Update April 3, 2012

Upcoming Website

We are currently working with Align Inc. to develop a website for the Concussion/mTBI Strategy. The website, ConcussionsOntario.org will be launched in May and will contain the work relevant to the Strategy. With the assistance of the Coordinating Committee, we have designed the site around the Strategy’s five themes: recognition and awareness, diagnosis and early education, treatment of persistent symptoms, psychosocial and reintegration, and evaluation of access to care. ConcussionsOntario.org will target medical and non-medical professionals, researchers, administrators and policy-makers. Members of the public who visit the site will be referred to appropriate sources of information as the site will not duplicate existing efforts, but link to them. As with the Concussion/mTBI Strategy, the site will approach the issue from a systems perspective looking at what we are doing in all the areas of the Strategy with regards to research, education, policy, standardization of practice, and evaluation of performance. It will be a great location to host the resources, tools, research findings, and successes created through and supported by the Strategy.

CME Module Development

Ontario Neurotrauma Foundation has been approached by the Canadian Medical Association (CMA) to partner with them on the development of a Continuing Medical Education (CME) module for physicians on recognition and treatment of concussions. The module will be developed by CMA and their provider of CME, Memorial University Newfoundland, in concert with subject matter experts recommended by ONF and using materials derived from ONF research and other sources. The module will be accredited and the course evaluated in terms of learner knowledge gains and intent to change practice. We are very excited to have this opportunity to partner with CMA and to have this potential impact on medical practice. The module will be developed over the next four to six months.

Legislation Tabled at Queen’s Park

On March 6, 2012 legislation was tabled on Bill 39: Education Amendment Act (Concussions), 2012 for the first reading at Queen’s Park by the Honourable Laurel Broten, Minister of Education, with support from the Honourable Deb Matthews, Minister of Health and Long-Term Care.

The Bill amends the Education Act. Part XIII.1 of the Act is renamed “Pupil Health” and a new section is added to it. The new section authorizes the Minister to make policies and guidelines respecting head injuries and concussions and sets out a list of matters that this power includes. The section requires school
boards to establish policies and guidelines with respect to head injuries and concussions and requires school boards to address the specified matters.

This is an excellent step forward to further awareness, improve on prevention of concussions, and facilitate appropriate management in the period following injury including return to classroom activity. As this fits with much of our work to date, the Concussion/mTBI Strategy anticipates involvement with the Steering Committee as this work is further developed.

**Update on the Review of Prognosis after Concussion/mTBI**

The results of this review are being eagerly awaited by those involved in the Concussion/mTBI Strategy. Led by Dr. David Cassidy, this international systematic review is expected to be completed by June 2012. The screening of potential articles has been completed and 300 papers have been reviewed so far with an acceptance rate of approximately 43%. Review of the selected papers should be completed by the end of April. The accepted papers will be incorporated with the previous 2004 study to provide an updated picture of factors associated with prognosis. The work has been accepted by a journal to be featured in a special issue.

**New Projects Moving Forward**

As a result of the second Summit on the Concussion/mTBI Strategy held in October 2011, Ontario Neurotrauma Foundation is supporting five new projects aimed at better understanding current concussion care in Ontario and setting the stage for improvement. The projects, led by each of the five working groups, are as follows:

**Sports: Review of Concussion Recognition and Management Tools**

The Recognition and Awareness Working Group will lead a project to review existing and validated evidence-based concussion recognition and management tools for sports, in order to suggest the most appropriate approaches and promote practical “on the ground” uptake of the tools by school coaches, teachers, nurses, trainers, and athletic therapists in Ontario. The project will also determine whether existing tools are known to this audience, as well as players and parents, and, if known, whether they are being used and to what degree.

The project will involve a systematic compiling of existing concussion recognition and management tools that are reviewed against criteria such as validity, reliability, base of evidence, accessibility, etc. and to identify tools that are practical, feasible, and can be administered within a reasonable time.

The results of this project will provide guidance on the current state of validated concussion screening tools for use in sports-related concussions. The findings may suggest an existing tool that could be implemented in Ontario schools or may demonstrate the need for development of additional tools for Ontario schools. The project may also inform the implementation of Bill 39.

**An Ontario Survey of Emergency and Primary Care Providers on Concussion Diagnosis and Initial Management**

The Diagnosis and Early Education Working Group will lead a project to investigate the current knowledge of emergency and primary care providers on concussion diagnosis and initial management.
A survey will be developed and administered to determine the current knowledge of concussion diagnosis as well as diagnostic algorithms and protocols being used by emergency departments (ED), family physicians, pediatricians, nurse practitioners (NP), and physician assistants (PA) in Ontario. The survey will enable the assessment of: a) knowledge of concussion diagnosis; b) understanding of initial management using return to play/school/work guidelines; c) use of existing concussion protocols; and d) opinions about perceived barriers to protocol use.

Obtaining a baseline understanding of how concussion is being diagnosed and managed is critical to moving towards standardized practice and improved service models. This project may also help address the barriers to protocol use and set the stage to measure the effectiveness of any future interventions to increase knowledge.

**Evaluation of the Guidelines for mTBI and Persistent Symptoms**

The **Management of Persistent Symptoms Working Group** will lead a project to evaluate the utility and uptake of the mTBI Guidelines by sports medicine physicians and military physicians introduced to the guidelines. Feedback will also be obtained from the physicians regarding facilitators and barriers to adaptation of the guidelines.

Working with sports and military physicians, an educational forum using relevant case-based examples of mTBI and persistent symptoms will be created. The 3-hour educational forum will be offered twice in five Ontario communities. A pre-post test design will be used to determine whether participating physicians have changed their practice by using the mTBI Guidelines and any barriers during the implementation will also be identified.

The results from this project are expected to inform the update of the Guidelines for mTBI and Persistent Symptoms. The project will also broaden exposure and foster formal linkages with military and sports medicine physicians in relation to guideline support, participation in the Concussion/mTBI Strategy, and improved mTBI care.

**Development of Return to Work Guidelines for mTBI: Phase 1**

The **Psychosocial and Reintegration Working Group** will lead a project to identify and collate return to work (RTW) systematic reviews and guidelines across health conditions to determine if some of the principles used for successful RTW in other conditions might apply to mTBI. A search will be conducted to identify existing systematic reviews and guidelines addressing RTW after injury or illness across all health conditions. Collaboration with the developers of the “Guidelines for Treatment of Concussion/mTBI and Persistent Symptoms” (Dr. S. Marshall et al.) will ensure that duplication over existing TBI literature does not occur.

A recommendations matrix will be created from the identified sources, not to create new recommendations, but to select recommendations from currently published work that might be
applicable to mTBI. A summary report of RTW core principles that can be relevant to mTBI will be produced and proposed to the mTBI/Concussion Guideline developers. A subsequent phase of this work will include an expert consensus conference to finalize the set of guidelines for return to work after mTBI to contextualize them to the Ontario setting. Of particular importance are guidelines that can be set in place to assist RTW of individuals who are not covered by workplace insurance. The consensus conference will inform the return to activity element of the Guidelines for Conussion/mTBI and Persistent Symptoms that are being updated in 2012.

Evaluating Access to Appropriate Concussion Care in Ontario

The Evaluation of Access to Care Working Group will lead a project to evaluate the current state of concussion care provided to adults and children in Ontario using a multimodal approach. OHIP billings and other sources will be analyzed to determine how many family physicians and pediatricians record concussion as a diagnosis and how many of these patients are referred to neurological or rehabilitation specialists. The number of patients with concussion seen in the ER who get subsequent access to specialists will also be assessed. In addition, insurance (HCAI) and WSIB databases will be used to examine concussion care for those with third party insurance coverage.

This project will also build on the previous ABI survey completed by the Concussion/mTBI Strategy, conducted via telephone with 18 adult and pediatric ABI services/clinics across Ontario. Information was gathered on the type of patients seen; service criteria; services and expertise available; policy and funding issues; and existing capacities, needs, and gaps. The working group will expand the survey to include sport injury clinics and any other available concussion care services to arrive at a complete picture of concussion services and how they are accessed.

Attempts will also be made to collect indicators proposed at the October 2011 Summit that apply to follow-up care after concussion diagnosis. Overall, these different approaches will lead to a better understanding of gaps in current practice of concussion care for adults and children. Another expected outcome will be the quantification and distribution of family physicians and pediatricians seeing concussions in children and adults and the frequency of these episodes.

For more information on the Concussion/Mild Traumatic Brain Injury Strategy, please contact:

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