



# Introduction

This Strategic Plan sets out the direction and key initiatives for New Zealand's National Trauma Network (the 'Network') to achieve over the next 5-years.

A solid foundation of work has been built since the inception of the Network in 2012 and we are on the cusp of achieving a contemporary trauma in New Zealand. We are at a critical point in the development of the Network as we transition from 'start-up' phase into a maturing system. We are in an excellent position to make the step changes that will help us realise the important benefits of a mature coordinated trauma system.

Our goal is to reduce preventable levels of mortality, complications and lifelong disability amongst people who sustain a major trauma. We also expect to see a more efficient system and cost savings to the health and disability system. These benefits will be of enormous social and financial value to New Zealander's, as they have to other countries who have introduced similar systems.







The intent of the Network is to establish a contemporary trauma system in New Zealand which puts the patient first and achieves an excellent standard of trauma care, supported by good data.

# Why

Reduce trauma deaths and long-term complications, and achieve system performance

# What

To achieve a contemporary trauma system in New Zealand

## How

Demonstrate excellence across the trauma system through a data driven approach

## Who

Patients, whānau, providers of trauma services, and government agencies



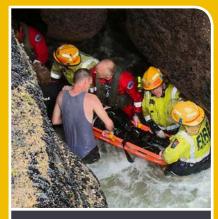
# Patient focussed

Putting patients at the centre of care and co-design of initiatives



# System led

Delivering a consistent approach supported by good data and evidence



# Performance driven

We hold ourselves accountable and seek performance improvement

# Where are we now

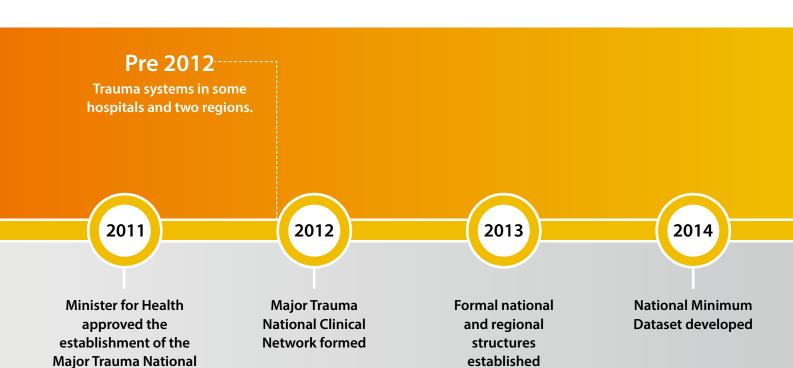
In its first 5 years the Network focussed on establishing a solid foundation with achievements across the three initial priorities.



#### **PRIORITY 1:**

# Formal trauma structure – achieved

- ✓ Formal structure established with a national network and four regional groups
- ✓ Website www.majortrauma.nz
- ✓ Trauma education and symposiums increased from 3 to over 10
- \$80K ACC incentive Fund for trauma education for nurses and allied health staff
- ✓ 'What's New in Trauma' roadshow held in 20 DHBs
- ✓ Hospital capability and capacity study
- / Emerging relationships with other agencies to provide a cross-sector approach



**Clinical Network** 

#### **PRIORITY 2:**

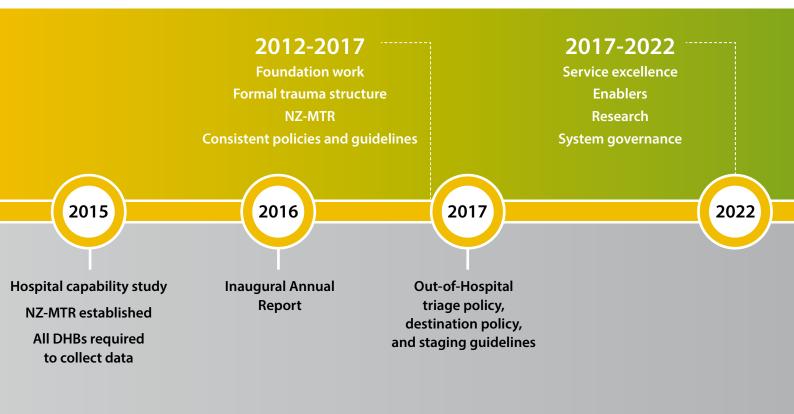
# New Zealand Major Trauma Registry – achieved

- ✓ NZ-MTR established with data collection from July 2015 on trauma patients with an ISS score >12 or who died in hospital from injury.
- ✓ Data collection resources employed in each hospital
- ✓ Supporting documentation published and includes:
- ✓ National Minimum Dataset
- ✓ Privacy Framework
- ✓ Data governance
- ✓ The inaugural Annual Report for 2015-16 published

#### **PRIORITY 3:**

# Nationally consistent guidelines and policies – achieved

- ✓ Out-of-hospital triage criteria
- ✓ Regional destination policies
- ✓ Staging Guidelines
- ✓ Inter-hospital transfer guidelines and hospital
- ✓ Clinical guidelines and inter-hospital transfer policies in some but not all regions.



# What is important

Trauma happens in urban and rural communities all over the country. It can happen because of road traffic crashes, walking and cycling, because of assault or falls, and other reasons. The challenge is providing a consistent level of care regardless of where it occurs or how it happened. We believe that by taking a collaborative approach across the health sector we can support the development of skills and knowledge needed to provide best practice care. We also believe that engaging with key stakeholders from other sectors will help us prevent injury.

#### Our initial focus areas:

- Maori: The incidence of major trauma in Maori is nearly double that for non-Maori and we need to understand the reasons better and work with Maori communities to prevent injury.
- Road traffic injuries: All road related injuries account for 50% of all injuries. This includes pedestrians, cyclists, car, and motorbike etc. Understanding the patterns of road related trauma will give us information to work with others to reduce these injuries.
- Serious Traumatic Brain Injury: the burden of sTBI on individual and their whanau is significant, and outcomes can be improved with access to comprehensive neuroscience care.
- **specific population groups:** Injury in the young and the old can have devastating consequences, and our job is to ensure they have the best outcomes possible.

#### System-led

The New Zealand trauma system is focussed on getting the processes in place so that trauma patients get the right care, at the right time, in the right place. The principles which underpin the national approach to our work are:

**Clinical leadership** – Doctors, nurses, allied health and ambulance personnel leading service design

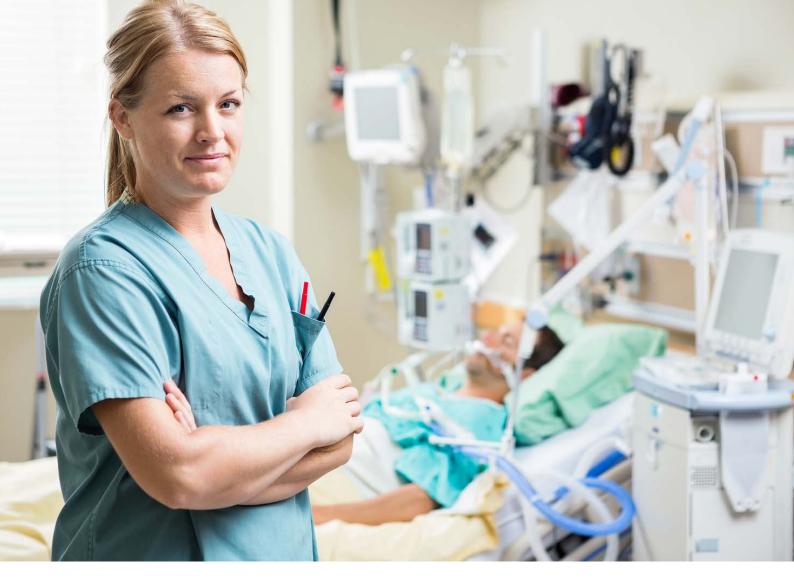
**Information** – transforming trauma data into useful information

Capability – people and organisations within the system

**Collaboration** – with patients in the co-design process and sharing across the system

**Resources** – financial and workforce inputs to the system





#### **Performance driven**

As a national trauma system we hold ourselves and others accountable for our impact on the system through robust and timely measurement. We will ensure a continued focus on national consistency so trauma patients receive best practice care regardless of where they are injured. We will maximise the financial and workforce resources to make real and sustainable changes. We will encourage all those in the system to strive for continuous improvement.

We will know the trauma system is delivering success when we have:

#### Better outcomes for trauma patients

- More survivors
- Those that survive have better outcomes
- Activation of trauma team for majority of major trauma patients
- Improved time to CT if GSC <13
- Consistent and coordinated care between pre-hospital, hospital and rehabilitation
- Clear and consistent communication
- Patient co-design in planning

#### Better outcomes for all New Zealanders

- Reduced risk of injury using the data to inform injury prevention initiatives
- Ethanol levels measured on most major trauma patients
- Greater equity in the burden of trauma and outcomes
- Unmet need is identified and measured

#### More efficient health and disability system

- Fewer hospital transfers to reach definitive care
- Coordinated trauma system within and across services
- Better organised, with resources in the right place to address need
- Robust data to measure performance and mechanisms to address poor performance
- More information on long-term patient outcomes
- Cost savings across whole of life care

These benefits will take 5 – 10 years to realise, and with two-years data we are now in an excellent position to start measuring the changes using the NZ-MTR data and other data sources.

# What we must achieve

The two areas which will make a real difference to our trauma system are service excellence across the trauma pathway, and research to enable a data-driven approach. Key enablers are needed to ensure the continuity of the NZ-MTR, the workforce have the capacity and capability to respond, and good governance at national, regional and hospital levels to implement change.

# Framework for the 5-year Strategic Plan for the New Zealand Trauma System

Four key areas are identified which we will work to achieve to build a sustainable, contemporary trauma system.

# Service excellence

Across the trauma pathway:

**Prevention** 

**Out-of-hospital** 

Hospital

Rehabilitation

#### **Enablers**

Technology & NZ-MTR
Workforce

#### National Trauma Research

**Leading applied research across:** 

**Local hospitals & regions** 

**National performance** 

**National reporting** 

Inter-system

Academic

Benchmarking

#### System governance

**National and regional systems** 

**Cross sector partnerships** 

**Advocacy** 

**Policy and legislation** 

**Funding and resource allocation** 



# Service Excellence 2017-2022



# Strategic outcomes

Better outcomes for patients, the population, and the health system

Nationally consistent approach to trauma

## Focus areas

A quality Improvement Programme will be implemented to achieve service excellence across:

#### **Injury prevention**

- Use data to inform injury prevention priorities
- Collaborate with key provides

#### **Out-of-hospital**

- Audit current policies
- Support air ambulance co-design project

#### Hospital

- Develop expectations for coordinated trauma system design and pathways
- Encourage development of hospital and regional clinical guidelines, inter-hospital transfer guidelines, and streamlined referral processes to tertiary hospitals
- Case management of trauma patients/ Indicator and outcome framework

#### Rehabilitation

- Develop a nationally coherent approach to rehabilitation including psych support and pain management
- Early rehab in acute phase
- Pilot initiatives to support patients and whanau through rehabilitation

# **Enablers 2017-2022**



# Strategic outcomes

A workforce with the capability and capacity to appropriately manage trauma

A web-based NZ-MTR that supports data capture

# Focus areas

#### Workforce

- Grow clinical leaders
- Advocate for allocated clinical and nursing workforce in all hospitals
- specialist trauma nurses to undertake four core roles:
  - data collection
  - nursing case management
  - quality improvement
  - education and training
- Support development of data management roles
- Work with rehabilitation providers to support the rehab workforce, including pain management and psych support
- Succession planning for key roles

#### **NZ-MTR**

- Update the national minimum dataset for trauma
- Explore ways to reduce the burden of data collection e.g.
  - Clinical audit function
  - Automatic file transfer from St John Ambulance ePRF
  - Links with national NHI collection
- Expand data QA initiatives
- Determine feasibility for transitioning to AIS 2015
- Strengthen the sustainability of AIS training in New Zealand

# **Analytical and Research Capability 2017-2022**



# Strategic outcomes

Undertake high-performing applied injury research

Transform data into useful information to support the trauma system

## Focus areas

#### **Applied research**

- Support DHBs, ambulance services and rehabilitation providers to interrogate and use their data
- Inform performance improvement initiatives

#### **Analytics**

- Business intelligence tools to support interrogation of data
- · Translational research
- National aggregate reporting
- National performance measures
- Benchmarking with Australian Trauma Registry
- Focus area research for specific population groups and injury patterns
- Cross database linkages
- Long term outcomes to understand how patients do post-acute

#### Informing policy

Using the information to inform others on a range of injury prevention, road safety, resource allocation, long term outcomes, and cost of care.

# Governance 2017-2022



# Strategic outcomes

Transition from project to sustainable business platform

Provide governance across the national trauma system

# Focus areas

#### **Building sustainability**

- Integrate the principles of the Treaty of Waitangi into all levels of the trauma network
- Transition the national programme from a project basis to a more sustainable approach with long-term funding
- Canvass a broader range of stakeholder's views and incorporate patient co-design into initiatives
- Build the capability and capacity of trauma leaders
- Develop a consistent expectation on the role of the regional trauma networks to support these groups to address issues of local importance, acknowledging these will be different from one region to another.

#### **Changing tack**

- Incorporate the outcome of the Royal Australasian College of Surgeons review of the New Zealand Trauma System
- Explore the implications for reducing the threshold for inclusion on the NZ-MTR to other admitted trauma patients
- Explore opportunities to grow our understanding of injury, and our ability to reduce its impact