PREVENTION. CARE. RECOVERY.
Te Kaporeihana Āwhina Hunga Whara

GP Frequently Asked Questions

Primary Care Concussion Pilot

May 2022

The Pathway

Why has ACC developed this new pathway?

Outcome data suggests that many patients with concussion can be managed safely and effectively in primary care, with the provision of early assessment and education.

For patients with an injury description which included "Concussion", 24% were referred into ACC Concussion Services but 50% of those patients receiving Concussion Services, required minimal input beyond initial assessment and education.

The data, from surveys and interviews with primary care practitioners, found that:

- 16% of primary care health professionals "do not feel confident" in their ability to assess concussion patients", and 27% feel "neutral" about their ability to assess concussion patients;
- They "feel limited" in their assessment and management of concussion/mild TBI within a 15-min consultation;
- There's a desire for more information about the assessment and management of concussion;
- That there isn't a consistent tool for assessing mTBIs in general practice;
- 57% of primary care health professionals would prefer an assessment tool was integrated with current PMS.
    - *Knowledge and attitudes (KA) surveys on concussion in sport: Doctors September 2017 Survey. Report #4 to Accident Compensation Corporation. SPRINZ, AUT.*

What are the aims of the pathway?

The new pathway is aimed to support General Practice in the early assessment, diagnosis, and management of patients with concussion / mild traumatic brain injury (mTBI).

How will this pathway be tested?

Testing will be a collaborative approach between ACC, PHO's (Pegasus and Procare) and AUT.

The Pilot will be conducted in the Auckland and Canterbury regions.

Aiming for 1000 assessments over a twelve-month period. This is to enable a sufficient volume of concussion cases to validate the outcomes and provide practical feedback from GP's

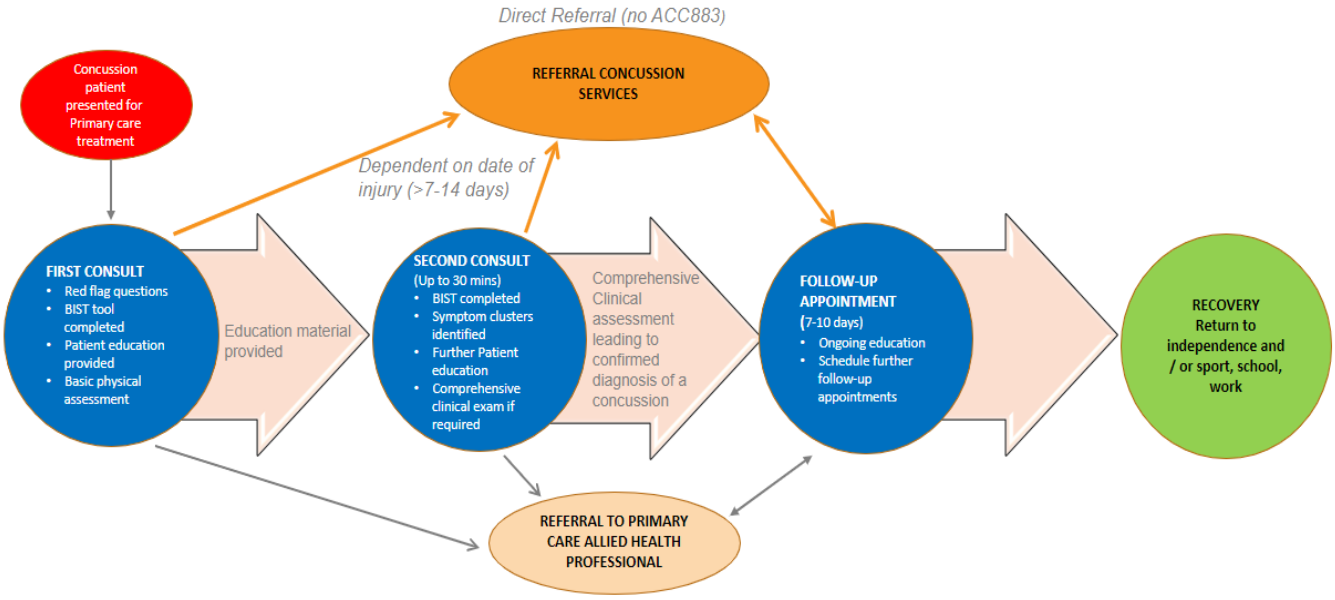
The pilot is a Test and Learn approach

How does the new Pathway work?

1. A patient will present to your GP clinic with a suspected concussion diagnosis.
2. You will use the standardised concussion assessment tool (BIST) which is incorporated into your PMS to assist with diagnosis and referral options.
3. There is also patient education information, in Te Reo and English, for you to provide to your patient.
   Resources (acc.co.nz)

4. GP education material has been developed to support concussion management
   https://bpac.org.nz/2022/concussion.aspx
   goodfellowunit.org/courses/concussionmild-traumatic-brain-injury-mtbi

Overview of the process



- FIRST CONSULT:
  1. Carry out initial assessment using Brain Injury Screening Score (BIST) and
  2. **Provide education to the patient and carer – this is critical**
  3. Arrange follow up within 7-10 days if this assessment concludes a suspected concussion /mTBI.
  4. Consider a referral to other Primary Care treatment providers (Allied Health) if appropriate. E.g physiotherapy, psychologist, chiropractor, osteopath, acupuncturist.
- SECOND CONSULT:
  1. If you were unable to complete the BIST or full assessment in the first consultation then
  2. Arrange a second consultation should be arranged **as soon as possible** to carry out a comprehensive assessment using the BIST assessment tool.
  3. Consider a referral to other Primary Care treatment providers (Allied Health) if appropriate.
- FOLLOW UP CONSULT(S):
  1. Follow up in 7 to 10 days to assess the patient's recovery:
  2. Screen the patient again using the BIST.
  3. Consider a referral to other Primary Care treatment providers (Allied Health) if appropriate.
  4. If the patient's overall symptoms (cognitive, physical, and emotional) are not improving or get worse, or the BIST score is above the threshold then consider direct referral to Secondary Care Concussion Service.

5. If the patient is recovering well, continue to manage their gradual return to work/activity.

Who is suitable for this pathway?

Any patient who:

- Has a suspected concussion diagnosis
- Has an accepted ACC claim

Concussion Management

What is concussion?

Concussion is defined as "the acute neurophysiological event related to blunt impact or other mechanical energy applied to the head, neck or body […] which results in a **transient** disturbance of neurological function". (Ontario Guidelines)

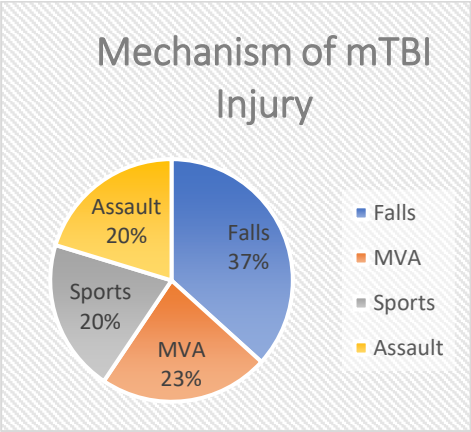
The associated biomechanical forces (e.g. rapid acceleration/deceleration, rotational forces) disrupt cell membrane and axonal integrity, which triggers an acute cascade of significant neurometabolic changes.

NB: The term concussion is often used interchangeably with mild traumatic brain injury (mTBI) in the medical literature.

What is the most common causes of concussion?

The most commonly reported causes of concussion in New Zealand are:

- falls,
- colliding with an object,
- being struck by a person (or animal) and
- driving-related accidents (including bike accidents)



What are concussion symptoms

Concussions can be challenging to recognise as the symptoms and signs are often subtle, non-specific, and the combination of features can vary substantially. Symptoms related to concussion generally fall into one of the categories outlined below and cannot be completely accounted for by emotional state, psychological reaction to physical or emotional stress or other causes. However, no symptom alone, or

in combination, are specific for concussion, and many overlap with those seen in other conditions / co-morbidities or scenarios, e.g. hypoglycaemia, alcohol or drug intoxication.

The following is a list of symptoms associated with a possible concussion diagnosis:

Physical/Sleep*	Behavioural/Emotional	Cognitive
Headache	Drowsiness	Feeling "slowed down"
Nausea/vomiting	Fatigue/lethargy	Feeling "in a fog"
Neck pain	Irritability	Difficulty concentrating
Blurred or double vision	Depression	Difficulty remembering
Seeing stars or lights	Anxiety	Difficulty with speech
Balance problems	Sleeping more than usual	
Dizziness	Difficulty falling asleep	
Sensitivity to light or noise		
Tinnitus		
Vertigo		
Fatigue/Lethargy*		
Sleeping more than usual*		
Difficulty falling asleep*		
Drowsiness*		

What red flags do I need to consider

Physical/Sleep*	Behavioural/Emotional	Cognitive
Worsening of initial symptoms	Increasing restlessness, agitation, confusion or combative behaviours	Prolonged loss of consciousness (≥ 2 minutes), or deteriorating conscious state
significant visual disturbances		
Severe or increasing headache	Significantly unusual/ inappropriate behaviours or personality changes	Inability to recognise people or places
Severe neck pain		Dysarthria (slurred speech)
Repeated vomiting (as a general guide, more than one vomit in an adult or any vomiting in a child)		Prolonged post-traumatic amnesia (> 12 hours)
Seizures or convulsion		
Ongoing diplopia or other		
Weakness, tingling or a burning sensation in the arms or legs		
Ongoing or severe dizziness/ vertigo		

What do I do if I am suspicious that a client has red flags present?

- Consider emergency department referral

What do I do if I am unsure a patient has a concussion

- Please use the assessment tools provided in your PMS to assist with your clinical reasoning to diagnose concussion. These tools have prompts inbuilt to help you make clinical decisions.
- If after completing the assessment the primary cause of the patient's symptoms are not concussion-related, please refer to the appropriate primary medical professional e.g. Physio. If the patient was identified by the assessment tools to require a concussion service support then please refer to your local provider.

What if I am unsure if the client's symptoms are due to a concussion or other injuries e.g neck.

- If the assessment tool is not conclusive then please follow up with the patient in 7-10 days to determine if their symptoms are improving.
- Also consider referral to a musculoskeletal or vestibular physiotherapist if you feel the patient has neck or balance issues
- If the client has long standing mental health issues please consider referral to community based psychology services.

What is the best general approach to guiding activity re-engagement?

- A general approach for guiding activity re-engagement is to use the "+3 rule".
    - First ask the patient to give themselves a baseline symptom severity scoring on a 0 – 10 scale.
    - After engaging in an activity, the patient should then rate their score again; if the severity of symptoms increases by three or more points compared with their baseline score, then the intensity or duration of the activity should be temporarily decreased.
    - If the activity can be completed without increasing symptom severity by three or more points, the level of challenge can be gradually increased on subsequent days and the rule applied again

What if I feel the patient needs return to work assistance and their concussion symptoms are improving?

- Research indicates that people with concussion who return to work have an improved recovery, social integration, financial stability and overall quality of life compared with those who remain out of work.
- Therefore, an early return to some form of vocational engagement, following the compulsory 24 – 48 hour rest period, should be a priority for most employed people who have a concussion, assuming the work environment or duties does not put them or others at risk of injury
- Consider a Fit for selected duties certification and specify hours or tasks they can work
- If the patient requires increased support consider referring to Vocational Rehabilitation Service.

What Risk factors are associated with prolonged recovery?

- High initial symptom burden or load (Strong indicator)
- Previous concussions (within past 12 months) or prolonged recovery from concussion (Strong indicator)
- Pre-existing mental health conditions e.g anxiety and depression (Strong indicator)
- Being female
- Younger and older age groups.
- The presence of migraine-like symptoms or a history of migraine.
- People with alcohol and substance abuse issues.
- Predominance of vestibular or cognitive symptom clusters,

Persistent concussion symptoms

- A small number of patients may report continuing symptoms that impair their daily functioning and quality of life.
- The phrase "persistent concussion symptoms" is preferred to describe symptoms that are present beyond three months of a patient sustaining a concussion, e.g. fatigue, headache, concentration/memory impairment.
- The presence of persistent concussion symptoms is likely dependent on a complex interplay of biological, psychological and social factors, and the evidence for effective treatment is limited.
- This phrase was historically referred to as "post concussion syndrome". The Diagnostic and Statistical Manual (DSM-5) of the American Psychiatric Association (APA) and International Classification of Diseases 11th Revision (ICD-11) no longer recognise post-concussion syndrome as a diagnostic entity.
- Consistent with this stance, ACC no longer accepts post-concussion syndrome as a diagnosis for brain injury or its subsequent symptoms.
- If a Read Code is required for patients with persistent concussion symptoms, use either the "concussion" (S60..) or "head injury" codes (S646.).

How can I find more about the management of concussion?

BPAC and Goodfellow have free education units that can earn you CPD points please follow the links.

https://bpac.org.nz/2022/concussion.aspx
goodfellowunit.org/courses/concussionmild-traumatic-brain-injury-mtbi

Other Questions

What if the tools in my PMS are not working

- Please call your PMS help desk

What if the patient has other significant injuries from their accident and is now complaining of concussion symptoms?

- Ensure eligibility criteria have been met as above
- Consider referral for a training for independence programme for traumatic brain injury so that all the patients' needs can be addressed in one service.

What if the patient has identifiable brain or head trauma e.g. fracture, subarachnoid haemorrhage should I send them to a concussion service?

- These patients would be better managed in a training for independence for traumatic brain injury programme so please refer for this service.

Referrals to a concussion service

You can refer directly to a Secondary Care Concussion Service provider via your PMS but please ensure that the clients has met all the eligibility criteria (below)
You must attach all relevant medical records to the referral including BIST summary.
(The PMS will generate the BIST report for you).

Eligibility criteria

The client must:

1. Have had a plausible mechanism of injury sufficient to cause a concussion
2. Have an accepted ACC claim with concussion as the diagnosis
3. Have presented within 6 months of the date of injury
4. Present with symptoms that are not primarily related to co-morbidies e.g. the following:
    - neck pain,
    - blood pressure, medication related, other differential diagnoses e.g Trans ischaemic attack (TIA)
    - mental health or
    - vestibular issues

How do I know which provider to send my referral to

You can identify the providers within your region on the ACC website
- https://www.acc.co.nz/for-providers/treatment-recovery/referring-to-rehabilitation/concussion-service-providers/

What do I do if the provider can't take the referral

- Look on our website to find another local provider and then send the referral to them

What do I do if a provider sends a patient back to me

- As above

Can I still send a referral to ACC

- NO, please don't send the referral to ACC as this can leads to double referral go to our website to identify your local providers and send the referral to the one you have chosen

How do I send a referral to a provider?

- Go to our ACC website, then select a provider near you, then via your PMS attach all relevant medical records, BIST summary and referral letter, then send to your chosen provider

How do I bill for appointments?

New non-contract payment codes are being introduced as part of the pilot study. These codes include:

- Funding for patient co-payment and
- If required, longer subsequent appointment time (i.e. either 15 minute or 30 minutes)
- First consultation
    - Codes DO NOT APPLY when patient presents with a suspected concussion
    - Patient pays usual co-payment for a primary care consultation and ACC makes the standard contribution provided it is an accident-related injury
- Subsequent consultations relating to the diagnosis and management of concussion
    - Codes APPLY – ACC covers the patient co-payment (i.e. use the new codes below)
    - ACC makes the standard contribution on an accepted claim on either a 15 minute or 30-minute appointment

What are the new purchasing codes?

The initial consult should be invoiced to ACC using the normal GP01 code

The follow up consult(s) should be invoiced to ACC using one of the following codes:

- GCP1 - This code covers up to 15 minutes plus co-payment
- GCP2 - This code covers up to 30 minutes plus double co-payment
- RCP1 - This code covers Rural GP up to 15 minutes plus co-payment
- RCP2 - This code covers Rural GP up to 30 minutes plus double co-payment
- UCP1 - This code covers Urgent Care up to 15 minutes plus co-payment
- UCP2 - This code covers Urgent Care up to 30 minutes plus double co-payment

How can I provide culturally appropriate care for Māori?

ACC now funds Rongoā Māori in conjunction with other treatment or rehabilitation approaches, depending on a patient's needs. This is funded under the social rehabilitation category, which is considered separate from treatment, and directed at helping patients return to independence in activities meaningful to their life/ wellbeing.

https://www.acc.co.nz/about-us/rongoa-maori-services/

What happens if a patient does not consent to particpating in the pathway?

On clicking the no consent box a reduced version of the BIST tool will be available for use however no data will be shared with the partners