

Opportunities to advance injury research in Aotearoa

We would like to collaborate with researchers who are interested in injury and want to understand more about the burden of trauma and the outcomes for those who have been injured in Aotearoa/New Zealand.

About us

The National Trauma Network was established to improve outcomes for people who are injured in New Zealand. Our goals are to reduce deaths, reduce the severity of disability of those that survive, and improve system effectiveness.

Research into injury is key to progressing these goals and we are keen to foster interest in injury research and build a strong and engaged research community.

In partnership with our sponsor the Accident Compensation Corporation (ACC) and delivery partner the Health Quality & Safety Commission (the Commission), we recently gathered a group of academic and clinical researchers together to identify research priorities and opportunities for collaboration. From this meeting we have identified some subject areas for research which could be undertaken by post-graduate students interested in injury research, or by those doing under-graduate summer studentships.

The New Zealand Major Trauma Registry (NZ-MTR) is a comprehensive repository of data on trauma patients admitted to all New Zealand hospitals who meet the threshold for inclusion. **The data is accessible** to any researcher, clinician, or student who has an interest in research to improve our understanding of the burden of injury and outcomes for those who have been injured. Requests for data requires approval through our Data Governance group to ensure the research is relevant and ethical.

The NZ-MTR Data Dictionary and the National Trauma Network's [Annual Report](#) will provide some background on the data we have available and the key issues we have identified. One area of importance is the disproportionately high burden of trauma for Māori and we encourage research in this area to foster improved Māori health outcomes. In addition, we can provide guidance such as how to link to other datasets e.g. national collections, and applications for funding grants.

How you can help

We ask you to share this within your faculty to inspire these and other possibilities with the next generation of injury researchers! We also provide a list of funding opportunities that may be able to support these projects. The closing dates for some of these grants is soon. If you have any questions or **have an interest in pursuing another project using the NZ-MTR data**, please contact me:

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Ideas for research

Falls: to understand the incidence, profile and outcomes of falls-related major trauma in NZ

Injuries resulting from falls represent a serious public health problem. Each year, many patients are admitted to hospital with serious injuries as a result of falls, and the numbers are growing. These patients often go on to experience further falls-related injury. This study will investigate the incidence of falls-related major trauma in NZ, the circumstances of the fall, and the short-term outcomes. It is anticipated that the findings will be used to improve the measurement of the burden of falls-related injury and inform primary prevention.

Cycling/pedestrian: Profile of cyclists, pedestrians or other vulnerable road users in NZ

Road related injuries are the most common cause of injury, accounting for 52% of all major trauma. With increasing population, alternatives to vehicle transport, progressing policies and development of safer infrastructures have become a key concern. This study aims to better understand the cohort of trauma patients identified as a vulnerable road user. It is anticipated the study will inform how to reduce the burden of trauma for these users.

E-scooter: Incidence, profile and outcomes of e-scooter related incidents in NZ

Commercial e-scooters were introduced in New Zealand in October 2018. Since their introduction, there have been significant costs to the health sector, particularly for minor trauma incidents. This study will investigate the incidence of e-scooter related injuries in NZ, the circumstances of the injury, and the short-term outcomes. It is anticipated that the findings will improve the measurement of the burden of e-scooter related injury and inform policy and safety interventions.

Profile of unplanned readmission of major trauma patients in NZ

This study aims to investigate the profile of trauma patients who are readmitted after discharge, and patterns in this cohort in relation to injuries, mortality, length of stay in ICU, or other factors. It is anticipated that the findings will provide a better understanding of trauma patients' journey of recovery.

Severe traumatic brain injury in elderly patients

Age is a significant risk factor for trauma patients. The risk of death increases with age. In older patients the main mechanism of injury is falls – particularly those resulting in severe head injuries. This study will investigate the profile of older serious TBI trauma patients – looking at their discharge pathways, pathology, comorbidities, pre-injury medications, differences in outcomes and other proxy measures indicative of the process of care.

Evaluation of vital signs bias for critical haemorrhage

Life-threatening haemorrhage is identified through vital signs such as tachycardia, decreased systolic BP and narrowed pulse pressure. Recognition of these signs permits clinicians to activate interventions like the massive transfusion protocol or similar. This study will evaluate the accuracy of these vital signs for predicting critical haemorrhage in major trauma patients.

Attributes of the students/researchers

Necessary skills/knowledge: These studies will require an interest in epidemiology, injury and quantitative analysis. Participation will improve the student's understanding of injury burden measurement, and regression modeling. The student will work closely with their supervisor as well as members of the NZ National Trauma Network team. Therefore, good communication skills will be important.

Methodological approach: The NZ-MTR will be used to identify all major trauma patients in New Zealand from specific periods. Demographic, injury event, diagnosis, complications, comorbidities, and in-hospital outcomes will be extracted from NZ-MTR.

More on the data collection in the National Trauma Registry [here](#).

Undertaking these or similar studies will improve the following skills: statistical analysis, literature review, epidemiological analysis, and report writing.

Funding opportunities

The National Trauma Network does not fund research directly; however, we are happy to support applications.

Health Research Council (HRC) Grants:

The HRC has several other grants available, detailed below. Read [The New Zealand Health Research Prioritisation Framework](#).

Grant	Key deadlines
<p>Health Delivery Research Activation Grants: Up to \$30,000 to enable established or prospective researchers/research providers to establish their health delivery evidence needs or research opportunities before applying for larger-scale funding. Read more</p>	<p>Registration closes 8 April 2020 Full application closes 22 April 2020</p>
<p>Health Delivery Research Project Grants: Up to \$1.4 million for research projects connected to health delivery evidence needs. Read more</p>	<p>Registration closes 27 February 2020 Full application closes 26 March 2020</p>
<p>Health Sector Research Collaboration Grants (Pilot): Negotiated funding focused on upskilling and empowering health care or health service delivery organisations to engage in health delivery research, intensify research in health delivery settings, and ensure research adequately responds to health sector, patient and community needs. This pilot will start off with District Health Boards, with a view to expanding to other health providers in the future, including primary care and community, and Māori and Pacific providers. Read more</p>	<p>Registration closes 20 February 2020 Full application closes 22 April 2020</p>
<p>Health Delivery Research Career Development Awards: A development opportunity for health professionals (clinical or non-clinical) and academic health researchers to undertake a funded placement in a health delivery research team or health sector setting. Designed as an alternative pathway into health delivery research. Read more</p>	<p>Registration closes 8 April 2020 Full application closes 22 April 2020</p>
<p>Ngā Kanohi Kitea Project Grants: Developing Māori capability and knowledge is the prime focus of Ngā Kanohi Kitea community research grants. The grants provide opportunities for iwi, hapū and other community groups to address community-identified health needs. Full project grants are available and range from \$50,000 to \$200,000. Read more</p>	<p>Registration closes 12 March 2020 Full application closes 16 March 2020</p>

Other funding streams:

Grant	Key deadlines
<p>Lottery Health Research Grant: Health research funding to support translational research projects, shared research equipment, post-doctoral fellowships and PhD Scholarships. Read more</p>	<p>Application opens 8 July 2020 Full application closes 2 September 2020</p>
<p>Royal Australasian College of Surgeons: Various scholarships for developing New Zealand based trainees and fellows Read more.</p>	<p>Various</p>
<p>The New Zealand Nurses Education & research foundation scholarships and grants for nurses: Supports a range of education pathways like undergraduate study, postgraduate study, research, conference attendance, courses, travel and so forth. Read more.</p>	<p>Various</p>
<p>ACC Workplace Injury Prevention Grants: Support research focused on workplace injury prevention. Read more.</p>	<p>Details to be released in late March 2020.</p>
<p>Health & Safety Association NZ Scholarships available for post-graduate study and research in health and safety. Read more</p>	