

Back2Play - Development of a Concussion Management Platform for Children and Youth: Bridging the Gap Between Research and Practice

Summary

According to CDC estimates, 1.6 - 3.8 million sports and recreation-related concussions occur each year in the US. A concussion is a type of traumatic brain injury with symptoms such as headache, nausea/vomiting, dizziness, and confusion.

Currently, people who have concussions recover at home with physical and mental rest for 14 – 21 days. After the onset of a concussion, a person is 3-5 more likely to have another concussion. The highest risk is for those who return to play before their symptoms have completely gone away. Therefore, there is no ongoing observation or treatment for concussion.

A group of McMaster researchers have developed and evaluated a comprehensive concussion management platform that can monitor and evaluate symptoms; real-time activity monitoring that guides youth on how to adjust the activity to minimize symptom exacerbation through recovery from concussion.

The Back to Play App (B2P App), will be available to children/youth post-concussion via mobile device. The platform will guide children/youth through the revised CanChild RTA and RTS Protocols; include real-time monitoring of biological variables including heart rate, movement, symptoms, and cognitive activity

Contact

Sabrina Kirby, Business Development Officer

kirbysl@mcmaster.ca



A Brain Concussion is a violent jarring or shaking that results in a disturbance of brain function.

Advantages

- Provides a real-time activity monitoring concussion management platform
- real-time monitoring of biological variables including heart rate, movement, symptoms, and cognitive activity
- guides children/youth from exacerbation to recovery
- follows CanChild RTA and RTS protocols

Applications

- real-time activity monitoring concussion management platform
- Updating patients and physicians regarding their concussion with evidence
- Accurate information available for physicians at the point of care