Improving trauma care for critically bleeding patients

Physical injury is the main cause of death for **New Zealanders aged 1-39 years**.¹

Most of New Zealand's injury is **transport** or **falls** related.²

In the first 12 hours after injury, **blood loss** is the most common cause of death, even after going to hospital.³





The goal of the **Critical Haemorrhage Project** is to **develop a critical bleeding bundle of care** for New Zealand hospitals.

How a 'bundle of care' can help

A 'bundle of care'



is a clear set of actions and treatments that are proven to improve patients' outcomes.

Treating patients with a **'bundle of care'** that controls bleeding and helps with blood clotting will improve **consistency of care and outcomes**.

A critical bleeding bundle of care could, **over the next five years**:

- prevent up to 100 deaths in New Zealand
- reduce complications like multiple organ dysfunction or failure



 mean fewer total blood products are used ⁵ which would reduce pressure on blood donations and health system costs.



- 1 1996–2016; data sources: Ministry of Health Historical Mortality report; NZ Injury Query System (NIQS). Injury Prevention Research Unit, Department of Preventive and Social Medicine, University of Otago.
- 2 New Zealand Trauma Registry and National Trauma Network Annual Report 2018-19, page 13, https://www.majortrauma.nz/assets/Publication-Resources/Annual-reports/National-Trauma-Network-Annual-Report-2018-19.pdf
- 3 New Zealand Trauma Registry (www.majortrauma.nz/nz-mtr).
- 4 A bundle is a structured way of improving the processes of care and patient outcomes. It involves clear evidence-based practices that, when performed collectively and reliably, have been proven to improve patient outcomes (http://www.ihi.org/Topics/Bundles/Pages/default.aspx).
- 5 Mohamed et al. 2017. The impact of early thromboelastography directed therapy in trauma resuscitation. *Scandinavian Journal of Trauma, Resuscitation and Emergency Medicine* 25: 99. DOI 10.1186/s13049-017-0443-4.



