



CASE STUDY

Reducing the burden of injury in Australia and India

A person dies from traumatic injuries as a result of a road accident every four minutes in India.

In Australia, over 1200 deaths were caused by road accidents in 2015. By 2020, it is expected that traumatic injury will represent the third greatest disease burden worldwide. For every death as a result of trauma, many more are seriously injured or permanently disabled.

Many of these deaths and disabilities are avoidable. Improvements in trauma care and rehabilitation can dramatically reduce the disease burden of traumatic injury. Often it is simple improvements which allow injured people to recover and lead normal productive lives.



Image: The team from the Australia-India Trauma Systems Collaboration

Australia-India Strategic Research Fund

Since 2003, Professor Mark Fitzgerald and his team at the National Trauma Research Institute (a department of Alfred Health and partnership with Monash University) have been investigating how to improve systems of trauma care and patient outcomes in Australia. They have enjoyed considerable success. **In Victoria, where they are based, their innovations have helped contribute to a 50 per cent reduction in the mortality rate from traumatic injury between 2001 and 2011.**

There is always room for improvement and a desire to refine their systems further led the National Trauma Research Institute (NTRI) to seek out a collaboration with the All India Institute of Medical Science (AIIMS). This collaboration allows the researchers to identify which improvements to systems and technologies work best much faster than is possible in Australia as a result of India's ability to rapidly iterate and adopt new technology combined with its huge population.

Together the NTRI and AIIMS are investigating the effects in India of a number of innovations in systems of trauma care and rehabilitation. These include: **a mobile app for ambulances which allows them to pre-warn hospitals about severely injured patients before they arrive;** the introduction of an Australian system to reduce errors during resuscitation; a mobile app to improve post-trauma rehabilitation; and developing better data collection to improve care underpinned by the

first multi-site trauma registry in India. The most successful innovations will be brought back to Australia, or offered internationally.

The researchers are particularly hopeful that the pre-hospital warning app can be adapted to the Australian ambulance setting, and that the rehabilitation app will help improve patient outcomes, particularly in regional Australia.

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To find out more

For more information on the Australia-India Strategic Research Fund, visit www.science.gov.au/aisrf.