



# Ontario Acquired Brain Injury (ABI) Dataset Project

## Central 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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- ❖ In 2009/10, Central West had the lowest rate of TBI (1.1 per 1000) and the second lowest rate of nTBI (1.3 per 1000). The rates were also lower than the provincial average (TBI – 1.8 per 1000, nTBI – 1.6 per 1000).

#### **Alternate Level of Care (ALC) Days**

- ❖ In 2009/10, Central West LHIN had one of the highest percentages of TBI acute care episodes with ALC days (25%) and was higher than the percentage in Ontario (18%). The percentage of nTBI acute care episodes with ALC days in Central West LHIN was the same as the percentage in Ontario (15%). From 2003/04 to 2009/10, the mean number of ALC days per ALC episode increased among TBI patients from 8 to 12 days and decreased among nTBI patients from 19 to 11 days. In 2009/10, the mean number of ALC days per ALC episode was lower than the provincial average (TBI – 24 days, nTBI – 20 days).
- ❖ The majority of patients with ALC days were 65 years and older (TBI – 69%, nTBI – 60%). The percentage of patients with psychiatric comorbidity was the same among TBI and nTBI patients (23%). Central West LHIN had the lowest percentage of TBI patients with psychiatric comorbidities.

#### **Emergency Department (ED) Visits**

- ❖ Between 2003/04 and 2009/10, there were 3,640 TBI and 2,680 nTBI cases recorded in the ED. From 2007/08, there were more TBI episodes than nTBI episodes. During this period, 32% of TBI ED visits occurred in the <18 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 4 to 5 hours and from 6 to 7 hours among nTBI patients from 2003/04 to 2009/10. The median LOS among TBI patients in 2009/10 was 4 hours and among nTBI patients, it was 6 hours.
- ❖ The majority of TBI patients were discharged from the ED (82%) compared to 35% of nTBI patients. Almost 60% of nTBI patients were admitted to acute care compared to 14% of TBI patients.

#### **Acute Care Admissions**

- ❖ Between 2003/04 and 2009/10, there were 914 TBI and 3,252 nTBI cases in acute care. From 2007/08 to 2009/10, there were substantially

more nTBI than TBI episodes. During this period, 32% of TBI and 24% of nTBI admissions occurred in the 75+ years age group.

- ❖ The mean LOS among TBI patients increased from 6 to 11 days among TBI patients and from 13 to 14 days among nTBI patients from 2003/04 to 2009/10. The median LOS among TBI patients was 4 days in 2009/10 and was 7 days among nTBI patients. Central West LHIN had the lowest median LOS among TBI patients across the LHINs.
- ❖ Special care days is the sum of all days in all intensive care units. The mean number of special care days decreased from 4 to 3 days among TBI patients and from 11 to 10 days among nTBI patients from 2003/04 to 2009/10. The median number of days in 2009/10 among TBI patients was 2 days and among nTBI patients, it was 4 days.
- ❖ From 2007/08 to 2009/10, among TBI patients, 56% were discharged home, 19% were transferred to long term care, and 8% died. Among nTBI patients, 39% were discharged home, 18% were transferred to long term care, and 22% died. The percentage of deaths in Central West was the lowest in the province.
- ❖ Among TBI patients, 5% were readmitted to acute care within one month and among nTBI patients, 7% were readmitted to acute care within one month.

#### **Inpatient Rehabilitation**

- ❖ Between 2003/04 and 2009/10, there were 29 cases coded with brain dysfunction in inpatient rehabilitation. There were no cases under the age of 40 years.
- ❖ The mean LOS among patients with brain dysfunction in inpatient rehabilitation increased from 24 to 41 days from 2003/04 to 2009/10. The median LOS was 19 days in 2009/10, one of the lowest in the province and lower than the provincial average (38 days) in 2009/10.

#### **LHIN Concordance**

- ❖ In 2009/10, the percentage of episodes within LHIN of patients' residence was 82% to 83% across all three health care settings. LHIN concordance for inpatient rehabilitation in Central West LHIN was higher than the percentage in Ontario (61%).