



Ontario Acquired Brain Injury (ABI) Dataset Project

North West 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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Acknowledgements:

- ❖ In 2009/10, North West LHIN had the highest rate of TBI (3.0 per 1000), which was substantially higher than the provincial average (1.8 per 1000). The rate among nTBI patients was 1.9 per 1000 and was also higher than the provincial average (1.6 per 1000).

Alternate Level of Care (ALC) Days

- ❖ In 2009/10, 20% of TBI and 23% 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 21 to 23 days and from 14 to 15 days among nTBI patients. North West LHIN had the highest percentage of nTBI acute care episodes with ALC days and was higher than the provincial average (15%).
- ❖ The majority of patients with ALC days were 65 years and older (TBI – 56%, nTBI – 61%). Among TBI patients, 23% had psychiatric comorbidities and among nTBI patients, 18% had psychiatric comorbidities, both of which are lower than the provincial numbers (TBI – 32%, nTBI – 24%).

Emergency Department (ED) Visits

- ❖ Between 2003/04 and 2009/10, there were 3,663 TBI and 1,748 nTBI cases recorded in the ED. From 2007/08 to 2009/10, there were more TBI episodes than nTBI episodes. During this period, 32% of TBI ED visits occurred in the <18 years age group and 30% of nTBI ED visits occurred in the 35 – 54 years age group.
- ❖ The mean length of stay (LOS) in the ED among TBI and nTBI patients remained relatively steady (3 hours and 5 hours respectively) 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 (78%) compared to 44% of nTBI patients. Almost 50% of nTBI patients were admitted to acute care compared to 18% of TBI patients.

Acute Care Admissions

- ❖ Between 2003/04 and 2009/10, there were 1,189 TBI and 2,346 nTBI cases in acute care. From 2007/08 to 2009/10, there were more nTBI than TBI episodes. During this period, 23% of TBI admissions occurred

in the 75+ years and also the 35 – 54 years age groups. Among nTBI patients, 24% were between the ages of 35 – 54 years.

- ❖ The mean LOS in acute care among TBI patients increased from 9 to 11 days and from 13 to 15 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 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 6 to 7 days among TBI patients and decreased from 8 to 7 days among nTBI patients from 2003/04 to 2009/10. The median number of special care days among TBI patients was 3 days and among nTBI patients, it was 4 days.
- ❖ From 2007/08 to 2009/10, 58% of TBI patients were discharged home, 15% were transferred to long term care, and 10% died. Among nTBI patients, 35% were discharged home, 14% were transferred to long term care, and 16% died. North West LHIN had the second highest percentage of TBI patients discharged home.
- ❖ The percentage of nTBI patients (11%) 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 to 2009/10, there were 226 cases coded with brain dysfunction in inpatient rehabilitation. From 2007/08 to 2009/10, 35% were between the ages of 40 to 64 years.
- ❖ The mean LOS among patients with brain dysfunction in inpatient rehabilitation increased from 72 to 91 days from 2003/04 to 2009/10. The median number of days in 2009/10 was 74 days. North West LHIN had the highest mean LOS and median number of day and was substantially higher than the other LHINs and the provincial average in 2009/10.

LHIN Concordance

- ❖ The percentage of episodes within the LHIN of patients' residence in 2009/10 was 97% to 98% across all three health care settings.