

# HAMILTON NIAGARA HALDIMAND BRANT LHIN

■ Ranked 1 or 2 of 14 LHINs  
■ Ranked 13 or 14 of 14 LHINs

No	Indicator	LHIN 2018/19- 2019/20	Ontario 2018/19- 2019/20	Rank
1	Annual age- and sex-adjusted incidence rate per 1,000 population for: a) moderate to severe TBI b) concussion/mild TBI	2.5 9.9	2.5 9.1	7 9
2	Risk-adjusted TBI mortality rate within 30 days of admission to hospital per 100 patients	13.7	13.7	8
3	Proportion of ALC days to total LOS in acute care (%)	29.1	25.2	12
4	Proportion of acute patients with TBI (%) discharged from acute care and admitted to: a) general inpatient rehabilitation b) specialized ABI inpatient rehabilitation	3.2 2.5	6 7.5	13 13
5	Median number of days from TBI onset and admission to: a) general inpatient rehabilitation b) specialized ABI inpatient rehabilitation	13 (8-27) 41.5 (17-71)	13 (8-23) 25 (12-44)	6 12
6	Median FIM change of: a) general inpatient rehabilitation b) specialized ABI inpatient rehabilitation	24 25	25 25	9 7
	Median FIM efficiency of: c) general inpatient rehabilitation d) specialized ABI inpatient rehabilitation	1.1 0.5	1.1 0.8	5 10
7	Median time from discharge from acute care/inpatient rehabilitation to first HCC visit for: a) physiotherapy b) occupational therapy c) speech language pathology d) social work	12 (4-59.5) 8 (4-35) 42 (11-113.5) 21 (11.5-49.5)	15 (5-59) 11 (4-46) 55 (13-144) 52 (18-127.5)	4 3 3 1
8	Median number of HCC visits within 60 days of discharge from acute care/inpatient rehabilitation for: a) physiotherapy b) occupational therapy c) speech language pathology d) social work	3 (2-5) 2 (1-3) 2 (1-2) 2 (1-2)	4 (2-5) 2 (1-3) 2 (1-2) 2 (1-3)	8 4 4 4
9	Proportion of patients with TBI (%) discharged from inpatient rehabilitation with a follow-up assessment within 30 days, 180 days, 365 days by a) a) GP/FP (any reason) b) GP/FP (mental health-related reason) c) Specialist (physical medicine, neurosurgeon, neurology) d) Specialist (psychiatry) e) No GP/FP or specialist follow-up assessment within 30 days	78.8, 98.3, 98.2 10.2, 27.1, 29.1 33.9, 52.5, 50.9 2.7, 11.9, 14.6 11.9, NA, NA	75.1, 93.1, 95.5 7.2, 21.2, 28.5 36.8, 66.3, 70.9 4, 12.8, 17 16.5, NA, NA	5* 1† 12† 8‡ 1
10	Proportion of patients with a TBI (%) discharged from acute care to: a) complex continuing care (CCC) b) long-term care (LTC)	6.4 2.3	3.6 1.6	13 12
11	Age- and sex-adjusted all-cause readmission rate at 30 days for patients with TBI per 100 patients	4.1	4.1	7
12	Total number of patients with TBI discharged from inpatient rehabilitation: a) complex continuing care (CCC) b) long-term care (LTC)	NA NA	23 16	NR NR

\*Ranking determined at 30 days

NR denotes No Ranking

†Ranking determined at 180 days

‡Ranking determined at 365 days

# Regional Context: HNHB

Population: 1,437,400 (10.4% of Ontario population)

## Health Services:

### Acute Care

**Level 1 Trauma Centre** Hamilton Health Sciences: Hamilton General Hospital  
**Acute Hospitals with Neuro-Capacity** Hamilton General Hospital  
**Other Acute Hospitals** Hamilton Health Sciences (Juravinski Hospital, Hamilton General Hospital, McMaster -pediatric)  
 St. Joseph's Hospital: Charlton Campus  
 Niagara Health System: St. Catharines General  
 Joseph Brant Hospital  
 Brantford General Hospital  
 West Haldimand Hospital

### Inpatient Rehabilitation

**Specialized ABI** Hamilton Health Sciences Regional Rehab Centre  
**General** Hotel de Shaver Hospital  
 Brantford General Hospital  
 Joseph Brant Hospital

### Outpatient Rehabilitation

**Specialized ABI** Hamilton Health Sciences Regional Rehab Centre  
**General** No

### Community-based Services

**Rehabilitation by registered professionals** Home and Community Care  
 Private services and organizations  
 Hamilton Health Sciences Outreach Services and ABI Crisis Team  
 BICR Outreach  
 Head Injury Rehabilitation Ontario  
 CONNECT at Home

**Brain Injury Organizations** Head Injury Rehabilitation Ontario  
 Hamilton Brain Injury Association  
 Hamilton Health Sciences Outreach Services and ABI Crisis Team  
 BICR Outreach  
 CONNECT at Home



### Access to Specialist:

- Physiatrist** ✓
- Psychiatrist** ✓
- Neuropsychiatrist** ✓ (limited)
- Behavioural psychologist** ✓ (limited)
- Speech-language pathologist** ✓
- Paediatric specialist** ✓ (limited)
- Other: Social worker, primary care** ✓

# Regional Context: HNHB

## What works well in HNHB LHIN

- There is a significant amount of TBI expertise in our LHIN across the continuum of care both in hospital and community.
- HHS ABI Program continues to utilize its expertise to support complex patients both regionally and provincially while continuing to build capacity throughout the province.
- This program offers case management with our Community Intervention Coordinators (CIC), outreach services implemented by our Rehabilitation Therapist and Neuropsychology Services.
- There are also strong relationships between hospital and community which allows us a better opportunity to transition patients effectively
- The demand of these services is illustrated through the data collected by HHS. In the year 2017-2018 our ambulatory program provided services to 2,019 individuals, 2018 – 2019 2,266 and 2019 – 2020 2,556.

## What are some gaps, opportunities or drivers in HNHB LHIN

- As in other areas of the province, there are significant gaps with respect to Neuropsychiatry, PSW supports along with suitable discharge options that can support patients after TBI with complex medical, cognitive and behavioural sequelae. It is rare that we are supporting individuals who aren't experiencing challenges with mental health and addictions and more emphasis and support is needed in this area.
- Difficulty in collecting ABI data (ABI not explicitly coded), which impacts decision making and planning.
- Better management and coordination of waitlists (regionally and provincially).
- Improved transitions between care settings (e.g., hospital-based ABI rehabilitation programs and mental health to community-based ABI rehabilitation).
- Improved coordination of provincial ABI resources with regional resources.

## Client Vignette

- Passionate, hardworking, and a willingness to learn – 21-year-old Cory was working an apprenticeship while attending college when his family and employer noticed a steady decline in his abilities, affecting his work and personal life. Worried about his safety, Cory took a leave from work to further investigate his symptoms.
- Over the course of several years, Cory was admitted to hospitals for mental health treatment, but his balance issues, falls and behaviours continued to increase. It was later determined that his mental health struggles were not the root cause of his illness, but a result of a misdiagnosis. Cory had suffered from a bacterial infection which went undiagnosed and resulted in damage to his brain.
- “Going back and forth to the hospital for treatment left Cory with many symptoms including behavioural problems that were extremely difficult for us to manage at home. We knew we wanted something better for our son. He needed the day-to-day care that we couldn't give him,” says Cory's mother.
- After receiving a recommendation from the hospital, Cory was admitted to a residential service program at HIRO. Through the client and family engagement approach, Cory's rehabilitation program was developed focusing on behaviour management and skill building. “Since being at HIRO we have witnessed so much improvement. We would say that the progress has been substantial. He has activities and programming offered that are more significant to his well-being. We have regular visits with the family, which makes a difference. He is much more stable. HIRO made us realize that there is hope.”
- Cory's dedication and hardworking mindset is prevalent throughout his journey at HIRO as he continues to work with staff on his rehabilitation goals. “I really like it here. My favourite part is making friends.” With the stability of his daily routine and the support from family, staff and housemates, Cory focuses on transitioning towards a higher level of independence. Today, Cory enjoys water aerobics, weight training, planning and shopping for groceries, listening to music and using a book to follow and make his own meals.

<https://hiro.ca/community/success-stories/client/cory/>