LIVING GUIDELINE FOR DIAGNOSING AND MANAGING PEDIATRIC CONCUSSION

Methodology: Living Guideline
The ONF has committed to supporting the real-time update of this guideline and any derivative products. This involves the following process:

1. Monthly scoping review
   - A monthly search of the following two databases:
     a. Medline
     b. PsycInfo
   - The Pediatric Concussion Guideline literature search strategy (a peer-reviewed template) will be used as part of this process. [Link to search strategy.]
   - Search outputs will undergo preliminary filtering by expert reviewers to eliminate articles that are specific to concussion.

2. Article review and screening
   - Articles must meet the following inclusion criteria:
     o Level 1: Themes specific to pediatrics; ages 0-18 years old; concussions and mTBI
     o Level 2: mTBI articles related to concussion
     o Level 3: Articles related to treatment and assessment, and align with themes (level 1)
   - A dedicated coordinator with knowledge and expertise in this area will conduct screening. A higher-level screening will be completed to ensure that the mTBI are indeed concussions and that the articles relate to treatment, assessment and to relevant domains. The level of evidence for individual research papers will be assigned using the Oxford Centre for Evidence-Based Medicine 2011 Level of Evidence Criteria.1
• Transparency of the process will be upheld using the following steps:
  a. Development of an operations manual to ensure that procedures are transparent.
  b. Use of Covidence (systematic review software) by the coordinator to access the screeners to view the sorting and screening of each paper to ensure proper procedures are followed.
  c. Completion of Covidence training by reviewers to ensure that reviewers understand the task and assess if they are consistent at the task.
  ▪ Provided detailed instructions to guide reviewers
  ▪ Site monitoring to ensure adequate screening

3. Inclusion of critical papers

• Critical articles will be evaluated by the qualified project coordinator.
• The coordinator will annotate the articles and designate them into potentially relevant domains.

4. Engagement of domain experts

• Critical articles will be forwarded to the appropriated team of expert reviewers specializing in that specific theme/domain. A minimum of quorum of three expert reviewers will be required to proceed to the next step of modifying the recommendation.

5. Modification of recommendation

• Modification of the recommendation will be based on the quality of the evidence. The expert reviewers will vote via REDCap, and in cases of unanimous decisions, the necessary changes to the recommendations will be made.
• Voting options will include
  a. No change to the guideline recommendations or the level of evidence
  b. Modify the level of evidence (up or down)
     ▪ If there is a modification to the level of evidence, panel experts who have indicated that their expertise is relevant to the domain will be contacted
to vote. A minimum of 75% endorsement by the panel experts will be required to proceed with this guideline change.

c. Modify the wording of the recommendation(s) (note: the domain experts will work with the research coordinator to suggest new wording).

- If there is minor word changes, a minimum of 75% endorsement by the panellist experts will be required to proceed with this guideline change.
- If there is major word changes, a minimum of 75% endorsement by the entire team will be required to proceed with this guideline change.

d. Delete the recommendation(s) entirely

- A minimum of 75% endorsement by the entire team will be required to proceed with this guideline change.

- In the event of disparity across the team, the coordinator will arrange for a teleconference of the content experts to discuss and obtain consensus whether the new evidence should modify the recommendation or not.
- Once consensus is reached, the living guideline document will be updated.

References: