



**NSW Injury Risk Management
Research Centre**

Research Plan 2006-2008

**November 2006
(revised February 2007)**

This document provides a mid-term review of the Research Plan of the New South Wales Injury Risk Management Research Centre (IRMRC).

THE NSW IRMRC VISION

To advance injury risk management through the conduct of high quality research, the building of research capacity and the translation of the results of research into policy and practice.

THE GOAL

The Injury Risk Management Research Centre (IRMRC, The Centre) strives to:

- Be an independent centre of excellence in research;
- Provide innovative research leadership in injury risk management;
- Be a source of information on injury risk management;
- Advance injury risk management through high quality research;
- Contribute to the policy development process of sponsoring agencies;
- Grow partnerships with researchers, government agencies and other stakeholders;
- Build capacity in injury risk management research;
- Appropriately target and disseminate findings to maximize integration into policy and practice;
- Develop research funding sources in order to sustain future research;

PRIORITY INJURY RESEARCH AREAS

Work undertaken by the NSW IRMRC has consistently shown that the injury priorities, in terms of incidence and cost burden, are:

- Suicide
- Motor vehicle traffic incidents
- Falls
- Drownings/near-drownings
- Violence
- Poisoning

Based on the key research strengths and networks of the NSW IRMRC, as well as consideration of the priority research areas identified for NSW, the 5-year NSW IRMRC research program will focus, in the main, on the following areas:

- Road Safety
- Sports and recreational injuries (including drowning and near-drowning)
- Falls
- Workplace safety
- Policy orientated and evaluation research

The Centre's capacity in policy and program evaluation has continued to develop in 2006, particularly in the area of falls and economic evaluation. Funding has been provided for positions in policy evaluation and to enhance the economic capacity of the Centre. A Visiting Professor in Public Health

Economics has been appointed. The recent development of these funding streams demonstrates that the Centre has been able to respond to new opportunities in injury research. The NSW IRMRC will continue to adapt to change whenever possible, whilst maintaining its major focus on its existing core research streams.

STRUCTURING OF THE NSW IRMRC RESEARCH PROGRAM

The NSW IRMRC research program will be structured around six main areas of strength. These include data systems and injury epidemiology, road safety, sports and recreation safety, falls, workplace safety and policy orientated and evaluation research. These reflect the capabilities of the Centre and areas where it has made significant contributions to date. Structuring the research plan around these areas also capitalises on the Centre's core disciplines of human factors approaches, epidemiology and biostatistics.

- **Data systems and injury epidemiology:** This area includes research involving biostatistical analysis of routine injury data collections as well as research using new data analytic and data management approaches such as data linkage. This area also includes research involving the development and evaluation of new data collection systems.
- **Road safety:** This area includes the broad range of research on road injury risk management relating to the identification of preventive strategies, the development and evaluation of potential intervention strategies
- **Sport and recreation (including drowning/near-drowning):** This area includes research on epidemiological monitoring, identification of appropriate preventive strategies and barriers to implementation and evaluation of their real-world effectiveness.
- **Falls:** This area currently includes research on epidemiological monitoring and policy evaluation.
- **Workplace safety:** This area includes research on the nature of workplace injury, human factors research on the risk factors for workplace injury and the evaluation of interventions to improve workplace safety.
- **Policy orientated and evaluation research:** This area includes research on issues relating to the translation of injury risk management research into health and safety planning, policy and practice. Specific issues include studies on the cost of injury and injury prevention in indigenous populations.

Appendix 1 outlines how senior research staff of the centre contribute across these areas, as at November 2006.

In addition, the NSW IRMRC research program includes research training of post graduate students and public health professionals.

FUNDING THE RESEARCH PROGRAM

It is expected that funds will continue to be generated from the following sources and in the distribution indicated:

45%	Peer Reviewed Grants (ARC and NHMRC Investigator Driven Research) including Research Fellowships
25%	Core funding from partners: RTA, MAA and NSW Health
25%	Successful research tenders and consultancies in the areas of road safety, occupational health and safety, falls, sports safety, translational research and public health data
5%	UNSW Contribution
Across income streams: Up to 20%	Collaborations on projects which are initiated by external collaborators on which NSW IRMRC staff provide epidemiological or human factors expertise.

Table 1: Sources of Funds

Where possible, staff with PhDs will be encouraged to seek funding of their positions through NHMRC and ARC Research fellowships to provide ongoing salary infrastructure support for their research program. As at November 2006, three NSW IRMRC staff hold such fellowships.

COLLABORATIONS

The NSW IRMRC will establish and participate in research partnerships with other academics across the UNSW to expand the expertise base available for its injury research. These partnerships may be either IRMRC or other UNSW researcher driven.

It will also lead and/or participate in strategic research partnerships with other key injury groups, particularly those in NSW. This will serve to establish NSW as a key locus of injury research expertise in Australia. The current NHMRC Capacity Building Grant Partnership (led by the NSW IRMRC) with the George Institute of International Health, the Prince of Wales Medical Research Institute, and the Rehabilitation Studies Unit will be a major forum for this over 2005-2009.

KEY RESEARCH PERFORMANCE INDICATORS

Introduction

A performance measurement framework has been developed at the Centre which attempts to meet both the needs of the Board and the university administration. The Board seeks appropriate and timely indicators for the management and governance of the Centre, and the University needs to meet the Commonwealth's demand for more rigorous evaluation of the benefits of a research group's performance as set down in the proposed Research Quality Framework (RQF).

In this section we describe these needs in detail and discuss the requirements of the RQF. Our objective must be to avoid duplication and meet the needs of both bodies with the development of one set of indicators. An evaluation framework for the IRMRC is then presented and appropriate measures of performance identified.

It must be noted that the indicators are only the first pass in any evaluative process and the measures themselves may not be entirely suitable in all instances. They will need to be revised over time. It is expected that further adjusted will be needed once UNSW has finalized its RQF research groupings.

Performance indicators were developed in collaboration with researchers at the Centre and it is to be hoped that the unique characteristics of disciplines and roles at the IRMRC are provided for properly.

Rationale and Purpose of Indicators

The Board requires measures against which the performance of the Centre may be evaluated. The Commonwealth Department of Education, Science and Technology (DEST) needs to evaluate and compare the performance of funded research institutions. Funding bodies want evidence of the quality, benefit and usefulness of funded research. The fundamental question is: what is the benefit of investment in research? The subsidiary governance question pertains to the efficiency and effectiveness of administrative systems.

Indicators were developed to meet the circumstances of the IRMRC and measure not only research quality and research impact, as required under the RQF, but also individual research productivity and administrative competence.

The currently proposed RQF is intended to compare outcomes between institutions and has only been defined at a generic level. Objective, quantitative indicators of quality and impact have not been fully developed, and will be decided upon by the future Assessment Panels for each of the future research clusters. Such measures are fundamental to the evaluation of organisational performance and the IRMRC, as an externally funded research centre accountable to a Board, must report against appropriate, objective and relevant performance indicators *now*. Furthermore, whilst there is no requirement in the RQF for administrative performance measures, this information is necessary for the Board to monitor all aspects of the Centre's

performance and so fulfill its governance function. IRMRC indicators have been developed that we consider appropriate to ensure the accountability of an externally funded body such as the IRMRC.

Research Quality Framework

The Recommended RQF (October 2006) requires each of the future research groups to submit an 'Evidence Portfolio' founded on a 'Context Statement' which incorporates overall productivity, quality and impact indicators, such as ranked output, peer reviewed research income, evidence of research collaborations and editorial contributions to journals, the number and destination of HDR completions, esteem indicators (prestigious fellowships) and any information linking previous research to impact in the assessment period. We will use this format in the presentation our performance measures.

In the RQF documents, quality is defined as the “recognition of the originality of research by peers and its impact on the development of the same or related discipline areas within the community of peers” (DEST Oct 2006 p10). The Group of eight research universities (Go8) argued that the most reliable indicators of research quality are citation impact and success in winning national competitive grants (Response to the RQF Development Advisory Group *Guiding Principles* document circulated 16 August 2006 p 3). This seems to have been accepted by Department of Education, Science and Training (DEST). Quality assessment will be applied to a research group’s body of work, that is, the best four outputs per researcher and the full list of research outputs for the group.

Impact refers to the extent to which the research is successfully applied and the broader impact or ‘usefulness’ (presentation by Prof Les Field, DVC (Research) UNSW, Faculty of Science Research Forum, 2006). It is defined in the RQF as the “impact or use of original research outside the peer community that will typically not be reported in traditional peer reviewed literature.....Broader impact relates to the recognition by qualified end users that methodologically sound and rigorous research has been successfully applied to achieve social, economic, environmental and/or cultural outcomes.....research must be sound by the standards of its field recognized in terms of originality, significance and rigour.” (DEST Oct 2006 p10). This information is to be provided under the RQF as a ten page impact statement which includes up to four case studies, the impact of which is corroborated by end-users.

Both impact and quality will be rated on a five point scale from 'outstanding' to 'below standard' or 'no identifiable benefit'.

The key performance indicators against which the Centre will be evaluated may be found in the Business Plan.

APPENDIX 1

**NSW IRMRC STAFF STRENGTHS IN RELATION TO THE KEY
STRUCTURAL COMPONENTS OF THE RESEARCH PROGRAM
(as at November 2006)**

COMPONENT	SENIOR STAFF
Data systems and injury epidemiology	A/Prof Ann Williamson Dr Andrew Hayen Dr Soufiane Boufous
Road safety	A/Prof Ann Williamson Dr Julie Hatfield Ms Rena Friswell
Sport and recreation (including drowning/near-drowning)	Dr Shauna Sherker Dr Soufiane Boufous
Falls	A/Prof Ann Williamson Dr Andrew Hayen Ms Mary Potter Forbes
Workplace safety	A/Prof Ann Williamson Dr Julie Hatfield Ms Rena Friswell Ms Mary Potter Forbes
Policy orientated and evaluation research	A/Prof Ann Williamson Dr Julie Hatfield Ms Mary Potter Forbes

Table 2: Research Strengths by personnel