



# Ontario Acquired Brain Injury (ABI) Dataset Project

## South 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, South West LHIN had the second highest rate of TBI (2.5 per 1000). The rate among nTBI patients was 1.8 per 1000. The rates in South West LHIN 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, 9% of TBI and 8% of nTBI acute care episodes had ALC days, which was lower than the percentage in Ontario (TBI – 18%, nTBI – 15%). From 2003/04 to 2009/10, the mean number of ALC days per ALC episode for TBI patients increased from 12 to 26 days and from 15 to 28 days among nTBI patients. South West LHIN had the lowest percentage of ABI acute care episodes with ALC days.
- ❖ The majority of patients with ALC days were 65 years and older (TBI – 67%, nTBI – 65%). Among TBI patients, 30% had psychiatric comorbidities and among nTBI patients, 19% had psychiatric comorbidities.

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

- ❖ Between 2003/04 and 2009/10, there were 14,226 TBI and 7,603 nTBI cases recorded in the ED. From 2007/08 to 2009/10, there were more TBI episodes than nTBI episodes. During this period, 42% of TBI ED 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 3 to 4 hours and from 5 to 6 hours among nTBI patients 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 (82%) compared to 40% of nTBI patients. Among nTBI patients, 51% were admitted to acute care compared to 16% of TBI patients.

#### **Acute Care Admissions**

- ❖ Between 2003/04 and 2009/10, there were 4,141 TBI and 11,076 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 among nTBI patients, 23% were between the ages of 35 – 54 years.

- ❖ The mean LOS in acute care among TBI patients increased from 9 to 11 days and decreased from 16 to 14 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 7 days.
- ❖ Special care days is the sum of all days in all intensive care units. The mean number of special care days increased from 5 to 7 days among TBI patients and from 7 to 8 days among nTBI patients from 2003/04 to 2009/10. The median number of special care days among TBI patients was 4 days and among nTBI patients, it was 3 days.
- ❖ From 2007/08 to 2009/10, 52% of TBI patients were discharged home, 17% were transferred to long term care, and 12% died. Among nTBI patients, 41% were discharged home, 13% were transferred to long term care, and 22% died.
- ❖ The percentage of nTBI patients (10%) readmitted to acute care within one month was more than three times the percentage of TBI patients (3%) from 2007/08 to 2009/10.

#### **Inpatient Rehabilitation**

- ❖ Between 2003/04 to 2009/10, there were 1257 cases coded with brain dysfunction in inpatient rehabilitation. From 2007/08 to 2009/10, 39% were between the ages of 40 to 64 years.
- ❖ The mean LOS among patients with brain dysfunction in inpatient rehabilitation decreased from 63 to 58 days from 2003/04 to 2009/10. The median number of days in 2009/10 was 44 days. The mean and median LOS in South West 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 88% in ED, 81% in acute care, and 76% in inpatient rehabilitation, which were higher than the provincial percentage (ED – 85%, acute care – 78%, inpatient rehabilitation – 61%).