Ontario Neurotrauma Foundation

Fondation ontarienne de neurotraumatologie

TBI Report Card Stakeholder Meeting

CHAMPLAIN REGION

Friday Sept 4, 2020

Agenda

Time	**Topic** (Discussion Leader)
9:00am	Background for ONF TBI Report Card (Judy)
9:05am	Summary of Provincial/Regional Report Cards (Kristen)
9:20am	Considerations for the next TBI Report Card (Kristen)
9:30am	TBI-related Data Collection - new data, standardization, etc. (Judy)
9:40am	Next steps (Kristen)
9:45am	TBI Report Card Summit – October 15th, 2020

Background (Judy)

- Work on the Report Card started 2018 in response to a lack of provincial system-level TBI-related data
- Based on stroke care report cards, which have been key to driving improvements in best practice stroke care and patient outcomes
- TBI care indicators formulated based on:
  - INESSS-ONF Guideline for the Rehab of Adults with Moderate-to-Severe TBI, in particular the Fundamental recommendations
  - Stroke report card indicators
  - Consultation with experts, ICES, and PABIN
  - Available data

TBI Report Card

Purpose:

1. Introduce the first provincial- and LHIN-level TBI Report Cards based on 2017/18 fiscal year.

2. Summarize provincial trends in eleven key TBI indicators over the 5-year period.

3. Present regional summaries of indicators (i.e., West, Central, Toronto, East, and North)

4. Identify actionable recommendations for multiple levels of the healthcare system

TBI Report Card Indicators

No	Care Continuum Category	Quality Domain[1]	Definition
1	Prevention	Surveillance	Annual age- and sex-adjusted incidence rate for TBI per 1,000 population
2	Prevention	Surveillance	Risk-adjusted TBI mortality rate within 30 days of admission to hospital
3	Acute management	Efficiency	Proportion of alternate level of care days to total length of stay in acute care
4	Acute management	Integration	Proportion of acute TBI patients discharged from acute care and admitted to inpatient rehabilitation
5	Rehabilitation	Efficiency	Median number of days from TBI onset and admission to inpatient TBI rehabilitation
6	Rehabilitation	Access	a) Median time from discharge from acute or inpatient rehab and first homecare therapy visits (i.e., SW, OT, PT, SLP) b) b) Proportion of TBI patients discharged from acute or inpatient rehabilitation and followed by homecare therapy visit (i.e., SW, OT, PT, SLP)
7	Rehabilitation	Access	Mean number of homecare therapy visits (i.e., social work, occupational therapy, physiotherapy or speech language pathology) among TBI patients discharged from inpatient acute or inpatient rehabilitation
8	Rehabilitation	Access	a) Proportion of TBI patients discharged from inpatient rehabilitation with a general practitioner/family physician follow-up assessment within 30 days of discharge b) Proportion of TBI patients discharged from inpatient rehabilitation with a follow-up assessment with a specialist (i.e., neurology, neurosurgery, psychiatry or physical medicine specialist) within 180 days of discharge
9	Reintegration	Access	Proportion of TBI discharged from acute care to CCC/LTC (excluding patients originating from LTC/CCC)
10	Reintegration	Effectiveness	Median total length of stay (days) in institutional-based care in the first 90 days from TBI onset
11	Reintegration	Integration	Age- and sex-adjusted readmission rate at 30 days for patients with TBI for all diagnoses

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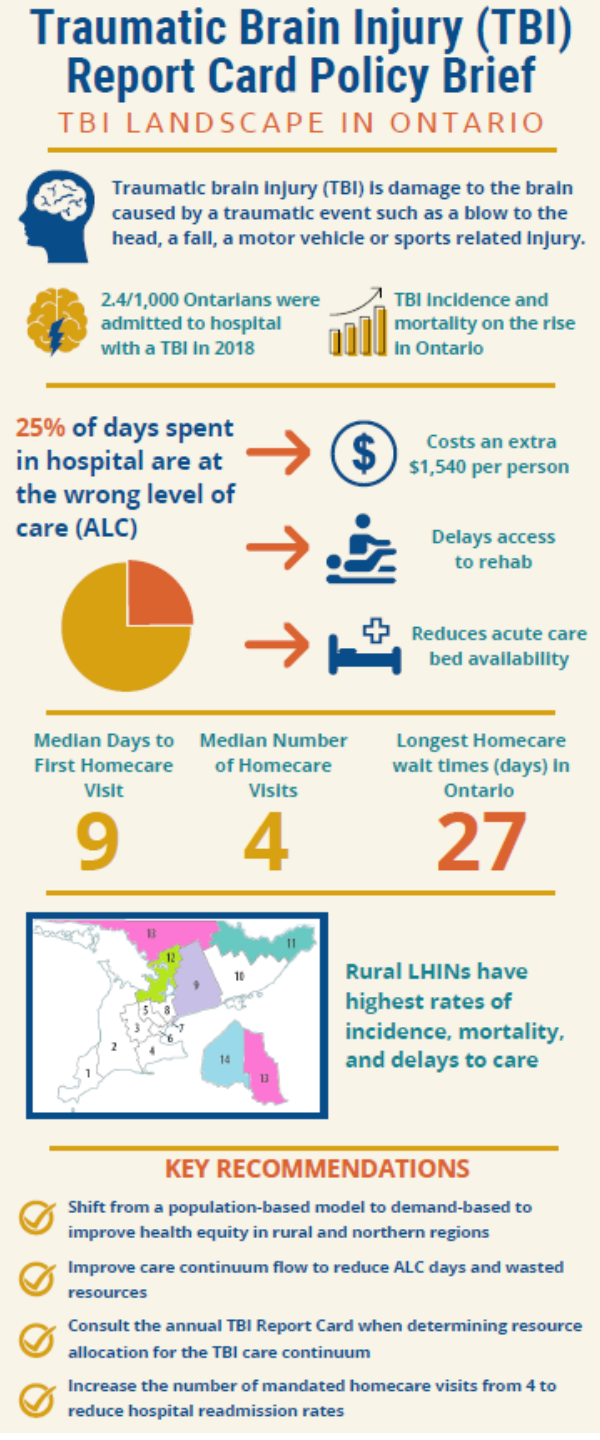
Key Provincial Findings

- TBI-related incidence of admission and mortality on the rise
- Long wait times:
  - 25-30% of total length of stay day were alternate level of care
  - 17 days to be admitted to inpatient TBI rehab (up to 34.5 days)
  - 9 days for 1st homecare therapy visit after discharge (up to 27 days)
- Community care:
  - 76% of patients see a doctor within 30 days of discharge
  - 67% of patients see a specialist within 180 days of discharge
  - 4 homecare therapy visits within 60 days of discharge
- Rural/northern regions have highest rates of incidence, mortality and delays to care



Champlain LHIN – 2017/18

No.	Indicator	2017/18 (2016/17)	Ontario 2017/18	Variance across LHINS (min-max)	Rank
1	Annual age- and sex- standardized incidence rate for TBI per 1,000 population (%)	2.68 (2.83)	2.39	1.85-3.42	9
2	Annual risk-adjusted mortality rate within 30 days of admission for TBI[1] (%)	15.06 (14.78)	13.32	10.98-25.98	11
3	Proportion of alternate level of care days to total length of stay in acute care (%)	20.36 (19.97)	24.31	12.90-36.34	6
4	Proportion of acute TBI patients discharged from acute care and admitted to inpatient rehabilitation (%)	22.7 (22.79)	19.97	12.68-28.52	3
5	Median days from TBI onset and admission to inpatient TBI rehabilitation	30 (32)	17	10.5-34.5	13
6	Median days from discharge from acute or inpatient rehabilitation to first homecare therapy visit	19.5 (24)	9	5-27	13
7	Median number of homecare therapy visits among TBI patients discharged from inpatient acute inpatient rehabilitation	4 (4)	4	3-7	7
8	a) Proportion of TBI patients discharged from inpatient rehabilitation with a GP/FP follow-up assessment within 30 days of discharge (%)	72.87 (73.10)	76.12	42.86-87.30	9
	b) Proportion of TBI patients discharged from inpatient rehabilitation with a follow-up assessment with a specialist within 180 days of discharge (%)	60.47 (70.34)	67.32	55.80-82.56	10
9	Proportion of TBI patients discharged from acute care to CCC/LTC[2] (%)	4.81 (6.19)	5.7	1.29*-9.64	7
10	Mean total LOS days in institutional-based care in the first 90 days from TBI onset[2] (%)	8.17 (9.51)	7.92	5.29-9.09	5
11	Age- and sex-adjusted all-cause readmission rate at 30 days for patients with TBI (%)	3.49 (4.39)	4.18	3.02-4.99	2

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ORGANIZATIONAL RECOMMENDATIONS FOR TBI HEALTH SYSTEMS

1. TBI resources should be reorganized to a demand-based model instead of a population-based model to appropriately distribute resources to underserved northern and rural communities struggling with high incidences of TBI.

2. Develop an immediate communication strategy to disseminate existing open-source TBI/ABI clinical support resources to clinicians in rural and remote areas to increase specialized knowledge within general facilities.

3. Ontario Health Teams (OHTs) should mandate and allocate resources to the small rural hospitals to support the uptake of TBI knowledge and expertise using both active (such as webinars, lectures, accreditation programs) and passive (resource sharing) TBI educational tools to help close the gap in TBI knowledge between specialized and general rehabilitation facilities.

4. To address the inappropriate use of funds and resources caused by 24% of in-hospital time being spent in alternative levels of care, a Community Support Coordinator with links to OHTs should be placed within each in-patient institution to better coordinate efficient transitions from one level of care to the next. This would support the development of integrated care.

5. There should be a clearly identified person (e.g., case or care coordinator, preferably someone who could follow the patient over the continuum of care) who schedules the first follow-up appointment with their patient's GP and remains connected to the patient to ensure effective transition to longer term community-based services. This person should be formally connected to OHTs and would support the provision of integrated care.

6. As long-term outcomes for TBI are significantly influenced by early intervention, financial resources should be used to effectively organize early TBI recovery with the aim of reducing the number of days between TBI onset and inpatient rehabilitation admission. This will lead to reduced care costs and demand in the long-term as well as improve acute care outcomes.

7. Data and trends from this report should be used by Ontario Health and OHTs to prepare for capacity building over the next five years and prepare to meet the demand of those living with TBI. Demands on inpatient, outpatient, and community resources should be considered. Specific evaluation strategies and key performance indicators (such as return to school/work, community independence, social integration, and stable housing) should be agreed upon to assess how systems are responding to changes in demand.

STANDARDS AND THRESHOLD RECOMMENDATIONS

1. Reduce median number of days from discharge to first homecare therapy visit from 9 to no more than 5, as recommended by the Rehabilitative Care Alliance's Best Practice Framework [33]. Shorter times to homecare visits are expected to help maintain functional gains from in-patient rehabilitation and reduce readmission rates and therefore emergency costs associated with ongoing TBI care.

2. Generalized rural facilities should have at least one senior clinician who has completed 200 hours of specialized TBI rehabilitation. If such a clinician is not able to work directly at the institution, then procedures should be in place to support telephone or virtual consultations with such a clinician to enhance the specialization of care.

3. Increase the number of mandated homecare therapy visits within 180 days of first visit from four to at least eight to improve readmission rates, health outcomes, and caregiver burden.

ABI PROVINCIAL NETWORK STAKEHOLDER RECOMMENDATIONS

1. Following the annual release of the TBI Report Card, the provincial stakeholders (e.g., ABI Navigators, Brain Injury Associations, ONF ABI Team, Ministry of Health, Ontario Health Team planners and leadership) should agree upon 3-4 key areas of impact over the next year, self-identify mechanisms of change within their capacity, and collectively develop key performance indicators and outcome goals. It should be recalled that these recommendations come out of TBI data as that is were the evidence is available but should be considered relevant to the broader acquired brain injury sector.

2. As seniors are in the intersection of some of the more concerning observations, such as higher mortality, primarily caused by falls, it is crucial to work with Fall Prevention programs, Public Health and Regional Geriatric Programs to ensure that prevention as well as efficient diagnosis and treatment practices are in place, such as increased frequency and duration of clinical monitoring.

3. As this report card presents individual and average performance of key health and financial TBI indicators of each LHIN; hospital boards of directors, senior hospital managers, and LHIN administrators should reference their relative performance compared to other LHINs when setting priorities and strategic planning to target improvement in areas where they fall below average. As incidence of TBI is increasing in rural and northern communities, specific stakeholders in areas of prevention should utilize this data in determining needs-based prevention education.

4. As healthcare falls under provincial jurisdiction, provincially-focused ABI Conferences (e.g., Toronto ABI Network and OBIA conferences) should incorporate a TBI policy summit to bring together all levels of stakeholders within TBI and set strategic priorities inferred from the annual TBI report card. A systematic meeting process will help hold all stakeholders accountable for participating in evolving the TBI system and allow for regular evaluation and feedback.

Considerations for Future TBI Report Cards

- Key performance indicators
  - New/revised indicators?
  - Cohort? (mTBI vs moderate-to-severe (96%)
  - Stratification?
    - Existing: age, sex
    - New: general vs specialized rehab (95%), outpatient vs community, cause of injury, comorbidities/complex ABI needs

- Recommendations
  - Are they at the right level/detail?
  - New categories of recommendations?
    - Policy (24%)
    - Training (34%)
    - **Data collection (40%)**

TBI Data Collection & Standardization (Judy)

- Uncertainties across the province about which organizations collect data and what data is collected

- Strategies to improve data collection:
  - Provide clearer operational definitions (25%)
  - Create and disseminate standardized reporting forms (22%)
  - Provide more information for staff/clinicians to understand value of standardized data collection (22%) – ***will the Report Card help with this?***

INESSS-ONF Guideline identifies fundamental recommendations that are needed to build a good system for TBI Care

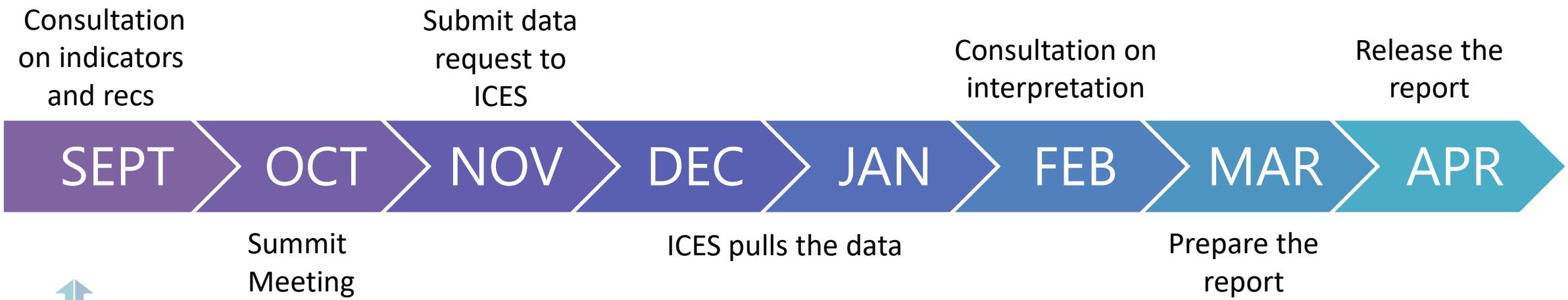
Every individual with traumatic brain injury should have timely, specialized interdisciplinary rehabilitation services.	Need operational definition in system for this and then need coding to reflect this.
The assessment and planning of rehabilitation should be undertaken through a coordinated, interdisciplinary team and follow a patient-focused approach responding to the needs and choices of individuals with traumatic brain injury as they evolve over time.	Currently there is no data that would be able to show this. Need operational definitions for this
The TBI rehabilitation team should optimally consist of a speech-language pathologist, occupational therapist, physiotherapist, social worker, neuropsychologist (and psychometrist), psychologist (with expertise in behaviour therapy), nurse, physician and/or physiatrist, rehabilitation support personnel, nutritionist, therapeutic recreationist and pharmacist.	Need operational definitions of this that would take into account rurality and proximity of services to residence.
The rehabilitation plan should be goal-oriented. There should be a high degree of involvement of the person with traumatic brain injury (TBI), their family/caregivers and the rehabilitation team members in goal setting early in the course of rehabilitation, so that they can be monitored throughout the rehabilitation program.	Need operational definitions of this. In theory all Tx should be goal-oriented and represent meaningful goals and clinical process. This is a current weakness in the system that there is poor understanding of a proper goal setting process that is data driven.

In order to support the continuous quality improvement of their services, TBI rehabilitation programs should monitor the population they serve by collecting and analyzing data pertaining to their clinical and socio-demographic profile. These should include but are not limited to: volume of referrals, age, sex/gender, race. etiology of TBI, severity of TBI, Glasgow coma scale, duration of PTA	This is spottily collected across the continuum of care, needs process to harmonize. There is a role for MOH to request this.
In order to support the continuous quality improvement of their services, TBI rehabilitation programs should monitor key aspects of their processes and efficiency, including but not limited to: injury onset days to start of rehab, LOS in rehab, intensity of services, measures of functional change progression (ex. FIM, FAM, DRS. MPAI4, CRS-R), d/c disposition, school/work on d/c, sat and QOL	This is spottily collected across the continuum of care, needs process to harmonize. There is a role for MOH to request this.
Individuals with ongoing disability after TBI should have timely access to specialized outpatient or community-based rehabilitation to facilitate continued progress and successful community reintegration.	Need operational definitions of this. Proxy is looking waitlists and number of patients who are not community-ready
Rehab programs for individuals with TBI should be developed in collaboration with caregivers to ensure carryover into the community.	Need operational definitions of this. Need attention on sustaining gains and support in community – community does not have sufficient capacity – waitlists and caregivers burnout are indicators of this.
All individuals with TBI who are conscious, including those in post-traumatic amnesia (PTA), should be assessed for common impairments including:	Need to operationalize this. This in theory is low hanging fruit. There is a role for MOH to request this.

Next Steps (Kristen)

- Who are the key ABI stakeholders in your region?
  - What are the ideal communication channels and formats to present information?
- What will you do with this information and how can ONF support you?
- Are you part of an OHT? What would help to increase your visibility/participation in OHTs?

TBI Report Card Timeline



SAVE THE DATE

TBI Report Card Virtual Summit Meeting

OCTOBER 15, 2020 | 8:30 AM - 12:00 PM
MEETING LINK AND AGENDA TO FOLLOW

This meeting, hosted by the Ontario Neurotrauma Foundation, aims to bring together all levels of provincial stakeholders within TBI to develop a prioritized action plan out of the TBI Report Card and provide feedback for the next iteration.

FOR MORE INFORMATION, EMAIL **KRISTEN.REILLY@ONF.ORG**

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Please feel free to reach out with additional feedback at any time:

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