

## **Long term functional outcome after acquired brain injury**

Following an acquired brain injury (ABI), individuals are susceptible to various, continuing sequelae that compromise their functional recovery and quality of life. Accordingly, the focus of post ABI review has shifted towards ongoing surveillance of symptom trajectories. This focus has also enabled better management for specific injuries in the form of designated diagnostic and treatment clinics. Our recent ABI research initiatives include: olfactory impairment in traumatic brain injury (TBI) and the subsequent development of an olfactory impairment clinic and the initiation of a program to treat ongoing symptoms post-concussion.

An Australian outcome study focused on the long-term difficulties experienced by patients with TBI identified the natural course of recovery from olfactory impairment, whereby 64% of patients had anosmia (with 24% being unaware of the deficit).

Concussion is an emerging area of focus within rehabilitation medicine. Whilst it is considered a mild injury, its sequelae impedes an individual's ability to resume their normal lifestyle. Epworth Rehabilitation's Concussion Clinic was established to treat symptom clusters (physical, thinking, sleep and emotional). Preliminary clinic results have indicated significant decreases in the severity of symptoms and increases in patient activity.

Patient reported outcome measures (PROMs) are becoming more prominent in gauging rehabilitation outcomes. The PSC (endorsed by the World Stroke Organization and incorporated into the Canadian Stroke Best Practice Guidelines) identifies common deficits after stroke and suggests subsequent referral pathways. Studies administering the checklist in Australia/China in 209 patients found similar rates of unmet needs across various functional domains at six months. Similar patient measures could be trialed in TBI.

## **Conclusion**

As outlined above, outcome research has directed the establishment of new clinics to focus treatment on residual disability post ABI.