



Ontario Acquired Brain Injury (ABI) Dataset Project

Toronto Central 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 in Toronto Central LHIN was 1.5 per 1000 and the rate of nTBI was 1.6 per 1000. The rate of TBI was lower than the provincial average (1.8 per 1000) while the rate of nTBI was the same.

Alternate Level of Care (ALC) Days

- ❖ In 2009/10, 22% 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 19 to 23 days and decreased from 21 to 18 days among nTBI patients. Toronto Central LHIN had the third highest percentage of TBI acute care episodes with ALC days.
- ❖ The majority of TBI patients with ALC days were 18 – 64 years of age (53%) and the majority of nTBI patients were 65 years and older (56%). Among TBI patients, 26% had psychiatric comorbidities and among nTBI patients, 24% had psychiatric comorbidities.

Emergency Department (ED) Visits

- ❖ Between 2003/04 and 2009/10, there were 14,200 TBI and 12,996 nTBI cases recorded in the ED. From 2007/08 to 2009/10, there were more TBI episodes than nTBI episodes. During this period, 26% of TBI ED visits occurred in the <18 years age group and 25% of nTBI ED visits occurred in the 35 – 54 years age group.
- ❖ The mean length of stay (LOS) in the ED among TBI patients decreased from 6 to 5 hours and from 9 to 7 hours among nTBI from 2003/04 to 2009/10. The median LOS in 2009/10 was 4 hours for TBI patients and 6 hours for nTBI patients.
- ❖ From 2007/08 to 2009/10, the majority of TBI patients were discharged from the ED (62%) compared to 32% of nTBI patients. The majority of nTBI patients were admitted to acute care (62%) compared to 35% of TBI patients.

Acute Care Admissions

- ❖ Between 2003/04 and 2009/10, there were 8,961 TBI and 25,631 nTBI cases in acute care. From 2007/08 to 2009/10, there were more nTBI than TBI episodes. During this period, 24% of TBI admissions occurred in the 75+ years age group and 25% of nTBI admissions occurred in the 35 – 54 years age group.

- ❖ The mean LOS in acute care among TBI patients decreased from 19 to 17 days and from 21 to 16 days among nTBI patients from 2003/04 to 2009/10. The median number of days 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 from 7 to 8 days among TBI patients and remained relatively steady among nTBI patients (9 days) from 2003/04 to 2009/10. The median number of special care days among TBI patients was 3 days and 2 days among nTBI patients.

- ❖ From 2007/08 to 2009/10, 52% of TBI patients were discharged home, 17% were transferred to long term care, and 13% died. Among nTBI patients, 49% were discharged home, 13% were transferred to long term care, and 15% died. Toronto Central LHIN had the lowest percentage of deaths and the highest percentage discharged home among nTBI patients.

- ❖ Toronto Central LHIN had the highest percentage of nTBI patients (12%) readmitted to acute care within one month and it was more than twice the percentage of TBI patients (5%) from 2007/08 to 2009/10.

Inpatient Rehabilitation

- ❖ Between 2003/04 to 2009/10, there were 4,437 cases coded with brain dysfunction in inpatient rehabilitation. From 2007/08 to 2009/10, 45% were aged 40 – 64 years.
- ❖ The mean LOS among patients with brain dysfunction in inpatient rehabilitation decreased from 64 to 62 days from 2003/04 to 2009/10. The median number of days in 2009/10 was 48 days. The mean and median LOS in Toronto Central LHIN were higher 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 lowest in Toronto Central – 50% in ED, 38% in acute care, and 25% in inpatient rehabilitation. Concordance in Toronto Central LHIN was lower than the provincial percentages (ED – 85%, acute care – 78%, inpatient rehabilitation – 61%).