

Australian Medical Research and Innovation Two Year Priorities

Title: A new approach to addressing the burden of injury

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1. What is the gap in Australia's health system to be addressed by this priority?

Injury is the leading cause of death in children, young people and adults of working age in Australia, with Indigenous populations also overrepresented in injury statistics, yet there is no harmonised national policy approach nor coordinating agency to reduce the significant burden of traumatic injury – a critical gap in the landscape of major policy developments providing universal coverage for catastrophically injured persons under the new National Injury Insurance Scheme.

2. How does your area of priority address either an existing or a new health or health system challenge?

Injury Prevention and Control was endorsed as a National Priority Area by the Australian Health Ministers in 1996, but despite the massive human and economic burden injury places on the individual, health system and communities, there is currently no national coordinating agency to drive evidence informed policy and practice, an outdated national strategy document (The National Injury Prevention Plan 2004-2014), and no current resources allocated to strategy renewal.

3. Comment on which aims and objectives your priority is likely to meet.

This priority will address four current challenges: i) Facilitate the translation of research into health outcomes, ii) Research universally embedded across the health system, iii) Maximise productivity within the health and research system, and iv) Reduce barriers to collaboration. Further, the proposal cuts across all levels of the Building Blocks for the Australian Health and Medical Research and Innovation Strategy. Notably, the proposal brings injury, a leading burden of disease, to the focus of researchers, clinicians and policy makers. It will enable a systems approach to injury prevention, including provision of economic evaluation of injury prevention programs and health service delivery, to ensure sustainable high quality cost-effective care. Importantly, this proposal specifically addresses the primary aim of achieving evidence-based health care policy and delivery mechanisms, with an appropriately skilled workforce.

4. Mandatory considerations – which of the mandatory considerations set out in the *Medical Research Future Fund Act (2015)* does your priority proposal address?

- Burden of disease on the Australian Community
- How to deliver practical benefits from medical research and medical innovation to as many Australians as possible
- How to ensure that financial assistance provides that greatest value for all Australians
- How to ensure that disbursements complement and enhance other assistance provided to the sector

5. Outline of priority proposal:

Burden of injury

Injury is the leading cause of death and long term disability in children and people of working age in Australia and imposes tremendous costs on both individuals and the community. Injury Prevention and Control was endorsed as a National Priority Area by the Australian Health Ministers in 1996, but despite the massive human and economic burden injury places on the individual, health system and communities, there is currently no national coordinating agency for injury. The burden is immense – mental & substance use disorders (12%), musculoskeletal conditions (12%) and injuries (9%) together are responsible for 33% of the total burden of disease. While estimates of cost of injury are scarce, work-related injury and illness in Australia for 2008-09 was estimated at A\$60.6 billion, the equivalent

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of 4.8% of GDP, with at least half of the costs due to injury. While there is a new National Suicide Prevention Strategy (<http://www.health.gov.au/internet/main/publishing.nsf/Content/mental-nsp>) and a National Road Safety Strategy (<http://roadsafety.gov.au/>) the three national injury prevention plans on unintentional injury have expired (the National Injury Prevention and Safety Promotion Plan: 2004 – 2014; National Falls Prevention Plan for Older People: 2004 Onwards; The National Aboriginal and Torres Strait Islander Safety Promotion Strategy) and no Government agency is taking the lead on renewing these (<http://www.health.vic.gov.au/archive/archive2014/nphp/#nippssp>). The National Injury Surveillance Unit produces high quality reports on the burden and risk factors for injury, but there is no national agency with a mandate for advocacy or prevention.

There is therefore no coherent coordinated joined up policy approach to reducing the significant burden of traumatic injury in Australia or coordination of care. There is also a lack of research focus on injury, both for prevention and for trauma care, as well as for examination of long-term outcomes. There are few large scale trials of injury prevention programs, and a lack of coordination of policy implementation and evaluation efforts from Governments, both National and State.

Injury is a unique condition. The primary causes of injury are self-harm, road injury, falls and drowning, poisoning, sport, and assault, and together they impose a tremendous burden on the community. However, while the outcome of injury is very much dealt with by the health system, through emergency services, trauma care in hospital settings, and rehabilitation, the prevention of injury is often managed by Government agencies other than health. Prevention of injury requires a systems approach, with coordination of efforts from agencies across all levels of Government, and inclusion of health, transport, and consumer protection, and from Australian, State and local governments. Injury prevention at a community level is currently outsourced to not-for-profit organisations and charities who struggle to deliver coordinated, evidenced based informed prevention programs.

A call to complement and coordinate existing work

Injury prevention research has traditionally been funded by a mix of NHMRC, ARC and State Government agencies (including for example the State Insurance Regulatory Authority NSW, Transport Accident Commission Victoria), with a mix of project and linkage/partnership projects funded. However, there is no coordination of this work, and with no national agency coordinating policy or prevention nationally, there are multiple gaps. For example there has long been poor regulation of off road motorcycle crashes in rural regions – a high burden evident from surveillance data but no agency with a mandate for action. There is also likely duplication, with multiple state based health departments conducting similar fall prevention research and evaluation projects. Further, there are few injury research centres across Australia, and those that exist, lack scale and so require bolstering and coordination to ensure continuation of high quality, priority driven research that drives policy and practice and reduces the burden of injury in Australia, thus reducing the significant cost of injury to our health system.

There are substantial gains to be made through coordination of national research on prevention of injury via establishment of **a national injury prevention coordinating agency** that monitors injury trends (via strengthening of the existing National Injury Surveillance Unit), and funds injury research that enables strong, consistent and coordinated links across States and Territories. Similar to the Injury Prevention Centre at the US Centres of Disease Control (<http://www.cdc.gov/injury/>) such an entity would have a budget to develop a program which can assist in building collaborative research with the necessary scale with funding of high quality priority driven injury prevention research, ensuring strong linkages and coordination between research, Government, insurers and NFPs in the sector. Such a Centre would also provide opportunity to drive policy nationally on major risk factors for injury such as alcohol, as well as identifying and commercialising opportunities for innovation. Such an approach would be leveraging and enhancing collaboration across diverse fields such health research, engineering, law, policy and regulation as well as epidemiology and biostatistics and health care delivery.

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National Injury Prevention Coordinating Agency – delivering practical benefits

This priority proposal therefore is to establish and fund a **National Injury Prevention Coordinating Agency** that monitors injury trends (by strengthening the existing National Injury Surveillance Unit), and funds national centres of injury research excellence across Australia, to drive evidence informed prevention programs nationally. The agency would provide block funding for high performing research centres that bring together stakeholders in key injury areas, e.g. road injury, falls, sport injury, poisoning (e.g. opioids), consumer product injuries, work-related injuries, intentional injury, and economic costs of injury. Outputs would be used to develop national prevention strategies and policies by the overarching agency, and support and work closely with State and Territory Governments to identify and address key injury issues.

Economic review

Incorporated into the Agency will be an evaluation of effectiveness of programs delivered to address the injury prevention continuum, including improved sharing of data and identification of priorities, delivery of injury prevention programs and policies, delivery of trauma care including ongoing coordinated care and outcomes.

Sharing of information – translation of findings

Through a novel information hub the Agency will ensure key findings and lessons learnt from injury prevention strategies, trauma care delivery and policy changes are shared across and between sectors with a focus on improving efficiencies across the board.

6. What measures of success do you propose and what will be the impact on health care consumers?

Key measures of success of this priority are: development and uptake of national strategies and tools for injury prevention, reductions in injury related hospitalisations, reduction in cost of injury, increased capacity to deliver injury prevention programs, measured program effectiveness and co-ordinated care and open dissemination of research outcomes.

7. Please outline any linkages your proposal has with stakeholders, policy agendas and other health and medical research funding agencies.

The Agency will work closely with key stakeholders, guided by a Reference Committee comprising representatives from relevant government and non-government agencies including community organisations and leading researchers, health economists and clinicians. It will provide an information hub to ensure grassroots programs and leading clinicians alike reflect current best practice approaches and deliver their program as part of a national coordinated injury prevention and health care delivery strategy. Further, the Agency will work closely with research and health care delivery institutions to ensure researchers have access to current injury data and programs thereby building an appropriate workforce skilled in injury prevention approaches and care delivery.

This proposal addresses a **national health priority area** (Injury prevention and control) as identified by the Australian Government, and provides real opportunity to make sustainable gains in injury prevention and control. The proposal will facilitate strengthening of existing linkages across agencies including Government, funding agencies (NHMRC and ARC), insurance agencies (eg third party, private insurers), safety regulators (e.g. workplace health and safety agencies, consumer safety regulators), key professional networks (e.g. the Australian Injury Prevention Network, the Australasian College of Road Safety, Public Health Association of Australia, Australian and New Zealand Falls Prevention Society, Australian trauma Society, College of Surgeons) and not for profits and charities working in the sector (e.g. KidSafe, Royal Life Saving, FarmSafe). It will also strengthen the existing work of the National Injury Surveillance Unit and provide strong leadership and coordination across multiple stakeholders.