



# Ontario Acquired Brain Injury (ABI) Dataset Project

## Erie St. Clair 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 Erie St. Clair LHIN was 1.9 per 1000, which was higher than the provincial average (TBI – 1.8 per 1000, nTBI – 1.6 per 1000).

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

- ❖ In 2009/10, 10% of TBI and 15% 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 9 to 10 days and decreased from 12 to 10 days among nTBI patients. Erie St. Clair had the second lowest percentage of acute care episodes with ALC days among TBI patients and the lowest median number of ALC days (4 days) across the LHINs. Also, there was a large decrease of 315 days in the total number of ALC days among TBI patients from 2008/09 to 2009/10. This was not the case for nTBI patients.
- ❖ The majority of patients with ALC days were 65 years and older (TBI – 80%, nTBI – 66%), which was much higher than the provincial average among TBI patients (63%). Among TBI patients, 33% had psychiatric comorbidities and among nTBI patients, 24% had psychiatric comorbidities.

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

- ❖ Between 2003/04 and 2009/10, there were 6,282 TBI and 4,617 nTBI cases recorded in the ED. From 2007/08 to 2009/10, there were more TBI episodes than nTBI episodes. During this period, 31% of TBI ED visits occurred in the <18 years age group and 28% 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 nTBI patients from 2003/04 to 2009/10. The median LOS in 2009/10 was 3 to 4 hours for TBI and nTBI patients.
- ❖ From 2007/08 to 2009/10, the majority of TBI patients were discharged from the ED (79%) compared to 41% of nTBI patients. Almost 50% of nTBI patients were admitted to acute care compared to 16% of TBI patients.

#### **Acute Care Admissions**

- ❖ Between 2003/04 and 2009/10, there were 1,881 TBI and 6,110 nTBI cases in acute care. During this period, 29% of TBI admissions occurred

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

- ❖ The mean LOS in acute care among TBI patients increased from 9 to 10 days and remained relatively steady among nTBI patients (12 days) 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 7 days, which was the same as the provincial average.
- ❖ Special care days is the sum of all days in all intensive care units. The mean number of special care days increased from 4 to 5 days among TBI patients and remained relatively steady among nTBI patients (5 days) from 2003/04 to 2009/10. The median number of special care days among TBI and nTBI patients was 2 days in 2009/10.
- ❖ From 2007/08 to 2009/10, 50% of TBI patients were discharged home, 22% were transferred to long term care, and 11% died. Among nTBI patients, 33% were discharged home, 21% were transferred to long term care, and 22% died. Compared to the provincial average, the percentage discharge to long term care in Erie St. Clair was 4% to 6% higher.
- ❖ The percentage of nTBI patients (9%) readmitted to acute care within one month was three times the percentage of TBI patients (3%) from 2007/08 to 2009/10.

#### **Inpatient Rehabilitation**

- ❖ Between 2003/04 to 2009/10, there were 929 cases coded with brain dysfunction in inpatient rehabilitation. From 2007/08 to 2009/10, 36% were between the ages of 40 to 64 years and the percentage of inpatient rehabilitation cases that were aged 75+ years (33%) was notably higher than the provincial average (20%).
- ❖ The mean LOS among patients with brain dysfunction in inpatient rehabilitation decreased from 25 to 23 days from 2003/04 to 2009/10, which was less than half the provincial average (51 days). Erie St. Clair LHIN had the lowest median number of days in 2009/10 (15 days) across the LHINs and was less than half the provincial average (38 days).

#### **LHIN Concordance**

- ❖ The percentage of episodes within the LHIN of patients' residence in 2009/10 was 98% to 99% across all three health care settings.