

# NHMRC Partnership Centre: Health System Sustainability Inaugural Symposium

**Jeffrey Braithwaite, PhD**

**Professor and Director**

Australian Institute of Health Innovation

**Director**

Centre for Healthcare Resilience and Implementation  
Science

**Annette Schmiede**

**Chair, Governance Authority**

NHMRC Partnership Centre

**Executive Leader**

Bupa Health Foundation



# What is health system sustainability?

*Sustainability implies that the health system endures and adapts by ensuring limited resources (physical, financial and human) are used efficiently and responsibly enough to continually maintain or improve population and individual health and wellbeing in a constantly changing external environment.*



# Health System Sustainability PC Funding Partners



**MACQUARIE**  
University

**University of Notre Dame  
Australia**



**NHMRC**



Australian Government  
National Health and Medical Research Council

**Bupa  
Foundation  
(Australia) Ltd.**



**PC**  
**\$10.75M,**  
**5 years**

**NSW Health**



NSW  
GOVERNMENT | Health



**AUSTRALIAN INSTITUTE  
OF HEALTH INNOVATION**

*Faculty of Medicine and  
Health Sciences*



**MACQUARIE  
University**



**MELBOURNE INSTITUTE<sup>®</sup>**  
of Applied Economic and Social Research



THE UNIVERSITY OF  
MELBOURNE

FACULTY OF  
BUSINESS &  
ECONOMICS



**MONASH University**



**THE UNIVERSITY  
OF QUEENSLAND**  
AUSTRALIA



**Monash Partners**  
Academic Health Science Centre

**Cabrini**



**Health**  
Sydney  
Local Health District



Consumers Health  
Forum OF Australia



**IHPA**





# Part 1: Structure of the Grant





# Chief Investigator (CI)

Professor Jeffrey Braithwaite, AIHI



# Designated System-Based Investigators (DSBIs)



MACQUARIE  
University

Ms Kim McClymont, NSW Health

Ms Annette Schmiede, Bupa Health Foundation

Professor Christine Bennett AO, University of  
Notre Dame



# Six Research Lead Investigators (RLIs)



MACQUARIE  
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Professor Enrico Coiera, AIHI

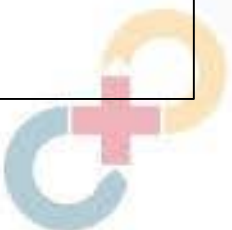
Professor Johanna Westbrook, AIHI

Professor Paul Glasziou, Bond University

Professor Anthony Scott, University of Melbourne

Professor Jonathan Karnon, University of Adelaide

Professor Rachelle Buchbinder, Monash University &  
Cabrini Institute



# Six Systems-Based Lead Investigators (SLIs)



Professor Robyn Ward AM, University of Queensland

Dr Teresa Anderson, Sydney Local Health District &

Sydney Health Partners

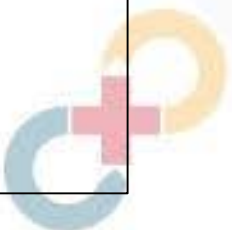
Professor Helena Teede, Monash University &

Monash Partners

Ms Leanne Wells, Consumers Health Forum

Professor Leonard Gray, University of Queensland

Dr Trent Yeend, Independent Hospital Pricing Authority



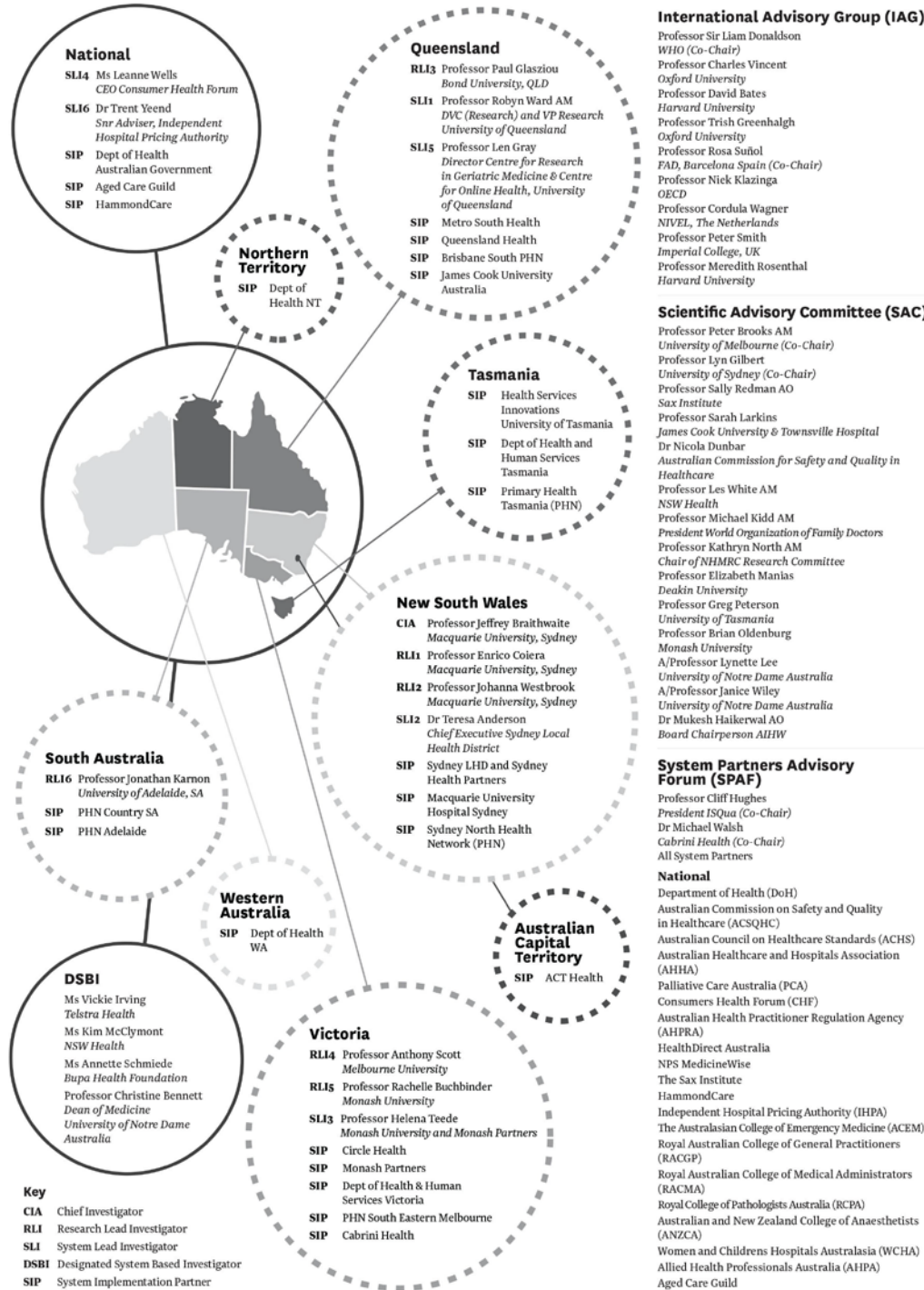
# **Implementation Partners and Supporters from 41 organisations or agencies**



# PARTNER MAP

## NHMRC Partnership Centre for Health System Sustainability

AUSTRALIAN INSTITUTE OF  
HEALTH INNOVATION  
*Faculty of Medicine and  
Health Sciences*



### International Advisory Group (IAG)

Professor Sir Liam Donaldson  
WHO (Co-Chair)  
Professor Charles Vincent  
Oxford University  
Professor David Bates  
Harvard University  
Professor Trish Greenhalgh  
Oxford University  
Professor Rosa Suñol  
FAD, Barcelona Spain (Co-Chair)  
Professor Niek Klazinga  
OECD  
Professor Cordula Wagner  
NIVEL, The Netherlands  
Professor Peter Smith  
Imperial College, UK  
Professor Meredith Rosenthal  
Harvard University

### Scientific Advisory Committee (SAC)

Professor Peter Brooks AM  
University of Melbourne (Co-Chair)  
Professor Lyn Gilbert  
University of Sydney (Co-Chair)  
Professor Sally Redman AO  
Sax Institute  
Professor Sarah Larkins  
James Cook University & Townsville Hospital  
Dr Nicola Dunbar  
Australian Commission for Safety and Quality in  
Healthcare  
Professor Les White AM  
NSW Health  
Professor Michael Kidd AM  
President World Organization of Family Doctors  
Professor Kathryn North AM  
Chair of NHMRC Research Committee  
Professor Elizabeth Manias  
Deakin University  
Professor Greg Peterson  
University of Tasmania  
Professor Brian Oldenburg  
Monash University  
A/Professor Lynette Lee  
University of Notre Dame Australia  
A/Professor Janice Wiley  
University of Notre Dame Australia  
Dr Mukesh Haikerwal AO  
Board Chairperson AIHW

### System Partners Advisory Forum (SPAF)

Professor Cliff Hughes  
President ISQua (Co-Chair)  
Dr Michael Walsh  
Cabrini Health (Co-Chair)  
All System Partners

### National

Department of Health (DoH)  
Australian Commission on Safety and Quality  
in Healthcare (ACSQHC)  
Australian Council on Healthcare Standards (ACHS)  
Australian Healthcare and Hospitals Association  
(AHHA)  
Palliative Care Australia (PCA)  
Consumers Health Forum (CHF)  
Australian Health Practitioner Regulation Agency  
(AHPRA)  
HealthDirect Australia  
NPS MedicineWise  
The Sax Institute  
HammondCare  
Independent Hospital Pricing Authority (IHPA)  
The Australasian College of Emergency Medicine (ACEM)  
Royal Australian College of General Practitioners  
(RACGP)  
Royal Australian College of Medical Administrators  
(RACMA)  
Royal College of Pathologists Australia (RCPA)  
Australian and New Zealand College of Anaesthetists  
(ANZCA)  
Women and Childrens Hospitals Australasia (WCHA)  
Allied Health Professionals Australia (AHPA)  
Aged Care Guild  
Royal Australasian College of Surgeons (RACS)



**MACQUARIE**  
University



# International Advisory Group (IAG)

## Co-Chairs

**Professor Sir Liam Donaldson**

WHO, Patient Safety Envoy

**Professor Rosa Suñol**

Avedis Donabedian Research Institute,  
Universitat Autònoma de Barcelona



# Scientific Advisory Committee



**MACQUARIE**  
University

## Co-Chairs

**Professor Peter Brooks AM**

University of Melbourne

**Professor Lyn Gilbert AO**

University of Sydney



# System Partners Advisory Forum (SPAFA)



**MACQUARIE**  
University

## Co-Chairs

Professor Clifford Hughes AO

International Society for Quality in Health  
Care (ISQua)

Dr Michael Walsh

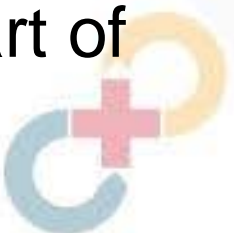
Cabrini Health



# Objectives of every PC



1. **Support implementation** of research-informed changes in health and health care systems
2. **Synthesis and dissemination** of existing research relevant to improving health and health care system performance
3. **Undertaking collaborative new research** to improve health care using methods which are cross-sectional, inter-disciplinary and trans-national in scope
4. **Building capacity**, within the research community to conduct applied research and within the system to use research as part of change management



## Part 2:

# What are we trying to do?

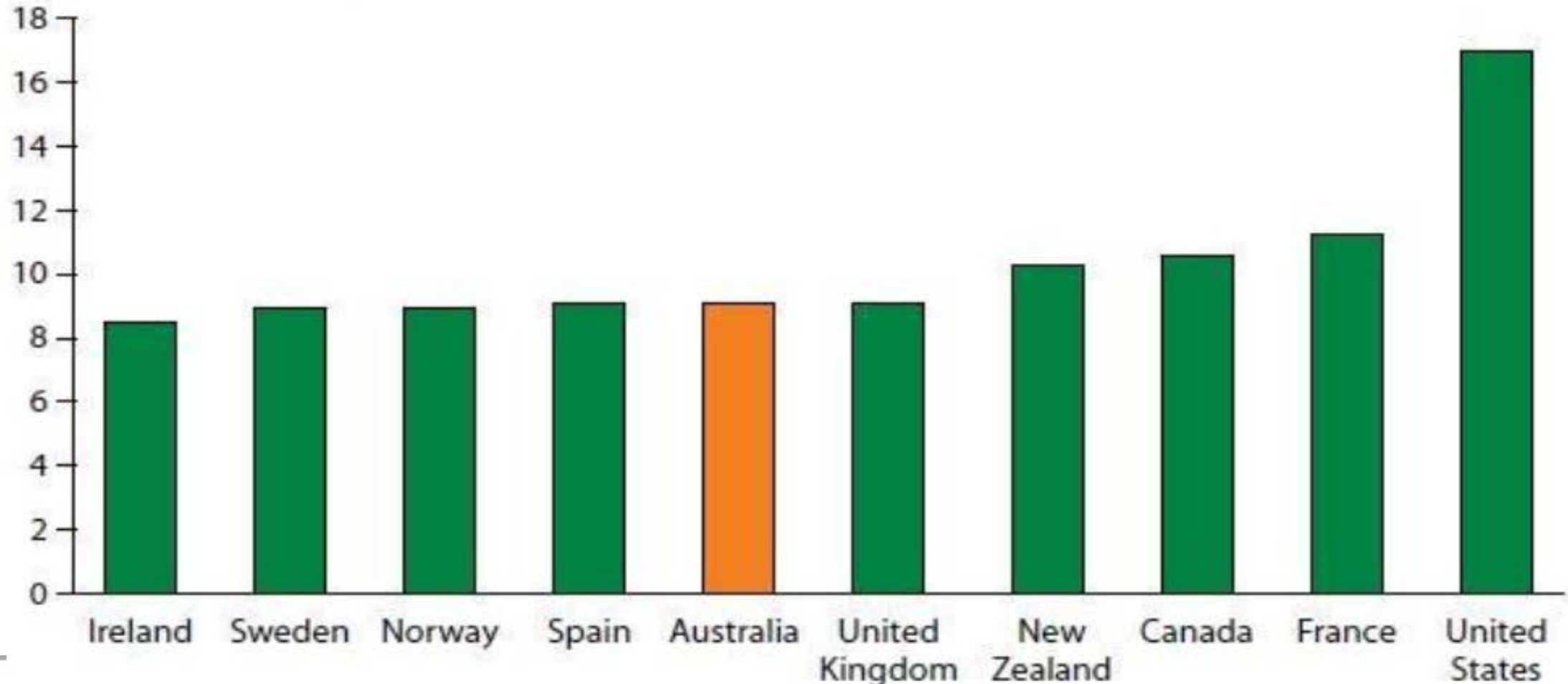


# Health expenditure as a proportion of GDP, selected OECD countries, 2011



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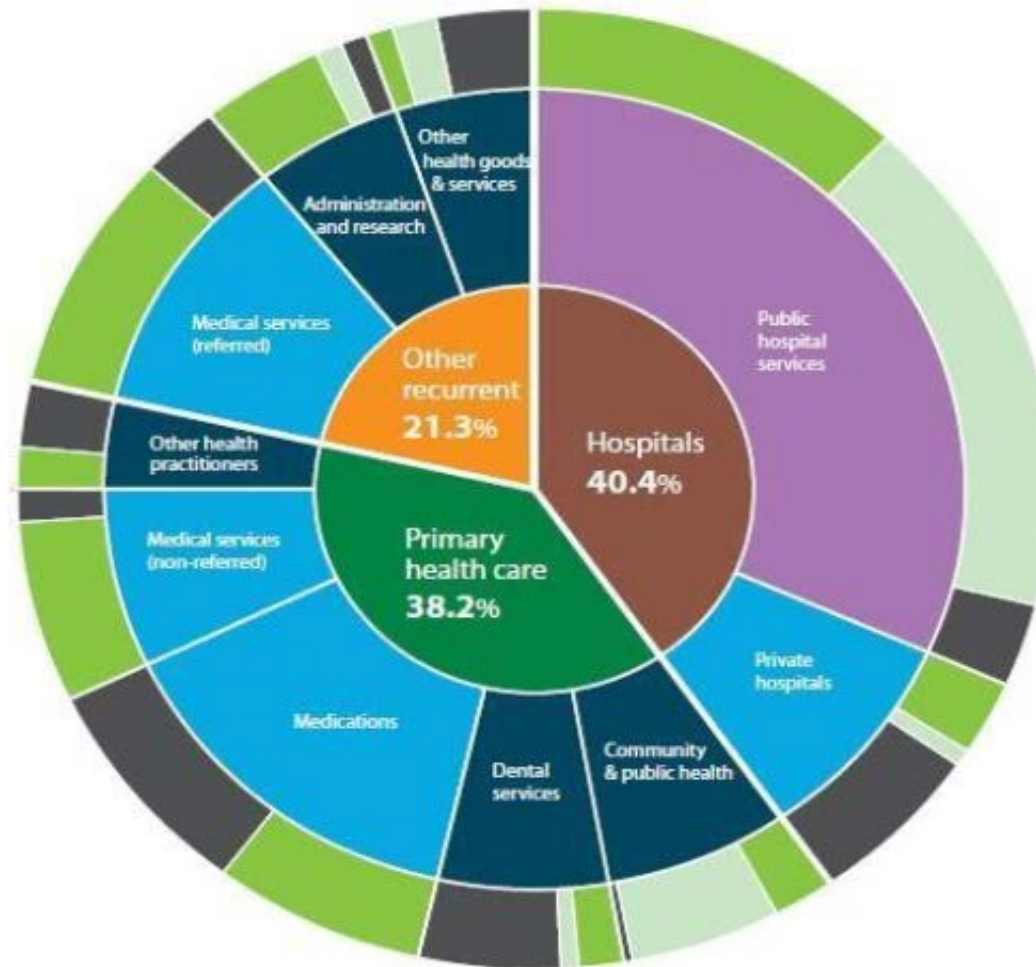
Health to GDP ratio (per cent)



# Health services-funding and responsibility



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Note: The inner segments indicate the relative size of expenditure in each of the 3 main sectors of the health system ('hospitals', 'primary health care', and 'other recurrent'). The middle ring indicates the relative expenditure on each service in the sector (shown by the size of each segment) and who is responsible for delivering the service (shown by the colour code). The outer ring indicates the relative size of the funding (shown by the size of each segment) and the funding source for the difference services (shown by the colour code).

Source: <http://www.aihw.gov.au/australias-health/2014/health-system>

## Share of expenditure



## Responsibility for services



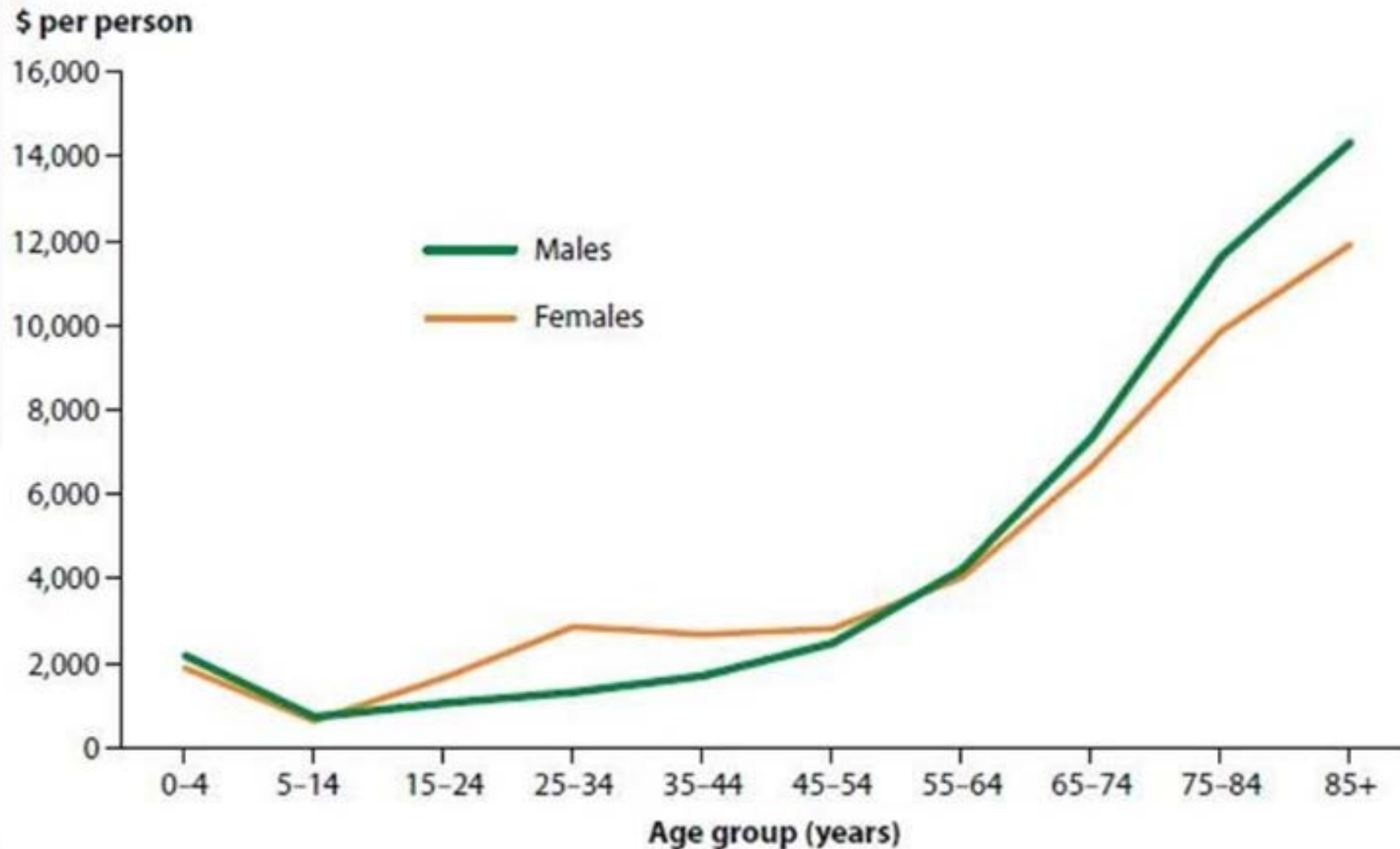
## Funding



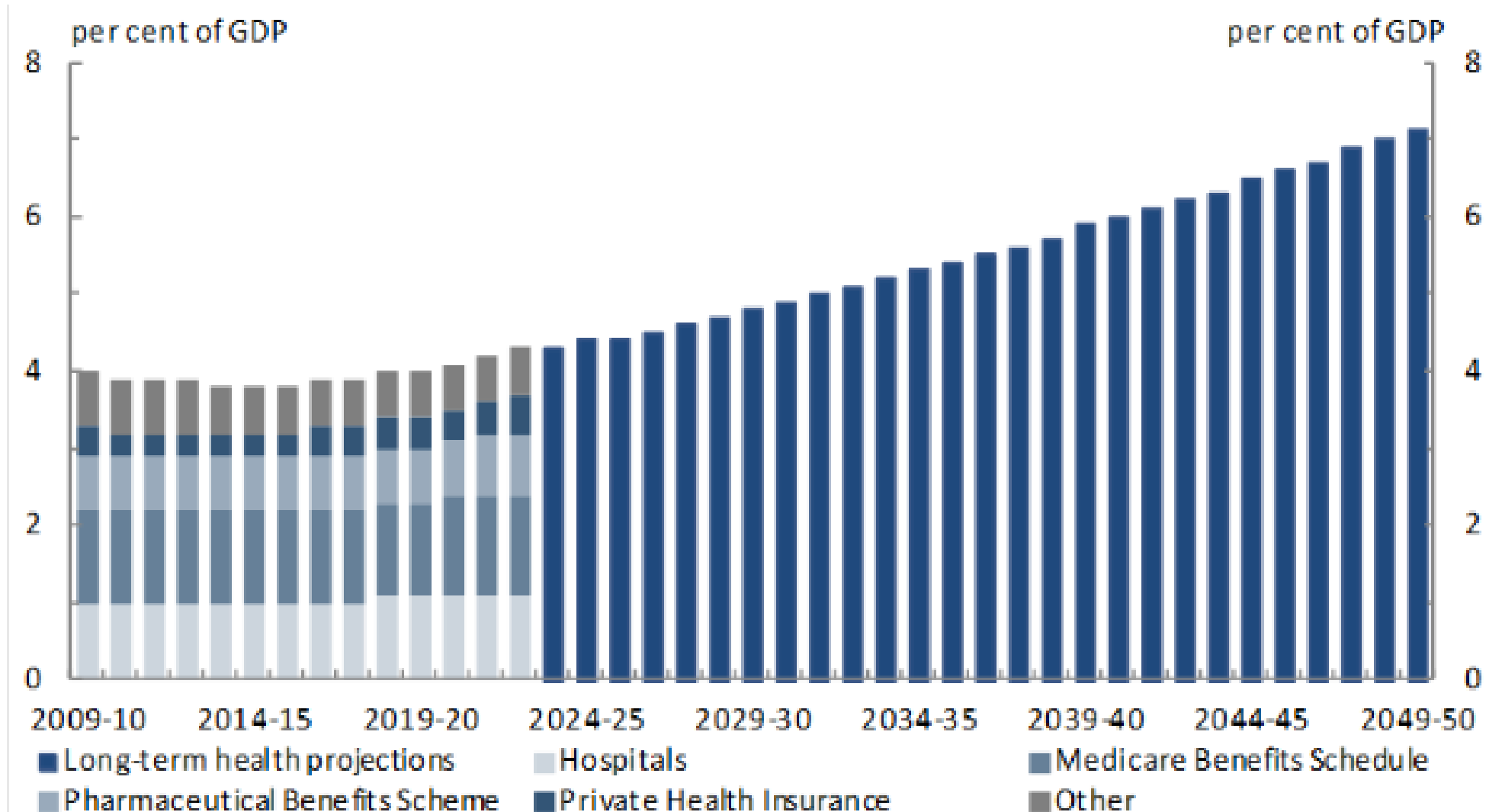
# Allocated health expenditure per person, by age and sex, 2008-09



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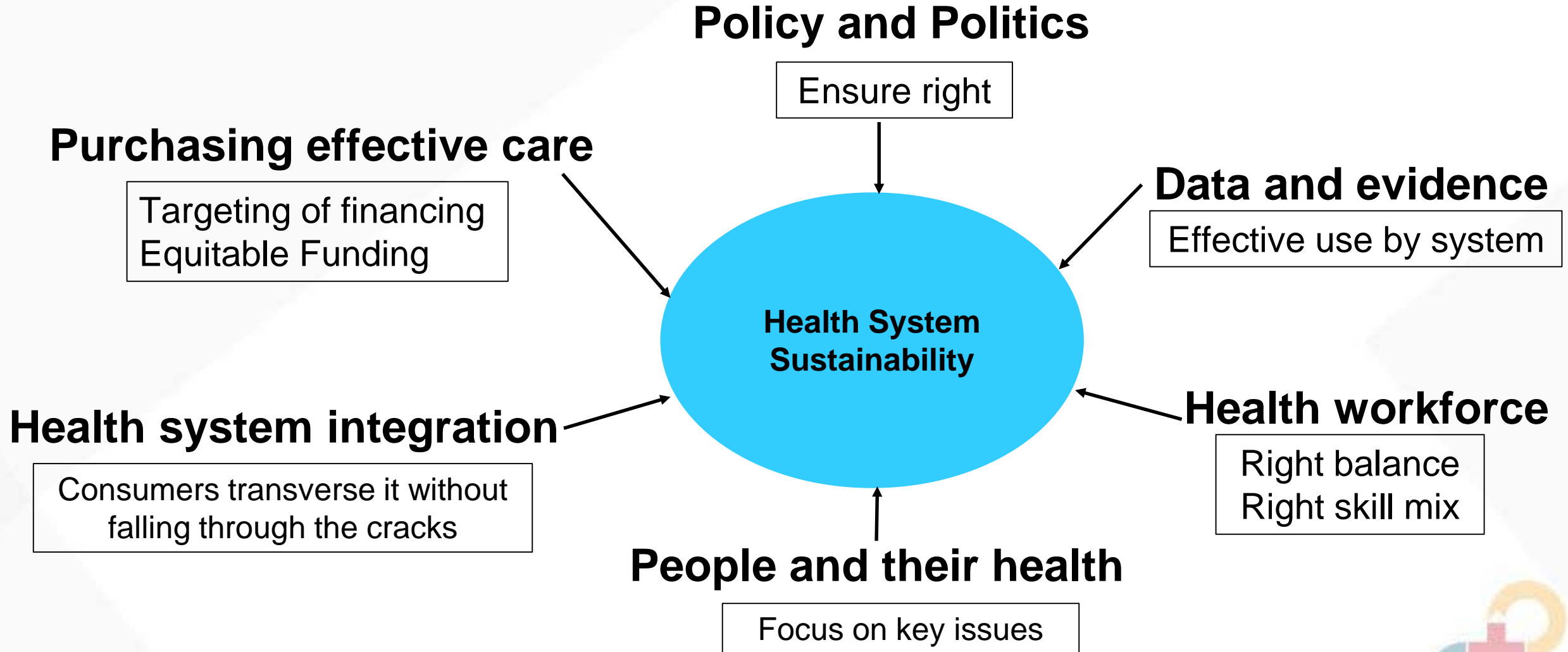
# Projected Commonwealth health spending



Source: Australian Government, 2010.



# Health System Sustainability

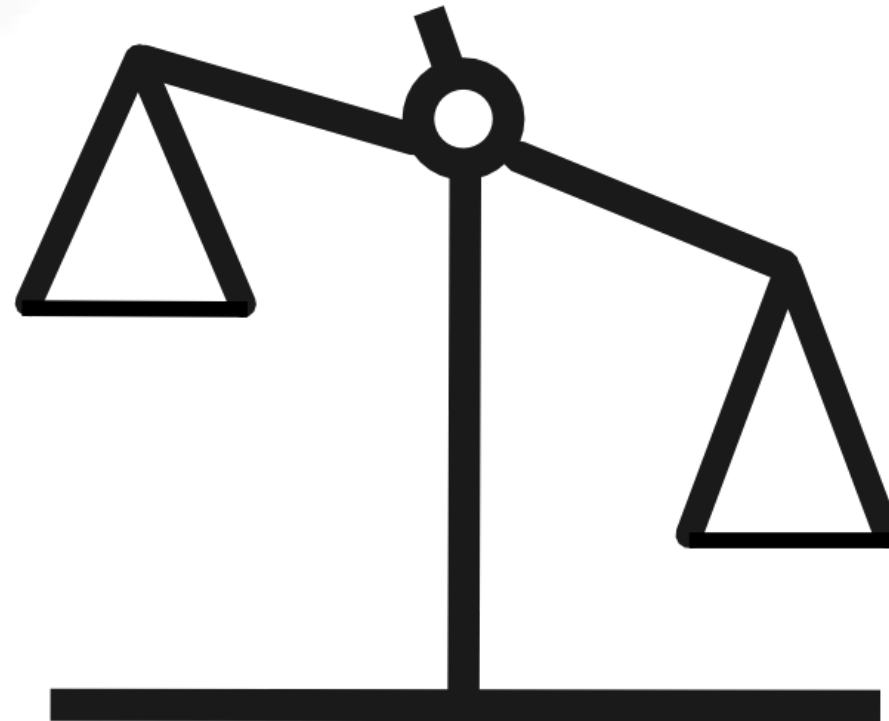


# Partnership Centre Vision



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**Effectiveness of  
every taxpayer  
dollar spent and  
every hour  
worked; reduce  
financial waste**



**Health system  
improvement,  
workforce and  
quality and safety**



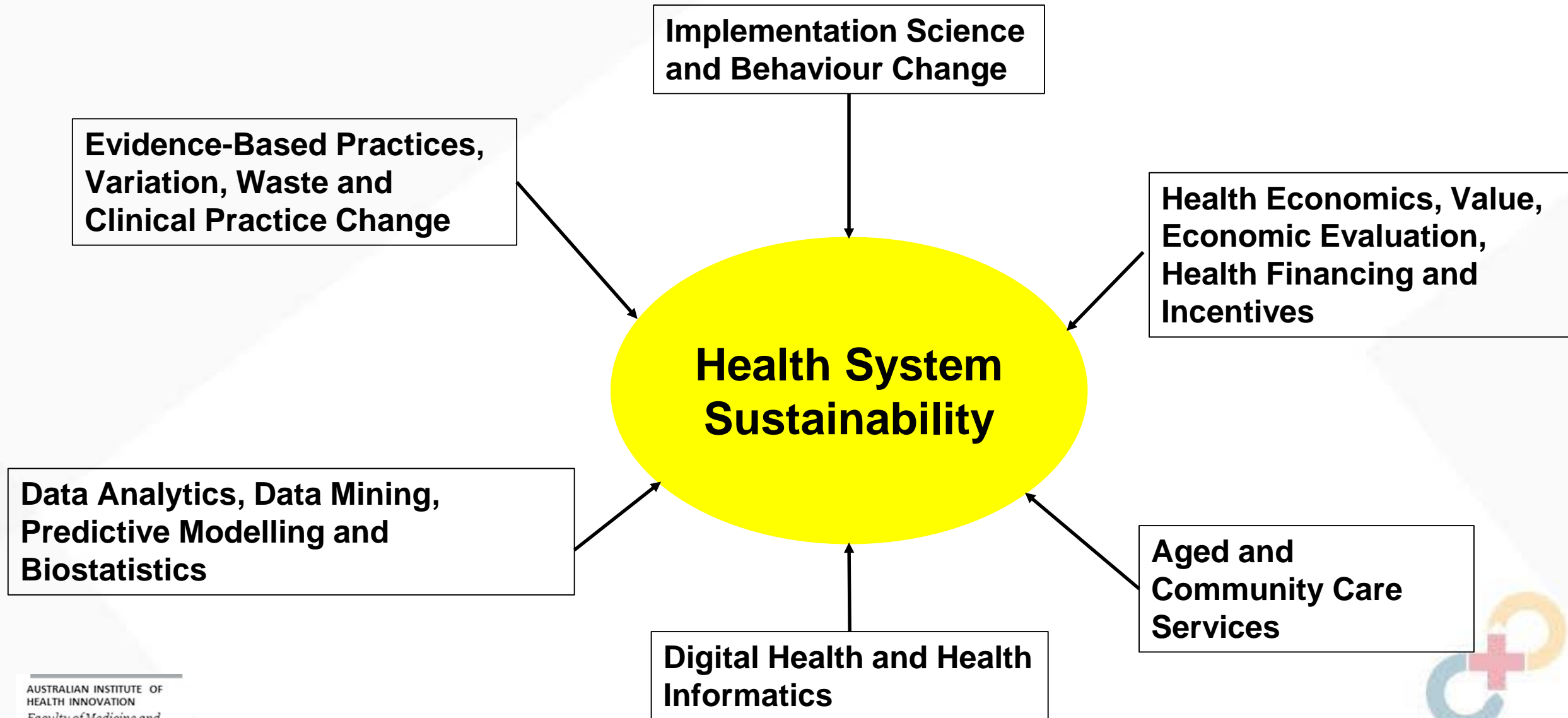


# Partnership Centre Vision

*Our vision is that our research findings significantly influence the evolution of a resilient health care system that is affordable, cost-effective and delivers improved health outcomes for all Australians.*



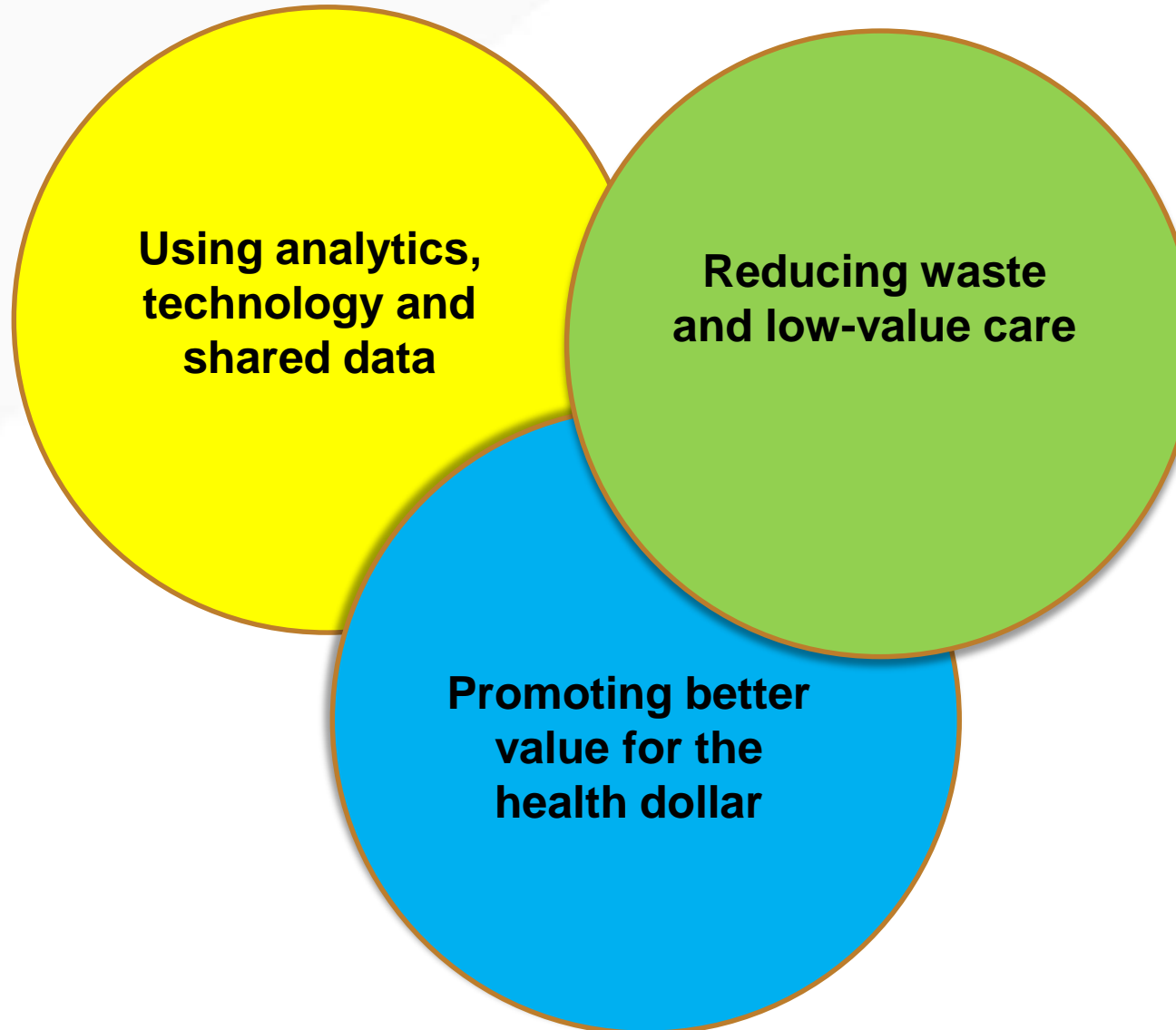
# PC Research Expertise



# Three Initial Research Areas



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# **Part 3:**

# **Outcomes expected at end of the five years**



# Nine major impacts

1. Demonstrated the **effect of information sharing and electronic records** on diagnostic testing and therapy decisions
2. Tested and implemented **successful data analytic tools** which identify and manage chronically ill patients at high risk and which improve the quality and efficiency of health services and hospitals
3. Influenced the adoption of cost-effective and clinically significant models in **telehealth** in Australia



# Nine major impacts

4. Prioritised the main sources of **wastage and low value care** in the Australian health system and understood the relative contribution of different sources of inappropriate care and variation to the **growth in volume of care per case**
5. Quantified aspects of resource wastage and have started to **identify and implement solutions**
6. Identified **promising alternative care delivery models** (lower cost locations, providers and processes) and evaluated the potential for system gains in different contexts of care: e.g. in Primary care settings, Hospitals, Aged Care



# Nine major impacts

7. Gained a more detailed understanding of whether and to what extent, **funding mechanisms** can reduce waste and encourage high value care in Australian health care settings
8. Demonstrated important aspects of **behaviour change** amongst clinicians, consumers and policymakers which embraces **uptake of cost-effective care recommendations** and articulated the mechanisms for achieving this, e.g. competition



# Nine major impacts



9. Established an overarching legacy which lies with our aim to produce impact so that we leave a **sustainable program of work and workforce (research and implementation capacity)** which adapts and continues to serve the health system



# Inaugural Symposium

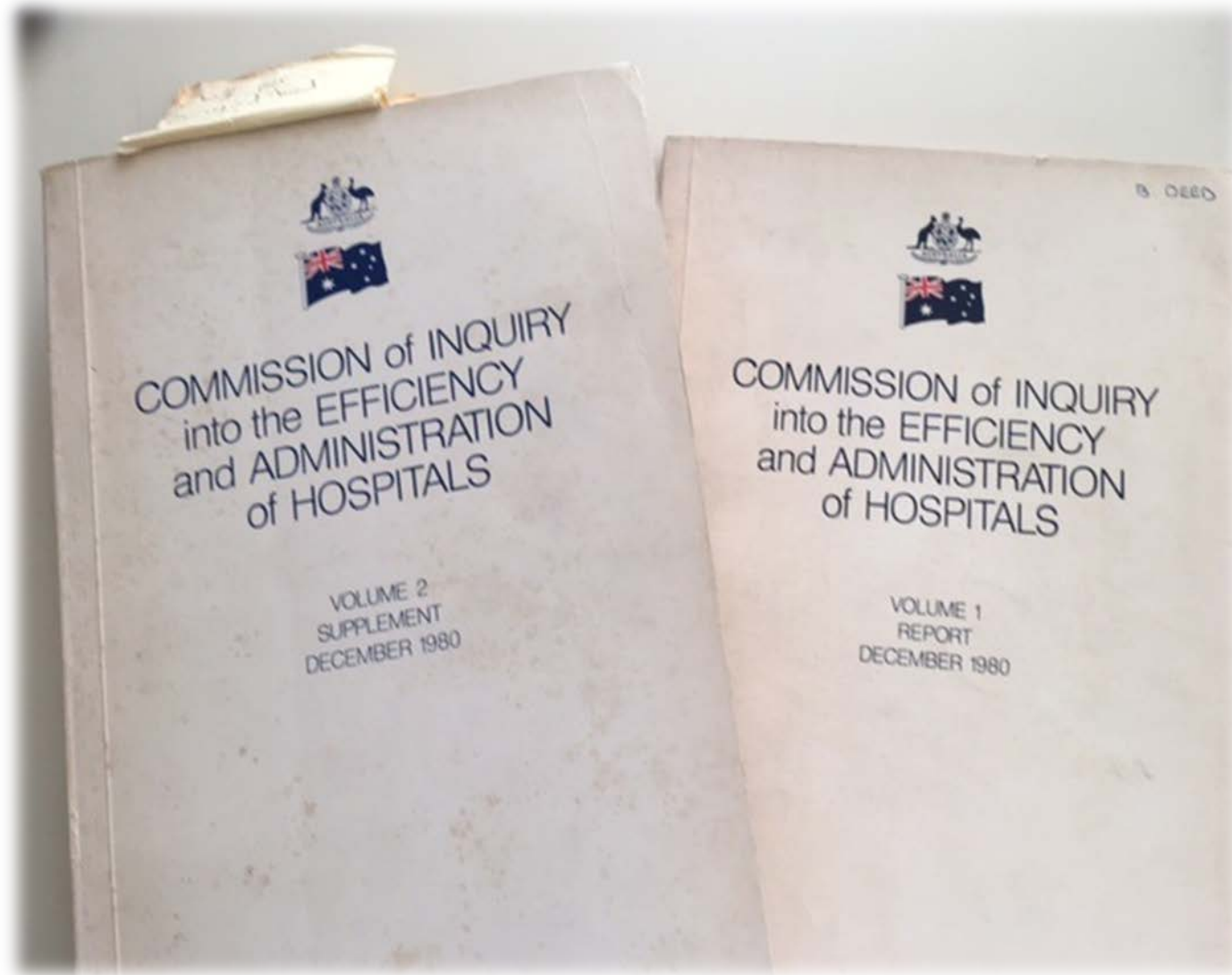
## Have we been here before?



**Health System Sustainability**  
NHMRC Partnership Centre



# 1980 Royal Commission

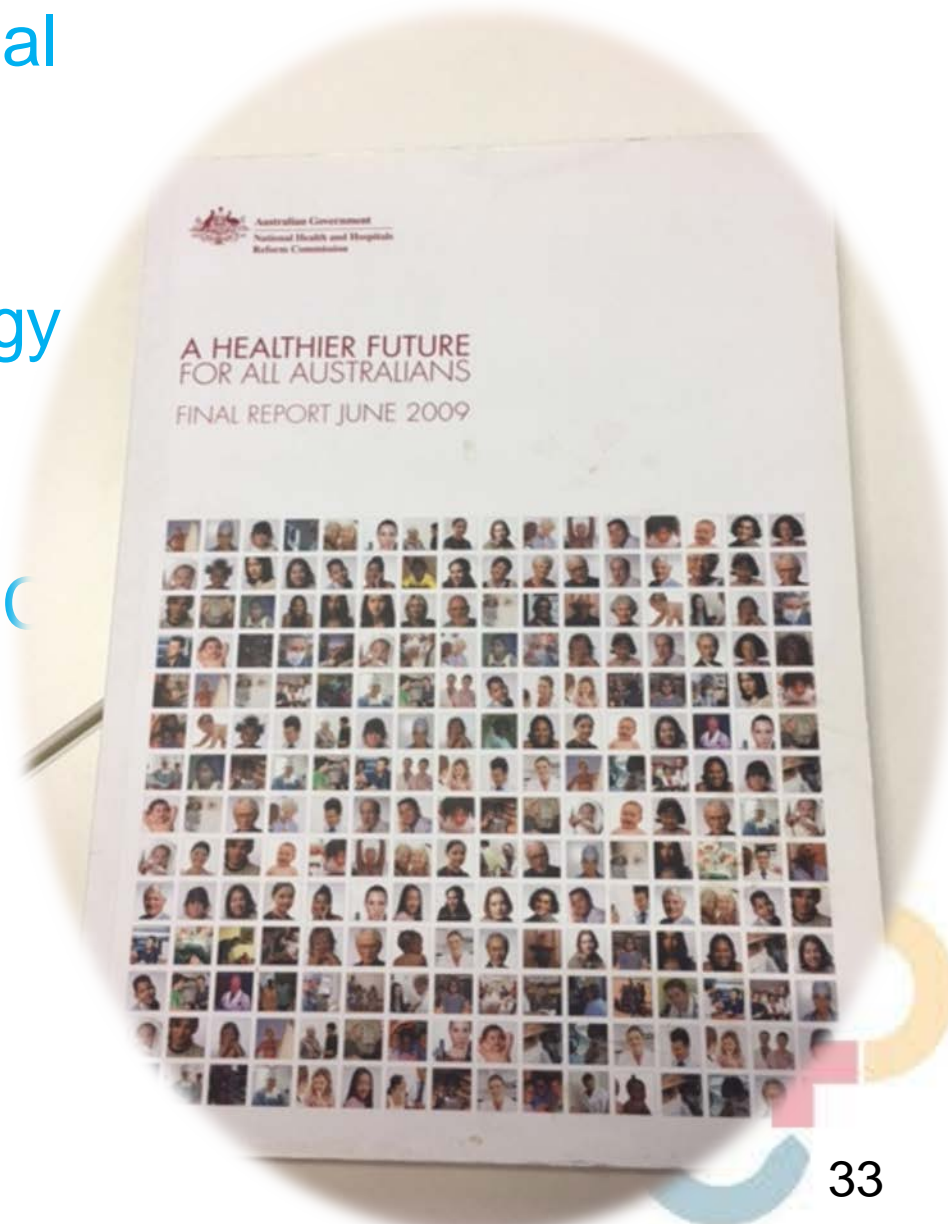
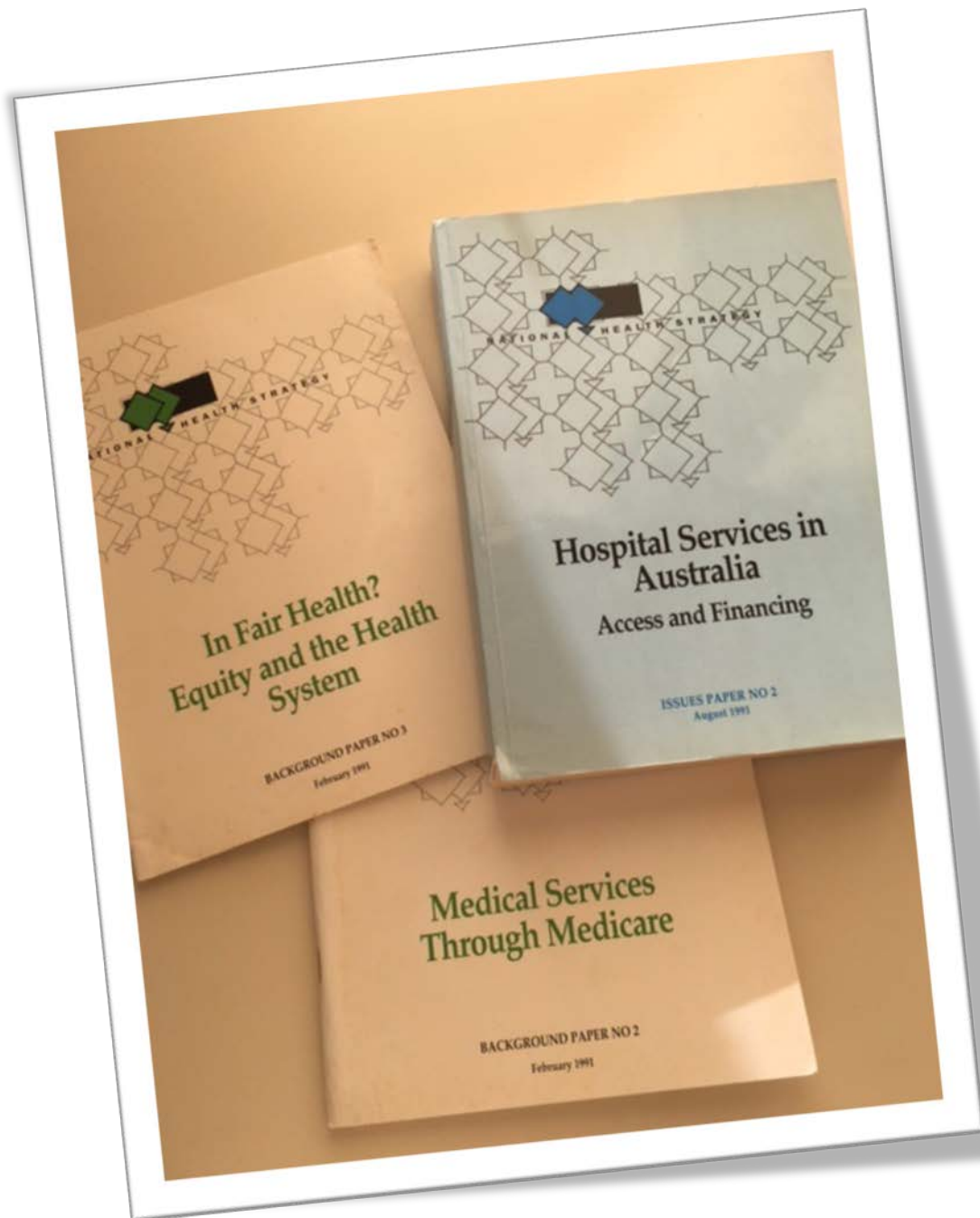


# National Health Strategy

1991

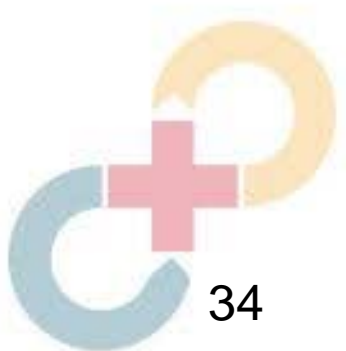
NHHRC

2009



# Partnership Centres Funding more than **traditional** research

- Not a traditional research – initiated grant scheme
- Not the research project that drives the work
- Goals and work plan in response to the particular **needs** of the health and healthcare systems
- Funding partners are looking for research – informed improvements in **care, management and/or policy**
- **Facilitate** routine use of research in Aust health and healthcare system



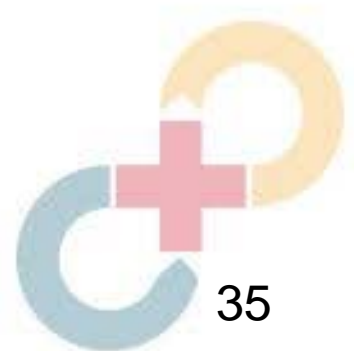
# Scope and objectives of the Partnership Centre Health System Sustainability

Investigate and

create interventions to improve health system performance sustainability

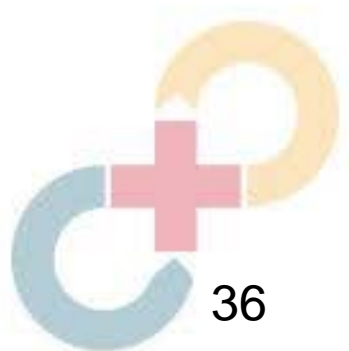
explore issues impacting health care system sustainability and develop and evaluate a set of **implementable interventions** that are appropriate from a **clinical, patient and economic** perspective

The outcomes of this work will be **practical** in nature and relevant to **governments** at all levels



# A sustainable health system delivers care that:

- **Meets healthcare needs** –culturally sensitive, socially responsive, economically responsible (affordable)
- **High quality**, appropriate, accessible, patient-centred, equitable, effective and efficient.
- Optimises patient **value** – over the full cycle of care - desired health outcomes per \$ spent
- Does not compromise future generations



# A sustainable health system requires alignment

- Funding
- Strategy
- Delivery
- Performance management
- Information



# The challenge

Major reviews of HMR commissioned by State and Australian governments have called for **research** and the research community to have **greater impact** on health-care practice, on the delivery of health services and on the development of evidence-based health policy.

