



Evaluation of the Current State of HSR in Australia and New Zealand

Suzanne Robinson on behalf of HSRAANZ

HSRAAZ commissioned HSR Scoping study

The HSRAANZ is the peak body for HSR in Australian and New Zealand and has a major role in assisting health services researchers and policy makers to meet the challenges facing the health system in the 21st Century. In order to inform the Associations strategy over the next decade we commissioned a study to provide a clearer picture of the current state of health services research in Australia and New Zealand.



Definition of HSR

Health service research is concerned with the relationship between the provision, effectiveness, and efficient use of health services and the health needs of the population. It aims to provide reliable and valid data on which to base appropriate, effective, cost-effective, efficient and acceptable services.

The Evaluation Brief: Aims and Objectives

- * **Study Aim: Provide clearer picture of the current state of health services research in Australia and New Zealand (from across the main HSR funders: ARC, NHMRC and ANZCTR).**

The key deliverables of the study are to identify:

- * **Who is doing what health services research in Australia and New Zealand?**
- * **How that research is being funded?**
- * **How that research is being used – by whom and how?**
- * **What real world impact is that research having?**

The evaluation team

University of Newcastle team: Dr Elizabeth Fradgley, A/Prof Christine Paul, Prof John Wiggers, Prof Deborah Loxton, Dr Catherine Chojenta, and Dr Melissa Harris



With support from Della Roach, Emma Byrnes, and Annika Ryan

Timelines

Project timeline for Objective 1 (what research is funded) and Objective 2 (a cross sectional survey to explore the impact of research)

Table 1: Proposed timeline and tasks

	October	November	December	January	February	March
OBJ 1 - funding	Develop inclusion criteria/ extraction forms	Extract, Analyse, Report	Milestone 1: Preliminary data for AGM			
	Identify all sources					
	Pilot test inclusion criteria/ extraction form					
OBJ 2 - impact	Survey development	Pilot-test of online version	Finalize survey	SURVEY CIRCULATION VIA HSRAANZ AND REMINDER PROCESS - *PLEASE COMPLETE THE ONLINE SURVEY		
Report						Analysis
						Milestone 2: CI/HSRAANZ: Finalize report

***Key dates for AGM attendees:** please consider completing the online survey when circulated by HSRAANZ executive team starting in December.



Methods

Phase 1

1. Desktop review of the four key funding bodies - ARC, NHMRC, HRCNZ



Phase 2

2. Survey of research community: researchers; funders and broader health system community



Desktop review

Funder (n. identified)	Years extracted	Years analysed for AGM	Grant type	Availability of keywords
ARC 397	2012-16	2012-2015	All grant schemes	Scientific title and keywords not provided, used FoR codes 11 and 17
NHMRC* 1788	2012-2016 No funding duration for 2013	2012-2015	All grant schemes – except equipment grants	Available and used when extracting information, funding duration not provided for 2013
HRCNZ 417	2012-2016 Only 2014-16 had project summaries	2012-2016	All grant schemes	Without project summary difficult to apply criteria – have requested additional information, data from confirmed cases presented today
ANZCTR	Info requested	-		

**some grant types from 2016 are still under embargo so not included, the coding is still in progress.*

Inclusion criteria

1. not a clinical/drug trial;
2. not health promotion aimed at the general public with no health service involvement (i.e. media campaigns);
3. required to include community, primary, hospital health services, qualified health professionals, or refer to service change, policy, or financing.

This criteria was piloted with approximately 40 cases in two rounds of independent coding.

Data extraction template

Data extraction process	Additional notes
For all funded studies:	
Scientific title or ARC identification	
Information source	
Inclusion decision	
For included studies only:	
Funding source	
Funding type	
Year announced	ANZCTR does not include this information
Ethics registration year	NHMRC, ARC, HRCNZ does not include this information
Funding duration (months)	ANZCTR does not include this information
Funding amount	ANZCTR does not include this information
First or Primary Investigator listed	
Email available	NHMRC, ARC, HRCNZ does not include this information
Other investigators listed	
Affiliations	
AU/NZ	
Study aim (Raw)	
Condition of interest	Conditions of interest are Australian priority research areas.
Population of interest (raw)	
Population of interest category	1) Administrator, manager or policy maker; 2) Health professional; 3) Consumer (including caregiver)
Service of interest (raw)	
Service of interest category	1) Inpatient hospital; 2) Outpatient hospital; 3) Community or residential; 4) Primary; 5) Rehabilitation; 6) Unclear – but involved a qualified health professional

Data extraction template

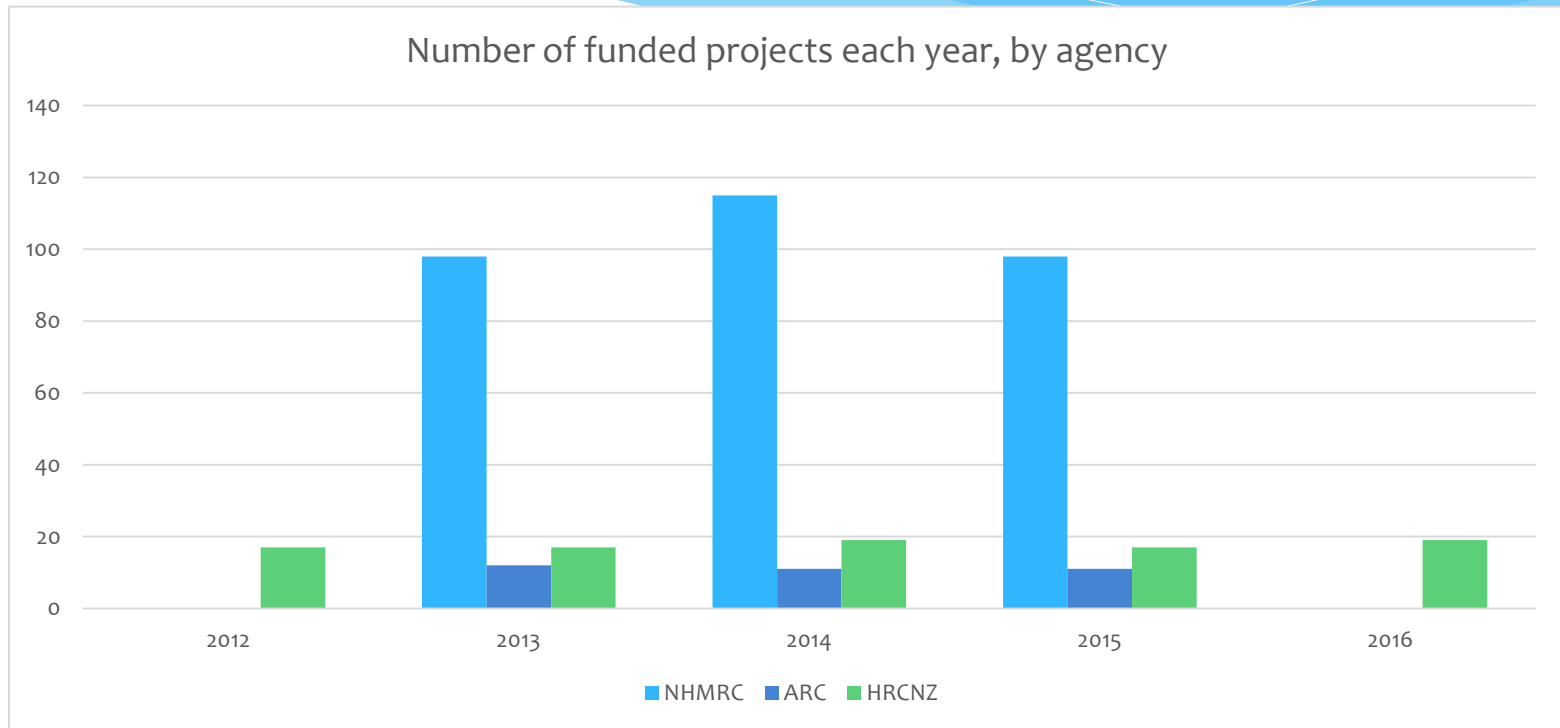
Data extraction process	Additional notes
Study design	Categories were derived from the Cochrane EPOC handbook. NHMRC, ARC, HRCNZ frequently does not include this information
Type of HSR aim	Intervention; Descriptive; Both; Unclear; CRE or NA
HSR outcome studied	<p>The following categories were adapted from Bowling et al. (2015):</p> <ul style="list-style-type: none">• Appropriateness = whether the expected benefit of a change exceeds its negative consequences - this includes treatment safety;• Effectiveness = if the change results in improved outcomes under real circumstances;• Cost-effectiveness = if the change results in improved outcomes and is financially appropriate;• Acceptable = if the change is evaluated in terms of provider and patient satisfaction - this includes patient-centred care and feasibility;• Capacity building/resource development = if the study is seeking to develop health service capacity to respond to health needs using strategies such as training, network development, or educational resources;• Accessibility = if the intervention seeks to increase individuals' health service use or mediate barriers to timely and equitable care

Preliminary findings

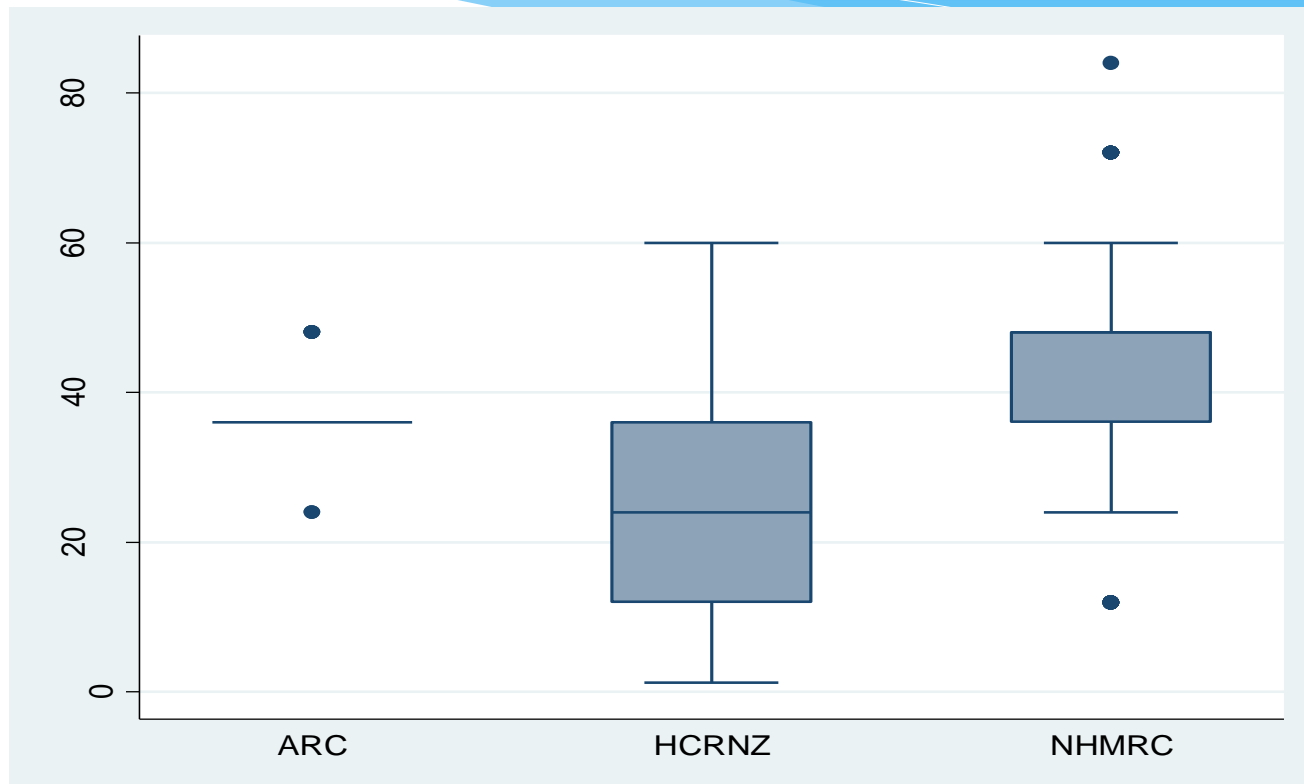
Total number of reviewed, excluded and included projects, by information source

	Number reviewed (%)	Number excluded (%)	Number included (%)
ARC	397 (14.2)	363 (91.4)	34 (8.6)
NHMRC	1788 (63.9)	1425 (79.7)	363 (20.3)
HRCNZ	612 (21.9)	523 (85.5)	89 (14.5)
Total	2797 (100.0)	2311 (82.6)	486 (17.4)

Preliminary findings

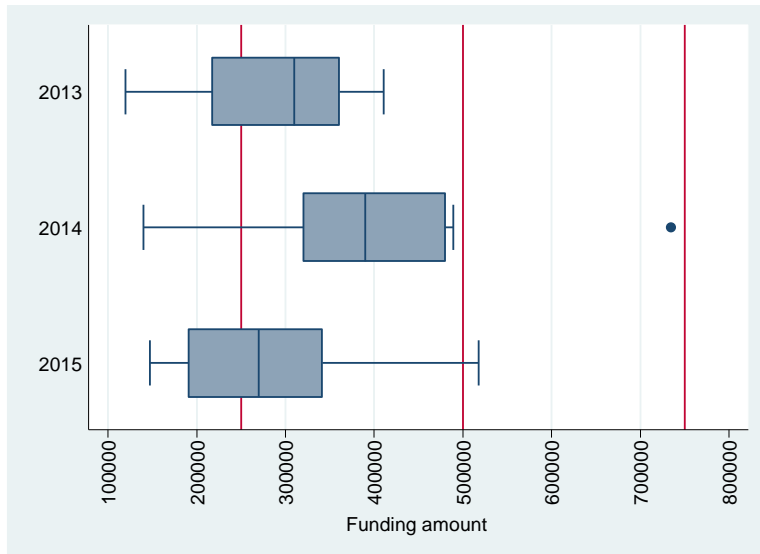


Funding duration (by month)

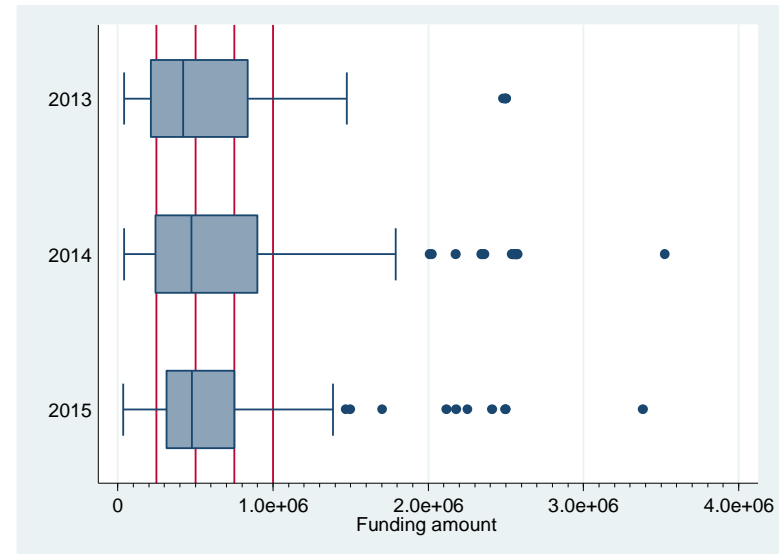


Funding amount allocated for HSR

Box plot of funding amounts awarded by **ARC**, by year

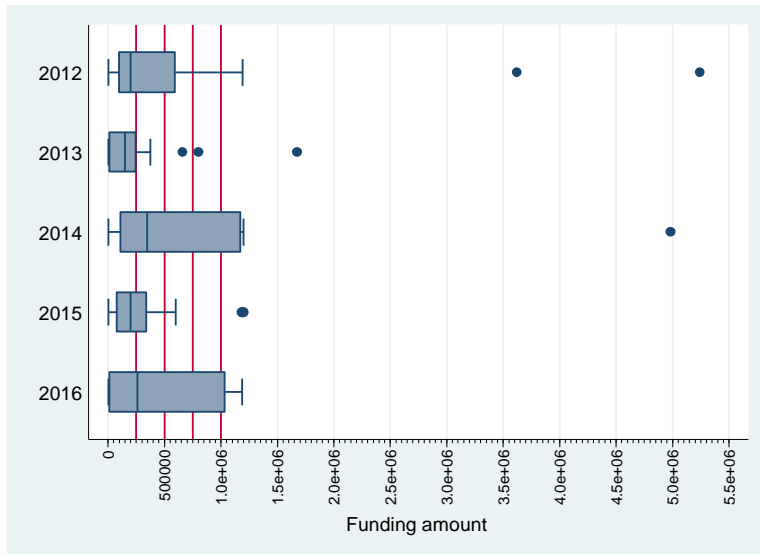


Box plot of funding amounts awarded by **NHMRC**, by year

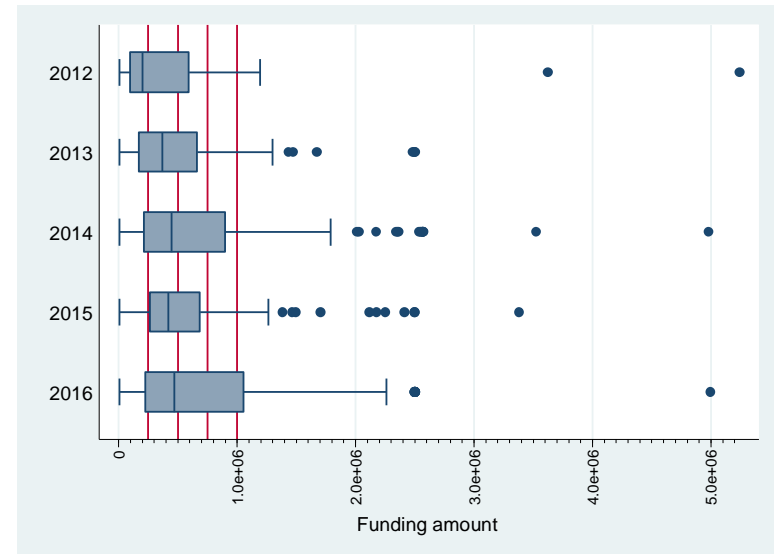


Funding amount allocated for HSR

Box plot of funding awarded by **HCRNZ**, by year



Box plot of funding awarded by **all** organizations, by year



CIA affiliations and administering organisations

- * A total of 58 unique affiliations were recorded;
- * greatest number of funded studies were reported by researchers affiliated with
- * University of Sydney (11.3%),
- * University of Melbourne (10.0%)
- * Monash University (7.3 %).

Conditions, services of interest and participants

The conditions and services of interest within funded studies (n = 486)

Condition	Number of studies (%)
Mental health and dementia	53 (10.9)
Cardiovascular disease (including stroke)	45 (9.3)
Cancer	42 (8.6)
Alcohol or drug abuse (including nicotine use)	28 (5.8)
Diabetes mellitus	24 (4.9)
Musculoskeletal conditions (including arthritis, osteoporosis)	21 (4.3)
Injury prevention	16 (3.3)
Chronic respiratory illness (including asthma, COPD)	14 (2.9)
Obesity	6 (1.2)
Other	175 (36.6)
Service	
Hospital (inpatient and outpatient)	112 (23.0)
Rehabilitation	10 (2.1)
Unclear- health professional involvement	196 (40.3)
Community or residential	76 (15.6)
Primary	71 (14.6)
Study participants or stakeholders	
Consumer (including caregiver)	129 (26.5)
Health professional	314 (64.6)
Service administrator or policy maker	158 (32.5)

A total of 81 studies (16.7%) were focused on improving or evaluating health services for Indigenous communities.

Research design

The research designs used in funded HSR studies (n=468)

Research design	Number of studies (%)
Randomised controlled trials, including cluster randomized trials	26 (5.4)
Non-randomised controlled trial	2 (0.4)
Cohort study (i.e. follow-up, incidence, longitudinal, or prospective study)	6 (1.2)
Cross-sectional study (i.e. prevalence study)	5 (1.0)
Qualitative methods such as interviews or focus groups	13 (2.7)
Economic analysis	9 (1.9)
Unclear or not applicable	406 (83.5)

Research design	Number of studies (%)
Intervention	181 (37.2%)
Description	115 (23.6%)
Both intervention and description	59 (12.1%)
Aims unclear	131 (27.0%)

Study outcomes

The primary outcomes of funded HSR projects	
Study outcomes	Number of studies (%)
Appropriateness	128 (26.3)
Effectiveness	169 (34.8)
Cost-effectiveness	83 (17.0)
Acceptability	96 (19.8)
Capacity building or resource development	169 (34.8)
Accessibility	101 (20.8)
Unclear	27 (5.6)

Early days : areas for further exploration and discussion

- * Lack of detail on current allocated research funding – consider how we record and retain funded research activity- i.e. keywords, lay summary (or scientific summary)- *does this need to be standardised?*
- * Limited information on of impact or translation – either during or after project- *do we need to capture this, should it be a central metric/criteria- can we learn lessons from other jurisdictions (Canada & UK doing work in this area)?*
- * More exploration of final data and exploration of possible trends
 - * NZ – funding smaller grants- *is this important for seedfunding?*
 - * Potential skew towards a few projects receiving a larger proportion of funds- *Is the balance of funding against topics/conditions etc relevant?*
- * Focus on service delivery at the clinical interface- limited information on contributions to how the health system is financed and organized, the inherent incentives in that, and the evaluation of system level policy. *Relates to the above – are we investing in the most appropriate areas- could we do more in the health systems space?*
- * Other ???

Next steps

- * Continue to extract information for desktop review – finalise results
- * Undertake phase two: survey of community: researchers; funders and broader health system community –

please do complete the survey out mid December

2016

