI – 1.8 per 1000, nTBI – 1.6 per 1000).

Alternate Level of Care (ALC) Days

- ❖ In 2009/10, 21% 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 22 to 31 days and from 16 to 24 days for nTBI patients.
- ❖ The majority of patients with ALC days were 65 years and older (TBI – 78%, nTBI – 70%). Central East LHIN had the highest percentage of TBI patients (43%) and the second highest percentage of nTBI patients (32%) with ALC days who had psychiatric comorbidities and were higher than the provincial average (TBI – 32%, nTBI – 24%).

Emergency Department (ED) Visits

- ❖ Between 2003/04 and 2009/10, there were 11,456 TBI and 8,158 nTBI cases recorded in the ED. From 2007/08 to 2009/10, there were more TBI episodes than nTBI episodes. During this period, 36% of TBI visits occurred in the <18 years age group and 27% 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 4 to 5 hours and from 6 to 7 hours for nTBI patients from 2003/04 to 2009/10. The median LOS among TBI patients in 2009/10 was 3 hours and for nTBI patients, it was 5 hours.
- ❖ The majority of TBI patients were discharged from the ED (87%) compared to 41% of nTBI patients. Almost 50% of nTBI patients were admitted to acute care while 10% of TBI patients were admitted to acute care.

Acute Care Admissions

- ❖ Between 2003/04 and 2009/10, there were 2,250 TBI and 8,871 nTBI cases in acute care. From 2007/08 to 2009/10, there were substantially more nTBI than TBI episodes. During this period, 43% of TBI and 29% of nTBI admissions occurred in the 75+ age group, which was higher than the percentage in Ontario (TBI – 30%, nTBI – 23%).

- ❖ The mean LOS in acute care among TBI patients increased from 9 to 15 days and among nTBI patients, it remained relatively stable (16 days) from 2003/04 to 2009/10. The median LOS among TBI patients in 2009/10 was 6 days and among nTBI patients, it was 8 days.
- ❖ Special care days is the sum of all days in all intensive care units. The mean number of special care days increased among TBI patients from 4 to 8 days from 2003/04 to 2009/10 and remained relatively stable for nTBI patients (8 days). The median number of special care days in 2009/10 was 4 days for both TBI and nTBI patients.
- ❖ From 2007/08 to 2009/10, among TBI patients, almost 50% were discharged home, 24% were transferred to long term care, and 14% died. Among nTBI patients, 30% were discharged home, 16% transferred to long term care, and 33% died. Central East LHIN had the highest percentage of deaths in acute care among nTBI patients and one of the highest percentages to long term care among TBI patients.
- ❖ The percentage of nTBI (8%) patients readmitted to acute care within one month was twice the percentage of TBI patients (4%) from 2007/08 to 2009/10.

Inpatient Rehabilitation

- ❖ Between 2003/04 to 2009/10, there were 348 cases coded with brain dysfunction in inpatient rehabilitation. From 2007/08, 36% of brain dysfunction occurred in the 75+ years age group, which was higher than the percentage in Ontario (20%).
- ❖ The mean LOS among patients with brain dysfunction in inpatient rehabilitation decreased from 43 to 34 days from 2003/04 to 2009/10. The median LOS in 2009/10 was 29 days. The mean and median LOS in 2009/10 in Central East LHIN were lower than the provincial mean (51 days) and median (38 days) LOS in 2009/10.

LHIN Concordance

- ❖ The percentage of episodes within the LHIN of patients' residence in 2009/10 was 89% in ED, 90% in acute care, and 98% in inpatient rehabilitation, which were higher than the provincial percentage (ED – 85%, acute care – 78%, inpatient rehabilitation – 61%).