NORTH EAST 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	3.5	2.5	12
	b) concussion/mild TBI	10.4	9.1	11
2	Risk-adjusted TBI mortality rate within 30 days of admission to hospital per 100 patients	14.2	13.7	10
3	Proportion of ALC days to total LOS in acute care (%)	27.3	25.2	9
4	Proportion of acute patients with TBI (%) discharged from acute care and admitted to: a) general inpatient rehabilitation	4.6	6	9
	b) specialized ABI inpatient rehabilitation	7.5	7.5	6
5	Median number of days from TBI onset and admission to: a) general inpatient rehabilitation	16 (10-21)	13 (8-23)	10
	b) specialized ABI inpatient rehabilitation	19 (11-35)	25 (12-44)	3
6	Median FIM change of: a) general inpatient rehabilitation	31	25	1
	b) specialized ABI inpatient rehabilitation	18	25	10
	Median FIM efficiency of: c) general inpatient rehabilitation	0.9	1.1	11
	d) specialized ABI inpatient rehabilitation	0.7	0.8	8
7	Median time from discharge from acute care/inpatient rehabilitation to first HCC visit for: a) physiotherapy	26 (13-140)	15 (5-59	12
	b) occupational therapy	25.5 (9-96)	11 (4-46)	13
	c) speech language pathology	113.5 (53.5-260)	55 (13-144)	12
	d) social work	60.5 (31-115.5)	52 (18-127.5)	7
8	Median number of HCC visits within 60 days of discharge from acute care/inpatient rehabilitation for: a) physiotherapy	3 (2-4	4 (2-5)	6
	b) occupational therapy	2 (1-3)	2 (1-3)	2
	c) speech language pathology	-	2 (1-2)	NR
	d) social work	2 (2-3)	2 (1-3)	1
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)	76.9, 92.3, 91.8	75.1, 93.1, 95.5	6*
	b) GP/FP (mental health-related reason)	-, 19.2, 26.5	7.2, 21.2, 28.5	10†
	c) Specialist (physical medicine, neurosurgeon, neurology)	36.5, 50, 53.1	36.8, 66.3, 70.9	14†
	d) Specialist (psychiatry)	-, -, -	4, 12.8, 17	NR‡
	e) No GP/FP or specialist follow-up assessment within 30 days	17.3, NA, NA	16.5, NA, NA	8
10	Proportion of patients with a TBI (%) discharged from acute care to: a) complex continuing care (CCC)	3.0	3.6	7
	b) long-term care (LTC)	2.3	1.6	11
11	Age- and sex-adjusted all-cause readmission rate at 30 days for patients with TBI per 100 patients	4	4.1	6
12	Total number of patients with TBI discharged from inpatient rehabilitation: a) complex continuing care (CCC)	NA	23	NR
	b) long-term care (LTC)	NA	16	NR

*Ranking determined at 30 days
†Ranking determined at 180 days
‡Ranking determined at 365 days

NR denotes No Ranking

Regional Context: NE

Population: 564,400 (4.1% of Ontario population)

Health Services:

Acute Care	
Level 1 Trauma Centre	No
Acute Hospitals with Neuro-Capacity	Health Sciences North
Other Acute Hospitals	There are 25 hospitals in the NE LHIN. Many are small community hospitals. There are 4 additional hub/general hospitals with acute care capacity.

Inpatient Rehabilitation	
Specialized ABI	Health Sciences North – 10 inpatient ABI beds
General	North Bay Regional Health Centre (NBRHC) Sault Area Hospital (SAH) Timmins and District Hospital (TDH) West Parry Sound Health Centre (WPSHC)

Outpatient Rehabilitation	
Specialized ABI	Health Sciences North – Outpatient Brain Injury Rehabilitation Service
General	NBRHC (Outpatient Neuro Day Program) SAH (Outpatient Rehabilitation Program) TDH (Outpatient Physiotherapy Program, Outpatient Occupational Therapy Program, Cognitive Assessments, Driving Screens, Outpatient Speech-Language Pathology Services) WPSHC (OT, PT, Cardiac Rehabilitation, Pulmonary Rehabilitation, Neurological Rehabilitation, Back Care Program and Healthy Aging Program)

Community-based Services	
Rehabilitation by registered professionals	Home and Community Care March of Dimes Canada Private services
Brain Injury Organizations	March of Dimes Canada Nippising Mental Health Housing and Support Services Brain Injury Associations also exist within communities of North Bay, Sudbury, Timmins and Sault Ste Marie. Ontario Brain Injury Association

Access to Specialist:	
Physiatrist	x
Psychiatrist	x
Neuropsychiatrist	x
Behavioural psychologist	x
Speech-language pathologist	✓
Paediatric specialist	✓
Other: Occupational therapist, recreational therapist, clinical/ rehabilitation psychologist, social worker, physiotherapist	✓

Regional Context: NE

What works well in NE LHIN

- Have specialized intensive inpatient and outpatient ABI rehabilitation for those moderate to severe ABI.
- NEO Resource Clinician and NEO ABI System Navigator jointly addressing NEO ABI gaps and challenges.
- Have partnerships and collaborations with Ontario Neurotrauma Foundation, OBIA, Toronto ABI Network, PABIN.

What are some gaps, opportunities or drivers in NE LHIN

- Population is not tracked in the system.
- Misalignment between care/service needs and service provision.
- Staff are not fully trained in TBI/ABI, which might compromise the service provided.
- Insufficient rehabilitation and specialized support in rural areas.
- Issues with housing (e.g., finding safe/suitable housing, long waitlists for supportive housing options, housing with ABI specific supports, accessible housing, community supports, affordability, location of specialized ABI housing).
- Clients with complex needs exceeding what community support services can provide.
- Lack of neurobehavioural rehabilitation and services in hospital and community.
- Issues with waitlists for provincial ABI programs, community-based rehabilitation support workers, community-based ABI services, general psychiatry.
- Issues surrounding the sprawling geography (e.g., shortage of personal care assistance and community support services in the community).
- Lack of services for children and youth.
- Lack of access to services for those with complex and challenging behaviours, medical specialties for outpatient follow-up, neuropsychiatry (long wait times).
- Lack of formal collaboration between mental health/addiction services and brain injury rehabilitation/services across the continuum.
- Limitations with accessing specialized services (e.g., clients must already have a diagnosis, limited resources available to assist those with inaccurate diagnoses).
- Lack of culturally appropriate care and complex ABI supports.
- Data challenges (e.g., data for outpatient care is not available in the sources of data that ICES can access, FIM data is not available for individuals accessing OBIRS). Other measures such as the Mayo-Portland Adaptability Inventory (MPAI-4) may be a preferable option for measuring the type of functional gains/goals that are appropriate for the post-acute outpatient period of rehabilitation.
- Improved concussion diagnosis and follow-up for those that go to ED or family doctor.
- Improved service areas for ABI outreach for rehabilitation support services/community support services.
- Lack of interdisciplinary concussion clinics and publicly funded concussion care.
- Increased understanding of the long-term support needs for those with moderate to severe ABI.
- Improved cross-sector awareness of the impact of ABI.
- Gaps in ABI regional planning, coordination, collaboration.

Regional Context: NE

Client Vignette

Scenario 1

- An individual was receiving ABI Outreach support through MODC but required Supportive Housing (SHP) level of service where they would receive daily services with ABI rehabilitation workers. The individual was on SHP waitlist for multiple years while receiving support in the community from multiple agencies working together. Once a SHP spot became available, they were offered the spot (given that they were at the top of the wait list) and accepted it. The transition between Outreach and SHP program occurred and the individual is now receiving daily ABI support. They are still accessing mental health services but with reduced hours.

Scenario 2

- An individual with ABI was in care at their local hospital and received general rehabilitation. However, with severe cognitive impairments, they required more specialized rehabilitation. The individual received a referral to a provincial ABI rehabilitation program, which they attended. They required 24/7 care, which their family was unable to provide. As such, the individual was repatriated to a local hospital. They submitted applications to ABI specialized housing but are waitlisted. The individual continues to reside in local hospital awaiting an ABI specialized bed with no appropriate discharge environment.

Scenario 3

- An individual with historic ABI resides in a rural area with no ABI services available. While on LHIN PSW support, their extreme behaviours jeopardized their PSW care. There is not any behavioural expertise in NEO to address the individual's behavioural issues. Given that the individual's family is unable to manage their behaviour, they were hospitalized. While in the hospital, they submitted applications to long-term care, which was accepted. However, due to their behaviour, they were removed from long-term care. They are now residing in a hospital, on wait list for ABI specialized housing but there are not any current or foreseeable vacancies or available discharge environment.

Scenario 4

- An individual with ABI went through acute care, regional ABI inpatient rehab, followed by regional Outpatient Brain Injury Rehab Services. They applied for ABI community services and was placed on the wait list. They received PSW support, but they still have rehabilitation needs that require the support of a rehabilitation worker. While awaiting ABI outreach support, the individual fell into crisis situations. They must wait multiple years before receiving service, and during this time they may decompensate and incorporate poor strategies into their daily living.