

Trauma Domain: Atlas of Healthcare Variation
Health Quality & Safety Commission
8 November 2013

What is the aim of the Atlas of Healthcare Variation?

The Atlas of Healthcare Variation aims to prompt discussion within the health and disability sector about unwarranted variation in the provision of health services, and to stimulate changes that lead to improvements.

What are injury cases?

Injury is the leading cause of lost years of life in people under aged 45, with car crashes and falls the major cause of injury in this country. Injury is defined as physical trauma and excludes such things as poisoning, hanging and drowning.

How will this information help with managing trauma cases?

It is important DHBs understand how trauma is being managed across New Zealand so they can better assess their own performance, including make changes where needed to improve the consistency, quality and access to treatment.

How does New Zealand's rate of deaths from major trauma compare with overseas countries?

Compared with other countries, New Zealand's rate of deaths from injury is at the lower end of the range.

The World Health Organization reported mortality rate following unintentional injuries for 2004¹. Mortality rates ranged from 11.9/100,000 up to 217.4/100,000, with New Zealand sitting on the lower end at 29.2/100,000.

The Victorian State Trauma Registry² reports similar mortality rates to those reported here, with in-hospital mortality rate 115/1000 in 2011–12 compared with 102/1000 reported for New Zealand's Trauma Registries in 2010–2012.

What were the differences in trauma deaths rates between DHBs and between ethnicities?

No significant variations were reported for either.

What are we doing in New Zealand to improve trauma treatment?

In 2012 the Ministry of Health and the Accident Compensation Corporation established the Major Trauma National Clinical Network to ensure the very best level of care is provided consistently across New Zealand to severely injured people. One of its first tasks has been to develop a national trauma database called the New Zealand Major Trauma Registry.

¹ Death and DALY estimates for 2004 by cause for WHO Member States (xls). *World Health Organization*. 2004. Retrieved 1/10/2013.

² <http://www.health.vic.gov.au/trauma/trauma-registry.htm>. Retrieved 1/10/2013.

The registry will allow those looking at improving the quality of injury treatment to assess their own performance, identify opportunities for quality improvement and then measure the effectiveness of subsequent quality improvement initiatives.

For example the registry allows the time from injury, to a patient receiving definitive care, to be measured. This is an important measure as it is well known that the shorter the time to treatment, the better the likely outcome for patients, 'the right patient getting to the right hospital at the right time'. Thus, DHBs who have established a register are able to investigate their performance over time on this measure, compare their data against other trauma registers, make quality improvements where indicated and then measure the effectiveness of any such changes. As the registers evolve, additional quality measures will be able to be explored, allowing for further quality improvement activity.

It is hoped that the Atlas will challenge more DHBs to establish their own registers and participate in evaluating opportunities for improvement. Currently, Auckland, Counties Manukau, Bay of Plenty, Lakes, Taranaki and Waikato DHBs have their own registers.