

Trauma rehabilitation
Whakaoranga kohuki



Te Whatu Ora Te Tai Tokerau case study:
Introduction of the ACC early cover process to enable ACC to allocate a case manager earlier

He mātai tā Te Whatu Ora Te Tai Tokerau: Whakarite i te tukanga ārai tōmua o ACC hei kōwhiri moata i tētahi kaiwhakahaere kaupapa



In 2021 the trauma rehabilitation national collaborative brought together 11 teams of rehabilitation clinicians from across Aotearoa New Zealand to complete quality improvement projects that would improve outcomes in rehabilitation after major trauma. The rehabilitation collaborative formed part of a broader programme of work by the National Trauma Network, Accident Compensation Corporation (ACC) and the Health Quality & Safety Commission (the Commission) to establish a contemporary system of trauma care in Aotearoa New Zealand.

Overview | Tirohanga whānui

The experiences of people in Te Tai Tokerau after being discharged from hospital following major trauma varied widely. Almost one in five people re-presented to the emergency department within 90 days of hospital discharge, indicating a need for improvement in the supports people received after hospital discharge.

Trauma services in many parts of Aotearoa New Zealand use the ACC early cover referral form (ACC7422) for people who experience a traumatic brain injury, multi-trauma or spinal cord injury. This means that an ACC case manager can participate in discharge planning earlier, possibly while the person is still in hospital. The project team implemented this process in Te Tai Tokerau, leading to an improvement in consumer satisfaction after discharge.

Background and context | Kōrero o mua me te horopaki

Whangārei Hospital is the facility with the highest trauma care capability in Te Tai Tokerau. An average of two people per week present at Whangārei Hospital following major trauma, from all over the Te Tai Tokerau region.

The Te Tai Tokerau population has more children and elderly people than the national average. Approximately 35 percent of the population are Māori. Many people live rurally and in areas of high deprivation.

Diagnosing the problem | Te tātari raru

The problem

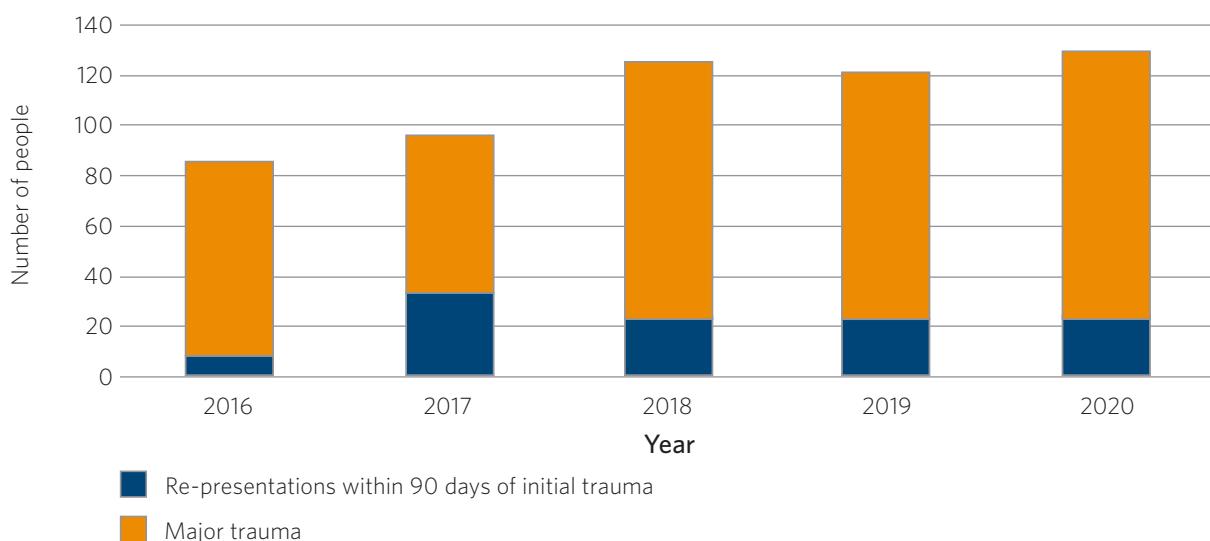
The ACC process for multi-trauma early cover with case manager allocation (ACC7422) was not used in Te Tai Tokerau. This meant that the opportunity was missed for an ACC case manager to participate in discharge planning for people hospitalised after major trauma, leading to unwarranted variation in the supports people received after hospital discharge.

How did you know that this was a problem? What data did you have to describe this problem?

A consumer experience survey showed variation in consumer satisfaction after hospital discharge. Some people received excellent support after leaving hospital, whereas others struggled to access the services they required. Consumers mentioned that they needed to know what support was available and what to ask for before they could access it.

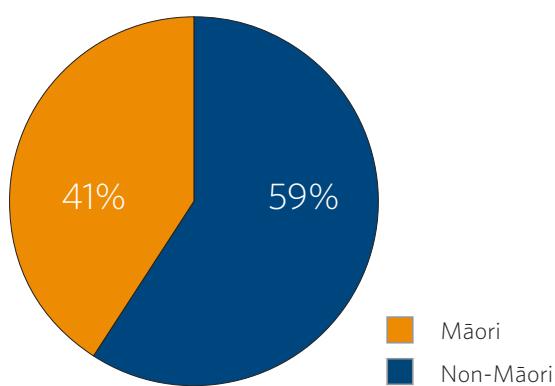
Over the previous three years, approximately one in five people had an unplanned re-presentation to the emergency department within 90 days of their initial trauma (Figure 1). Māori had a higher rate of re-presentation than non-Māori. Māori also had a higher 'did not attend' rate for outpatient appointments (Figure 2).

Figure 1: Major trauma vs re-presentations within 90 days, 2016–20



Source: Te Tai Tokerau data collection.

Figure 2: Ethnicity of people who did not attend outpatient appointments, 2016–20



Source: Te Tai Tokerau data collection.

The aim | Te whāinga

The project aim was that, by February 2022, 100% of surviving adult major trauma patients at Whangārei Hospital would have an ACC7422 lodged within one week of injury.

The measures | Ngā ine

The measures are described briefly here; refer to the appendix for a detailed description.

Outcome measure

- The percentage of eligible major trauma patients that have ACC7422 lodged within one week of admission.

Process measures

- Time in days between major trauma admission and when an injury claim form (ACC46¹) is lodged.
- Consumer satisfaction scores.

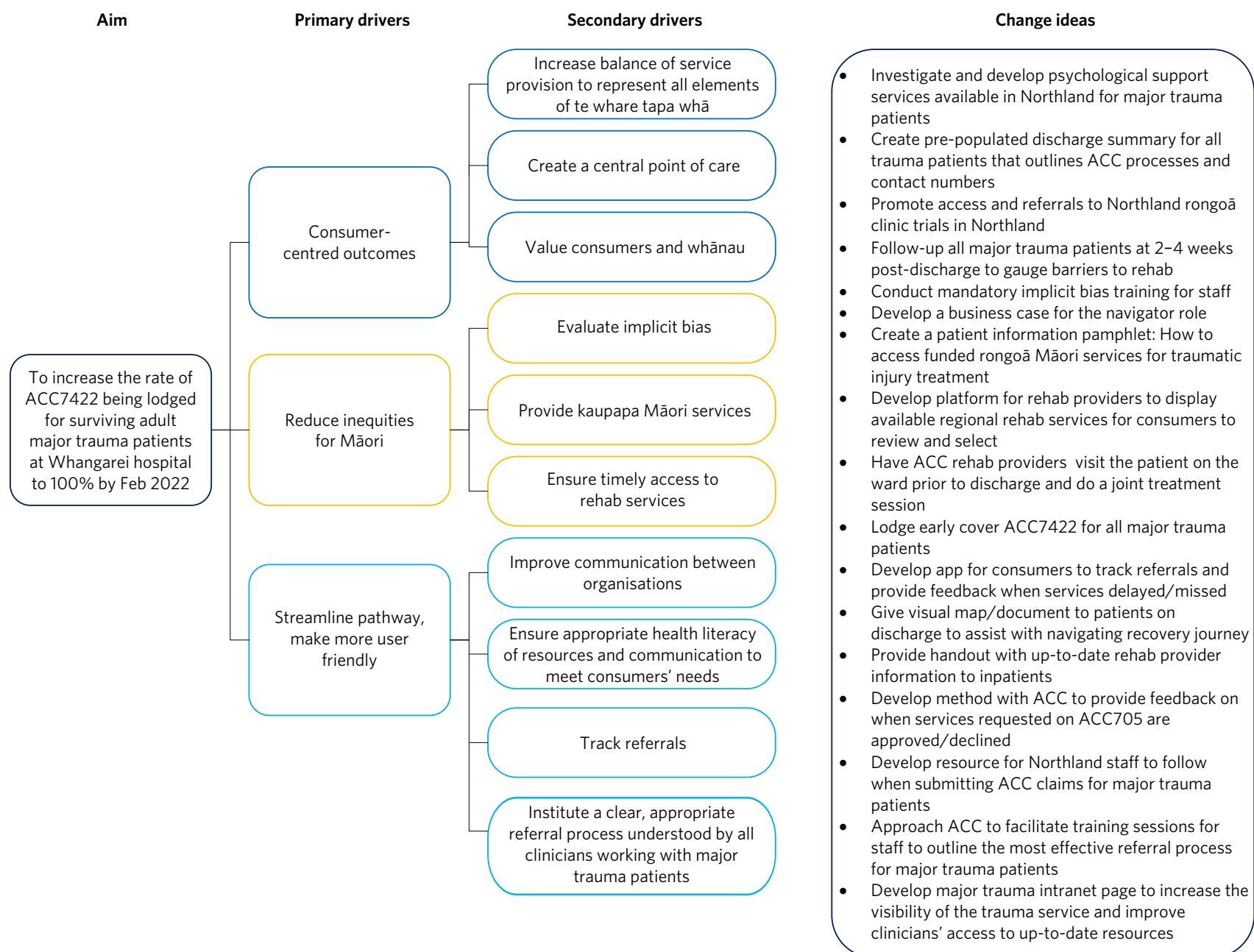
Balancing measures

- Staff satisfaction with the referral process.

¹ ACC46 is the injury claim form in use in Te Tai Tokerau. Other hospitals may use ACC45.

Drivers of change | Ngā tuāhua panoni

Figure 3: Driver diagram



What we did | Tā mātou i mahi

Were there any ethical considerations to be aware of?

Members of the team were initially unsure about contacting consumers after discharge. There were concerns that revisiting the trauma would be detrimental. The concerns were discussed with the hospital's quality improvement team, who recommended advising people that taking part in the phone call was optional and would not affect any ongoing care. In the end, the team found that people were thankful that someone had followed-up with them.

What aspects of the project were co-designed with consumers? How did you involve consumers in co-design?

What processes did you use?

We reviewed consumer compliments and complaints from 2019 and 2020. We then conducted an open-ended consumer experience survey via telephone to learn more about people's experiences after being discharged from hospital following major trauma.

The project team included a consumer representative. They were able to share the experiences of their whānau when accessing rehabilitation services after major trauma.

What quality improvement tools did you use that you would recommend?

- An Ishikawa/fishbone analysis was helpful in getting the whole team involved and offering input from different perspectives.
- Process mapping was helpful, although it ended up being a lengthy process – every time it was revisited, new issues were identified. The team were eventually able to use their end process map as a base for the ACC pathway document.

What changes did you test that worked?

- Lodging early cover ACC7422 for adult major trauma patients within one week of admission.
- Developing a resource for hospital staff to follow when submitting ACC claims for adult major trauma patients.

- Developing a major trauma intranet page to:
 - increase visibility of the trauma service
 - improve clinicians' access to up-to-date resources, including the referral process.
- Following up with adult major trauma patients by telephone at 2-4 weeks after discharge to discuss their experience.
- Developing an information pamphlet about how to access funded rongoā māori services.

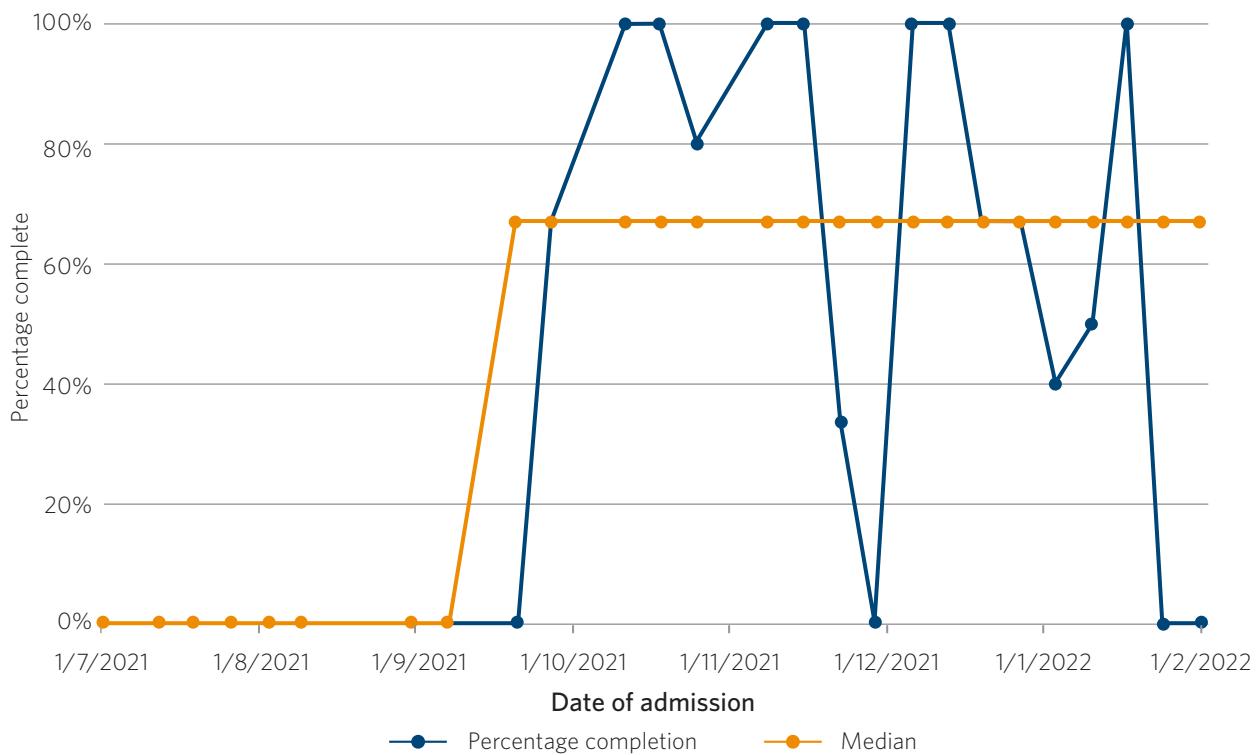


The results | Ngā hua

What outcome measures improved?

The median completion rate for the ACC7422 improved from 0 percent to 67 percent following the introduction of the ACC early cover process in September 2021 (Figure 4). Completion rates dropped when key staff were on leave.

Figure 4: ACC7422 completion rate per week, July 2021–February 2022

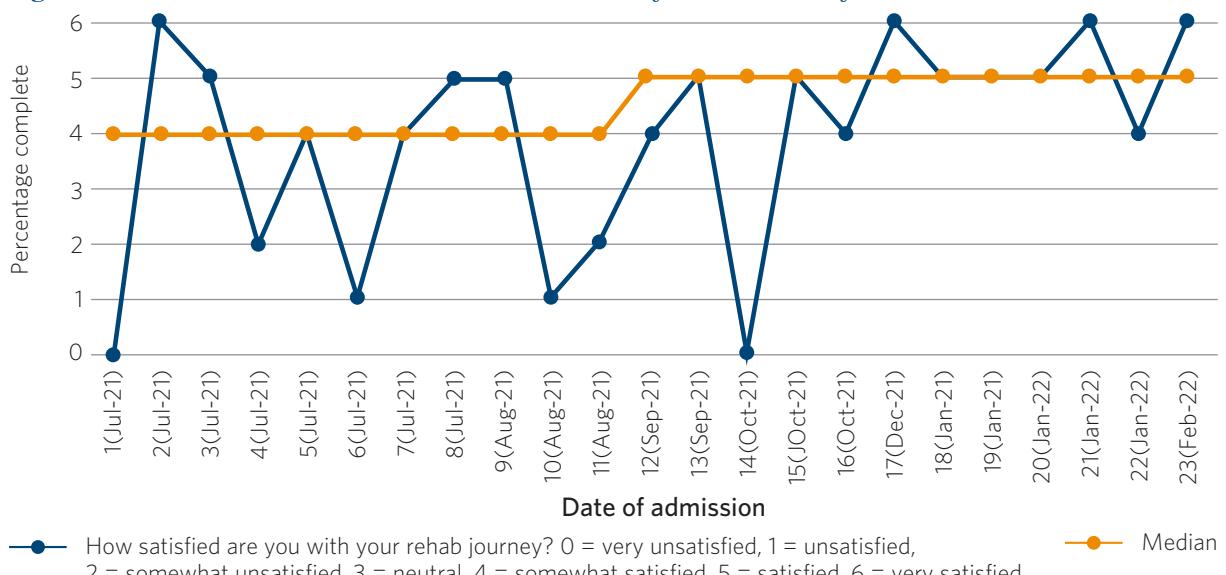


Source: Te Tai Tokerau data collection.

What process measures improved?

The median consumer satisfaction score increased following the introduction of the ACC early cover process in September 2021 (Figure 5).

Figure 5: Individual consumer satisfaction scores, July 2021–February 2022



Source: Te Tai Tokerau data collection.

Staff were asked whether they had noticed any improvements

'...what I do see is the relief in the patient/whānau/family response, knowing the process has started early.'

'I've noticed they get allocated a case manager and if I need to contact ACC before the case manager is allocated, I find that they can see that supports are vital and tend to approve very quickly because of the multi-trauma nature of the situation.'

'Faster response time overall and more confidence in case manager allocation.'

Were any unintended consequences such as unexpected benefits, problems or costs associated with this project?

Some of the change ideas that the project team initially thought would make things easier actually did the opposite. By testing them on a small scale, this was realised quickly, and the process was adapted.

Is there evidence that the knowledge of quality improvement science in the team or in the wider organisation improved?

Being part of this project gave the team the skills they need to lead further quality improvement activities. For example, the senior physiotherapist involved with the project is now looking into the possibility of referrals being sent directly to Training for Independence (in-home rehabilitation providers) instead of having to wait for ACC approval.

Post-project implementation and sustainability | Te whakaritenga me te whakapūmautanga

Have the successful changes been embedded into day-to-day practice? How have you managed this?

Initially, there was a noticeable drop in the rate of ACC7422 completion when the staff driving the project were on leave. This indicated that more work was needed for the process to become business as usual. As time went by, the change was embedded into day-to-day practice. Social workers now routinely identify people with major trauma and begin the ACC process. The ACC7422 is lodged by the trauma data collector.

How did you communicate your progress and results to others?

The project was presented at the:

- hospital's clinical governance forum
- local trauma meeting
- national trauma nurse coordinator study day
- allied health trauma study day.

Summary and discussion | Te whakarāpopoto me te matapakinga

What were the lessons learned?

Through this project, the team realised that:

- strategy and planning is essential
- once the right people are engaged, things go well
- there is opportunity for improvement everywhere.

They also learned to:

- start with the big picture; listen to clinicians and consumers
- break it down to small achievable 'plan-do-study-act' cycles and build on those
- believe in the project and maintain enthusiasm.

What are the key steps that a team somewhere else should take to implement this in their own area?

- **Identify who will be doing what**, eg, who will be screening to identify adult major trauma patients and who will be following up. A quality improvement project is a team effort, but people should have specific roles.

- **Have the data on hand and some case studies.**

It was useful to understand what happens in other hospitals. Learning that a case manager was allocated within 48 hours when an ACC7422 was sent helped to shape our project.

- **Get buy-in from leaders** in the area where the change will be implemented.

- **Break the process right down** and have the reference readily available in both paper and electronic form for everyone to refer to.

Are there any future steps or ongoing work that you intend to continue with on this project topic?

Yes, we intend to:

- evaluate the impact of implementing the ACC7422 by comparing the re-presentation rates of people who were on the early cover referral pathway with rates from those who were not

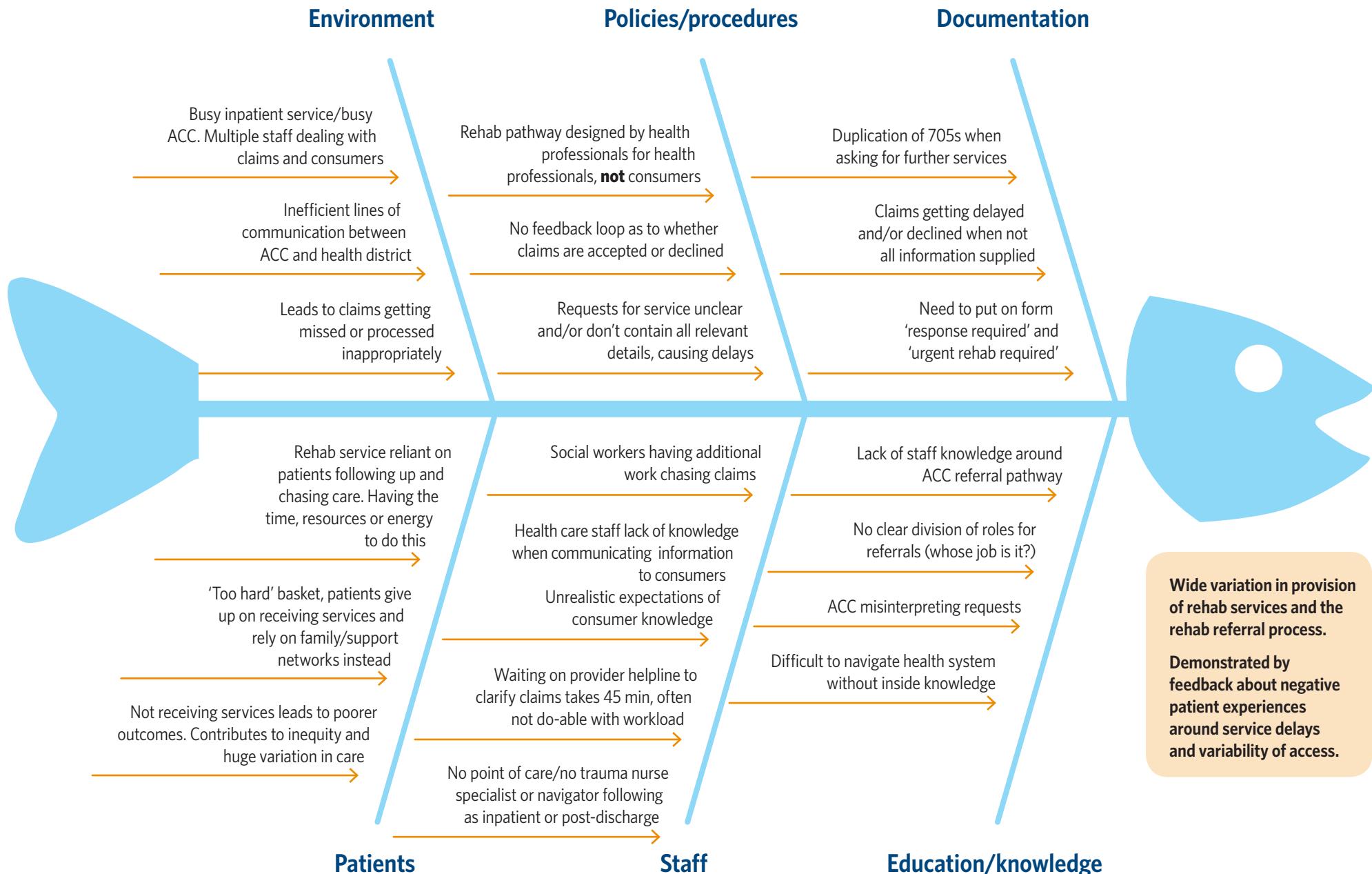
- further engage with ACC about how the ACC7422 pathway works, to iron out some of the ongoing problems that people are experiencing.

The team | Te rōpū

- Improvement facilitator/project coordinator
- Physiotherapist, inpatient and community, Bay of Islands
- Senior physiotherapist, orthopaedics, Whangārei Hospital
- Allied health professional lead, social worker
- Senior social worker, orthopaedics, Whangārei Hospital
- Whānau/consumer representative



Appendix 1: Fishbone diagram | Āpitihanga 1: Hoahoa tuaika



Appendix 2: Measures | Āpitihanga 2: Ngā ine

Measure name	Description	Collection method	Collection frequency
Percentage of ACC7422 forms lodged for eligible Northland adult major trauma patients	Numerator: Total number of ACC7422 lodged for adult major trauma patients Denominator: Total number of eligible adult major trauma patients (injury severity score >12) admitted to Whangārei Hospital	Manual notes audit	Collect manual notes daily as patients are admitted; correlate data weekly; audit monthly
Time in days between major trauma admission and an injury claim form (ACC46) being lodged	Time in whole days, from admission (day 0) until the date that ACC confirm an ACC46 is lodged	Patient details entered into spreadsheet Spreadsheet sent to ACC monthly to enter dates that ACC46 was lodged	Enter patient details bi-weekly Send spreadsheet to ACC monthly
Consumer satisfaction with the care received	Consumer satisfaction on a scale of 0-6	Phone call to a monthly sample of adult major trauma patients	Weekly attempts to call within three weeks of discharge
Staff satisfaction with the ACC referral process	Numerator: The number of staff who expressed satisfaction with the process Denominator: The total number of staff who responded to the survey	Paper survey	Quarterly

Glossary | Te kuputaka

ACC7422: The application form for ACC early cover. This applies when a person with traumatic brain injury, multi-trauma or spinal cord injury requires an early cover decision so that ACC can assign a case manager who can contribute to discharge planning before the person's discharge from hospital.

Balancing measure: The application form for ACC early cover. This applies when a person with traumatic brain injury, multi-trauma or spinal cord injury requires an early cover decision so that ACC can assign a case manager who can contribute to discharge planning before the person's discharge from hospital.

Driver diagram: A visual display of a team's theory of what contributes to the achievement of the project's aim.

Equity measure: Measures that have an equity focus.

Ishikawa/fishbone analysis: A tool used in quality improvement to analyse the problem by identifying potential causes. Also known as a cause and effect diagram.

Outcome measure: Determines the extent to which the aim has been achieved.

Process mapping: A visual diagram of the steps involved in a process. It helps a team to understand their current system better and makes it easier to see where opportunities for improvement are.

Process measure: Determines the degree to which processes or change ideas have been implemented.

Rongoa māori: Traditional Māori healing, encompassing herbal remedies, physical therapies and spiritual healing.

Other resources

Guide to completing ACC7422
<https://www.majortrauma.nz/assets/Publication-Resources/In-hospital/TBI/Guide-to-completing-the-early-cover-process.pdf>

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