TORONTO CENTRAL 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	2.3	2.5	6
	b) concussion/mild TBI	9.3	9.1	7
2	Risk-adjusted TBI mortality rate within 30 days of admission to hospital per 100 patients	12.9	13.7	1
3	Proportion of ALC days to total LOS in acute care (%)	35.2	25.2	14
4	Proportion of acute patients with TBI (%) discharged from acute care and admitted to: a) general inpatient rehabilitation	5.4	6	7
	b) specialized ABI inpatient rehabilitation	13.5	7.5	2
5	Median number of days from TBI onset and admission to: a) general inpatient rehabilitation	13 (10-20)	13 (8-23)	6
	b) specialized ABI inpatient rehabilitation	16 (9-34)	25 (12-44)	1
6	Median FIM change of: a) general inpatient rehabilitation	30.5	25	2
	b) specialized ABI inpatient rehabilitation	30	25	4
	Median FIM efficiency of: c) general inpatient rehabilitation	1.3	1.1	2
	d) specialized ABI inpatient rehabilitation	1.0	0.8	5
7	Median time from discharge from acute care/inpatient rehabilitation to first HCC visit for: a) physiotherapy	28 (9-109)	15 (5-59	13
	b) occupational therapy	24 (9-65)	11 (4-46)	11
	c) speech language pathology	71 (48-191)	55 (13-144)	10
	d) social work	81 (16-175)	52 (18-127.5)	10
8	Median number of HCC visits within 60 days of discharge from acute care/inpatient rehabilitation for: a) physiotherapy	4 (2-5)	4 (2-5)	3
	b) occupational therapy	2 (1-3)	2 (1-3)	11
	c) speech language pathology	1 (1-2)	2 (1-2)	9
	d) social work	-	2 (1-3)	NR
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)	74.8, 92.7, 96.6	75.1, 93.1, 95.5	8*
	b) GP/FP (mental health-related reason)	10.6, 25.8, 32	7.2, 21.2, 28.5	2†
	c) Specialist (physical medicine, neurosurgeon, neurology)	46.4, 74.8, 83	36.8, 66.3, 70.9	2†
	d) Specialist (psychiatry)	7.3, 23.2, 30.6	4, 12.8, 17	1‡
	e) No GP/FP or specialist follow-up assessment within 30 days	13.3, NA, NA	16.5, NA, NA	3
10	Proportion of patients with a TBI (%) discharged from acute care to: a) complex continuing care (CCC)	4.1	3.6	11
	b) long-term care (LTC)	1.7	1.6	8
11	Age- and sex-adjusted all-cause readmission rate at 30 days for patients with TBI per 100 patients	4.3	4.1	9
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: TC

Population: 1,264,000 (9.2% of Ontario population)

Health Services:

Acute Care

Level 1 Trauma Centre	St. Michael's Hospital/ Unity Health Toronto Sunnybrook Health Sciences Centre Hospital for Sick Children
Acute Hospitals with Neuro-Capacity	Toronto Western Hospital/ University Health Network (UHN)
Other Acute Hospitals	Michael Garron Hospital Mount Sinai Hospital/ Sinai Health System Toronto General Hospital/ UHN Princess Margaret Hospital/ UHN St. Joseph's Health Centre / Unity Health Toronto Women's College Hospital North York General Hospital Humber River Hospital

Inpatient Rehabilitation

Specialized ABI	Toronto Rehab/ UHN Bridgepoint Sinai Health System West Park Healthcare Centre- Toronto Grace Health Centre
General	Providence Healthcare St. John's Rehab Baycrest

Outpatient Rehabilitation

Specialized ABI	Toronto Rehab Day Hospital/Outpatient Rehabilitation Bridgepoint Sinai Health System Outpatient Neurological Rehabilitation Program – capacity is based on services required
General	Providence Healthcare St. John's Rehab - Sunnybrook Health Sciences

Access to Specialist:

Physiatrist	✓
Psychiatrist	x
Neuropsychiatrist	✓
Behavioural psychologist	✓
Speech-language pathologist	x
Paediatric specialist	✓

Regional Context: TC

Community-based Services

Rehabilitation by registered professionals	Home and Community Care (OT, PT, SLP and SW) Private services Cota Scarborough ABI Outreach Team (Nurse, OT, Behaviour Therapist, Psychologist, Rehabilitation Workers/ Individual Support Workers) Cota ABI Behaviour Therapy Program (Psychologist, Behaviour Therapist, Individual Support Worker) Brain Injury Society of Toronto (OT) Community Head Injury Resource Services (OT, SW, Behaviour Therapists)
Brain Injury Organizations	Cota (Case Management, Adult Day Services, ABI Supportive Housing at Collegeview) PACE Independent Living (Community Program, Adult Day Program) March of Dimes Canada (Supportive Housing) West Park Healthcare Centre (Behavioural Outreach, Adult Day Program) Brain Injury Society of Toronto (Case Management, Workshops and Education Sessions, Support Groups, Community Meetings and Outings) CHIRS (Adult Day Services, Community Support Services, Residential Services, Substance Abuse and BI and Clinical Groups) Cota Scarborough ABI Outreach Program

What works well in TC LHIN

- Patients with concussion who go through Emergency Departments at specific hospitals are streamlined to concussion clinics and supports.
- Efficient referrals and admissions through the RM&R system.
- Paper Inpatient referral process for hospitals who are not using the RM&R electronic system working with the centralized office through the ABI Network.
- Neurosurgical Education Outreach Network program at Sunnybrook supports repatriated ABI patients outside the GTA.
- Virtual rehabilitation is working well.
- The LHIN is rich with resources.
- Provision of case management and adult day programs by ABI programs and services.
- Toronto ABI Network provides comprehensive navigation support for over 1,200 referrals and over 1,400 phone calls for individuals with an ABI to inpatient, outpatient, clinics and community ABI services.

What are some gaps, opportunities or drivers in TC LHIN

- Issues with discharging patients without supportive housing and barriers to specialized rehabilitation and discharge destinations (e.g., homelessness, loss of housing, insufficient housing supports from family).
- Issues surrounding patients who have behavioural challenges and access to ABI services (e.g., waitlists, limiting program criteria, lack of opportunities).
- Need for improved education for family physicians on concussion and available concussion services, resources, and specialists.
- Fragmented system to access concussion services (e.g., multiple locations to receive services).
- Issues surrounding insurance funding and MVA related injuries.
- Confusion about WSIB service pathway.
- Improved supports for non-OHIP funded patients and/or refugees, individuals with ABI, Mental Health, Addictions and Justice issues.
- Improved education for repatriated hospitals to understand their patients may benefit from specialized ABI inpatient rehabilitation.
- Issues surrounding long wait lists for ABI Outpatient Rehabilitation, ABI Supportive Housing and Case Management.
- Individuals with ABI offered in/outpatient rehabilitation at non-specialized facilities.
- Patients sent to non-ABI specialized rehabilitation to free up beds in acute care.
- Misalignment between the population size and available services.
- Lack of specialized community rehabilitative options.
- Need for crisis supports (e.g., crisis beds, case management, psychiatric support, psychological support) and more neuropsychiatry access.

Regional Context: TC

Client Vignette

- A female in her mid-50's had a severe brain injury (i.e., bilateral rupture of an anterior communicating artery aneurysm, subarachnoid hemorrhage, hydrocephalus and stroke) in 2018. She went through a community hospital and received ABI inpatient and outpatient rehabilitation through ABI specialized services. She returned home after receiving rehabilitation to live with her boyfriend. She received some supports through an ABI community-based agency after waiting several months on their wait list. The individual was perceived to be "resistant" to services as she felt she did not need the help. As a result of her brain injury, the individual's insight was very limited, and this caused friction in her home. Consequently, her relationship ended, and she moved out of York Region back into her mother's home in the TC LHIN. The individual's supportive sister attempted to get her involved in Toronto-based ABI community programs; however, this individual's lack of insight was a barrier. It was agreed that a case manager could be involved and she was placed on the wait list. There was pressure on the patient's sister to help. The relationship between the individual and her mother (who is in her 80's) in the home became strained and volatile. The police were involved on a few occasions. This eventually resulted in the individual being hospitalized and placed in a Mental Health unit. This individual cannot return to her mother's home and is now considered homeless. The case manager involved has the individual placed on several ABI supportive housing lists, however there are no immediate openings due to wait lists being 5- 10 years long. The hospital will likely discharge this vulnerable individual within a few weeks likely to a homeless shelter, which may result in the family taking her back home. There have been attempts to involve community behaviour supports but these supports are being offered virtually due to COVID-19 and this individual is not capable of using the technology.

- A male in his mid-50's sustained a concussion through a motor vehicle collision (MVC) in 2016 and now has post-concussion syndrome. He has some funding through his insurance, which was a very difficult system to understand and navigate. He participated in a privately funded Community Based Rehabilitation program for an assessment and rehabilitation. He saw a neuropsychologist (received Cognitive Behavioural Therapy) and a team including an OT and PT. Outside of this clinic, he also saw a physiatrist, a Neurosurgeon and received vision therapy. He was diagnosed with chronic pain syndrome, which was being followed by a Pain Clinic. As a result of this, he is unable to work and this has affected his overall well being – which in turn effects his mood, anxiety and depression. A referral was submitted for an ABI Case Manager, but his needs were beyond the scope of case management services. This individual had significant challenges with nausea, falls, issues with sounds and smells, which made it difficult for professionals to engage and set up appointments to work with him on these challenges. It was mentioned that he would benefit from ongoing trauma counselling and psychology supports. Due to the limited insurance funding, he is no longer eligible for these services privately and they are not readily available through OHIP.