

TRANSCENDENT Speaker Series

How do we define and measure recovery from concussion?

Physiological and clinical recovery from concussion

A typical recovery from a sports-related concussion takes 2 weeks for most adults and 4 weeks for most children. Although, around 30% of children experience a recovery of more than 4 weeks.

It is important to recognize that the definitions of clinical and physiological recovery are different depending who you ask.

Did you know...

Clinical recovery has been defined in many ways, such as the **time to become symptom-free**, to **return to baseline** (or normal), or to **fully return to school, work, or sport**.

To support clinical decisions about recovery, a range of tests and symptom scales can be used, such as the Buffalo Concussion Physical Examination or the Buffalo Concussion Treadmill Test.



While there is discussion about the use of **neuroimaging** and **biomarkers** to support decisions about recovery, there is not yet the evidence needed to support their use.



It is important to remember that not everyone who is physiologically or clinically recovered is ready to return to their activities, such as sport. There is also a **psychosocial aspect of recovery** that can affect readiness to return to activities.

Psychosocial recovery from concussion



After a concussion, individuals may experience psychosocial challenges, for example, reduced resilience. Two possible large contributors to psychosocial recovery can be the presence or absence of **peer relationships** and **social support**.

With that in mind, when thinking about recovery, it is important to consider not only whether someone has returned to school/sport, but also whether they are back to their normal **social participation**.

There are tools to help support the assessment of psychosocial recovery, such as the Sport Concussion Office Assessment Tool 6 (SCOAT6), which considers factors such as anxiety, sleep, depression and self-efficacy.

The key takeaway: Many variables affect an individual's recovery from a concussion. There is a need to continue understanding how different variables impact recovery to better gauge when someone has recovered.

This information is based on a talk done for the TRANSCENDENT team by Dr. John Leddy and Dr. Keith Yeates.