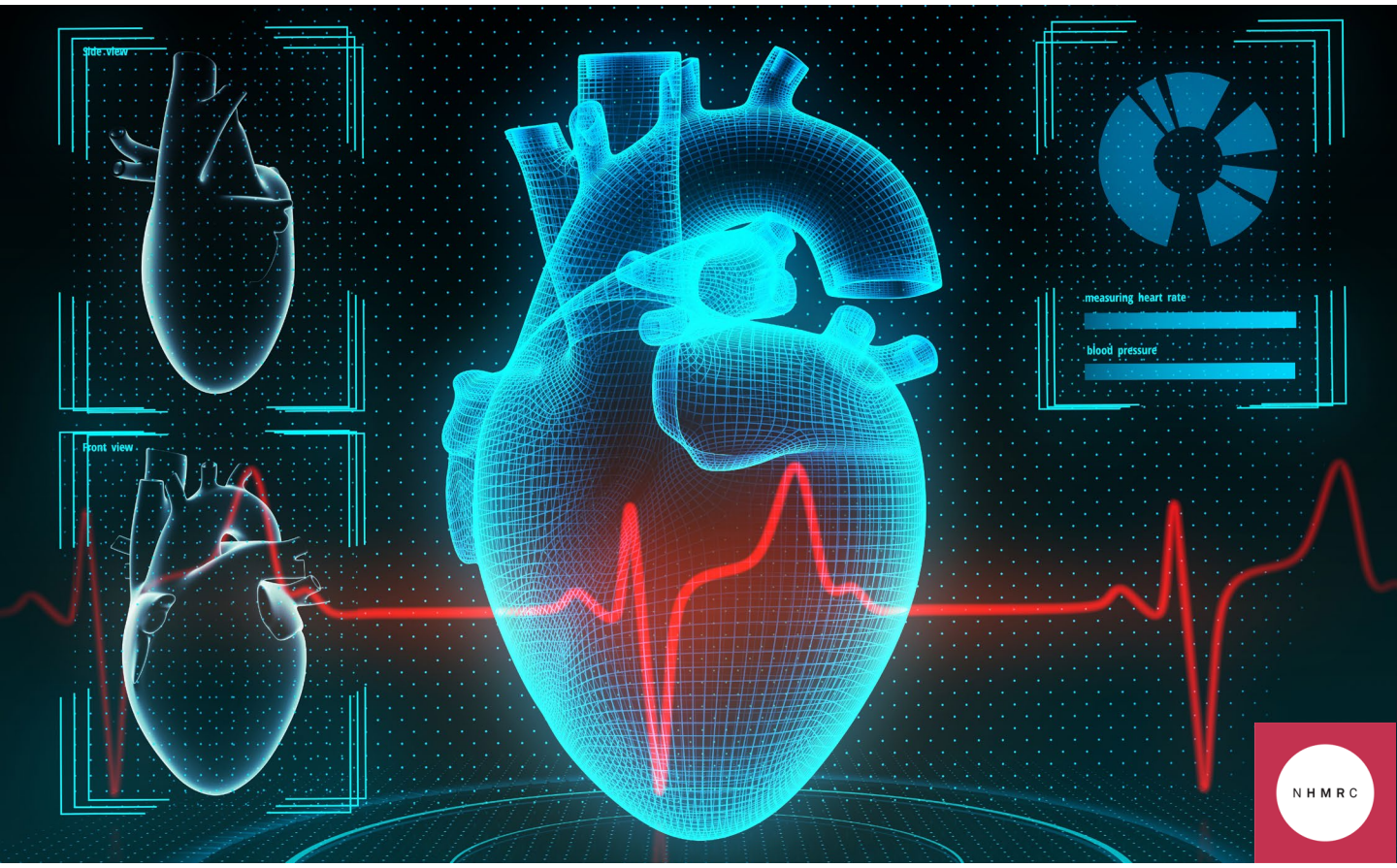


SOLVE CHD

NHMRC Synergy Grant (2020-2025)

Background

Solving the long-standing evidence-practice gap associated with cardiac rehabilitation and secondary prevention of coronary heart disease (SOLVE-CHD)

Heart Disease Burden

Cardiovascular disease (CVD), including coronary heart disease (CHD) and stroke, is the leading cause of death and disease burden globally.[1] CVD resulted in >1.1 million hospitalisations in 2015-16 and incurs the highest level of health care sector expenditure in Australia.[2] Over 65,000 Australians experience an acute coronary event (heart attack or unstable angina) each year[3] and importantly, many are preventable.[3,4]

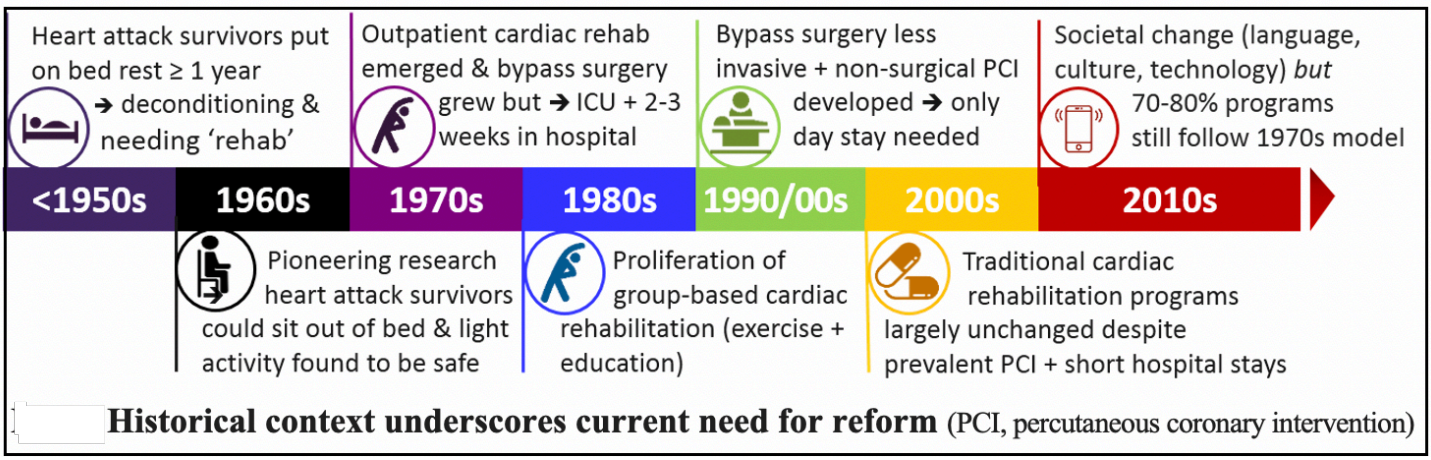
With an aging population, more people surviving initial events, and an epidemic of lifestyle-related health problems, the health burden is escalating globally.[5] Most patients now survive an initial myocardial infarction (MI), have a short stay in-hospital and are discharged with minimal physical morbidity Thus, improving post-discharge care through secondary prevention strategies (healthy living, adherence to medicines) is a current national and international priority.[6,7]

Importance of history

Understanding the historical context underscores the need to reform CHD management in light of societal changes (eg. cultural, linguistic and geographical diversity and proliferation of technology) and medical and surgical advancements (Fig).[8,9,10] Modern day "rehabilitation" was born at a time when *bed rest and physical inactivity were recommended* for people with heart disease.

Most (70-80%) heart disease secondary prevention programs today continue to follow the 50 year old model despite fundamental changes in society and medical care.[11]

Our goal is to modernise post-discharge secondary prevention and reduce the burden of heart disease by decreasing deaths, hospitalisations and costs via a program of work that integrates data, technology, partnerships and capacity building



Historical context underscores current need for reform (PCI, percutaneous coronary intervention)

SOLVE CHD

Our goal is to modernise post-discharge secondary prevention and reduce the burden of heart disease by decreasing deaths, hospitalisations and costs via a program of work that integrates data, technology, partnerships and capacity.

SOLVE-CHD is a 5 year program of work that builds on previous and current efforts.[12] In particular, the work of the Australian Cardiac Rehabilitation Measurement Taskforce[13] where there has been national consensus and development of quality indicators for cardiac rehabilitation. SOLVE-CHD will see delivery of interlinked service reform and research across 4 key activities.

1. Transformative data & quality

Collection of real-time, consistent jurisdictional and national cardiac rehabilitation data with appropriate governance established. This will ultimately reduce inequity, improve patient outcomes and systems efficiency through performance metrics, benchmarking and quality improvement. These data will be collected real-time and will be linked with electronic medical records.

2. New research

Development and investigation of novel interventions that utilise technology within the context of personalised models of care, usefulness, patient reported outcomes and value for money. These should be personalised and tailored according to need, patient preference and level of risk (to ensure treatment optimisation) and could be delivered using digital health. Examples include potential of virtual reality, peer support and telehealth approaches.

3. Capacity building

Identify and cultivate multidisciplinary research capacity, community engagement and future health services researcher leaders. Implement a program of project (small EMCR catalysts & pilot funds) and people support (PhD Scholarships & postdoctoral fellowships) as well as opportunities for travel and exchange between working environments (where possible). These funds will be provided to projects and people answering specific research questions relevant to SOLVE-CHD.

4. National network

We will establish a virtual National Secondary Prevention network to support and unify researchers, clinicians, government, non-government and consumers. This will help facilitate sharing of solutions, building partnerships and provide a conduit for sharing resources.

Meet The Team

SOLVE CHD

Prof. Julie Redfern
USYD

Prof. Tom Briffa
UWA

Prof. Robyn Gallagher
USYD

Prof. Garry Jennings
Sydney Health Partners
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Emeritus Prof. David Wood
National University of Ireland
Galway

Prof. Elizabeth Geelhoed
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Emeritus Prof. Adrian Bauman,
USYD

Prof. David Brieger
ANZAC Research Institute & USYD

A/Prof. Adrienne O'Neil,
Deakin University

Meet The Team

SOLVE CHD

A/Prof. Carolyn Astley
Flinders University

Prof. Clara Chow
USYD

Christine Conners
Top End Health Service

Rachelle Foreman
Brisbane North PHN

Prof. Gemma Figtree
USYD

Dr Karice Hyun
USYD

Professor Peter Thompson
Harry Perkins Institute of Medical Research; Sir Charles Gairdner Hospital; UWA

A/Prof. Simon Poon
USYD

Dr Robert Herkes
Australian Commission on Safety and Quality in Health Care

Steve Woodruffe
Southern Queensland Rural Health

Dr Emma Thomas
UQ

Cate Ferry
The Heart Foundation

SOLVE CHD Team

Prof Julie Redfern	Professor of Public Health and Deputy Director, Westmead Applied Research Centre, University of Sydney, practicing Physiotherapist
Prof Tom Briffa	Director of the Centre for Health Services Research and Head, Cardiovascular Research Group, University of Western Australia
Prof Robyn Gallagher	Professor of Nursing, University of Sydney; Past President, Australian Cardiovascular Health and Rehabilitation Association (ACRA)
Prof Garry Jennings	Executive Director, Sydney Health Partners, NSW; Director, Implementation and Policy Flagship, Australian Cardiovascular Alliance
Emeritus Prof Adrian Bauman	Emeritus Professor of Public Health, University of Sydney
Emeritus Prof David Wood	Cardiologist, Adjunct Professor of Preventive Cardiology at the National Institute of Prevention and Cardiovascular Health (NIPC), National University of Ireland-Galway, Republic of Ireland
Prof Elizabeth Geelhoed	Adjunct Professor, Faculty of Health and Medical Sciences, School of Allied Health, University of Western Australia
Prof David Brieger	Interventional cardiologist and head of the coronary care and coronary interventions at Concord Hospital and Professor of Cardiology, University of Sydney
A/Prof Adrienne O'Neil	Director of Heart and Mind Research at IMPACT and Deputy Director of Food and Mood Centre, Deakin University
A/Prof Carolyn Astley	Associate Professor, College of Nursing and Health Sciences, Flinders University; Senior Project Coordinator, Academic and Health Science Translation Centre, SAHMRI; Vice President (President Elect) ACRA
Christine Connors	General Manager Primary Health Care Top End Health Services
Prof Clara Chow	Professor of Medicine and Academic Director, Westmead Applied Research Centre, University of Sydney; President-elect, CSANZ; Program Director Community Cardiac Services & Cardiologist, Westmead Hospital
Prof Gemma Figtree	Professor in Medicine, University of Sydney, NSW; Co-lead, Cardiovascular Theme for Sydney Health Partners; President, Australian Cardiovascular Alliance; Chair, Expert Advisory Panel, Mission for Cardiovascular Health
Dr Karice Hyun	National Heart Foundation Postdoctorate Research Fellow and Biostatistician at Westmead Applied Research Centre, University of Sydney
Professor Peter Thomas	Deputy Director, Harry Perkins Institute of Medical Research; Deputy Director, Centre for Medical Research, University of Western Australia
Rochelle Foreman	Executive Manager, Health Systems Improvement, PHN Brisbane North
Dr Robert Herkes	Chief Medical Officer, Australian Commission on Safety and Quality in Health Care
A/Prof Simon Poon	Associate Professor, School of Computer Science, University of Sydney Adjunct Associate Professor, CUHK, Institute of Integrative Medicine
Steve Woodruffe	Clinical Educator (Exercise Physiology), Southern Queensland Rural Health
Cate Ferry	Clinical Manager at National Heart Foundation
Dr Emma Thomas	Research Fellow, Centre for Online Health (Centre for Health Services Research), University of Queensland

SOLVE CHD

Our Partners and Collaborators

THE UNIVERSITY OF SYDNEY

THE UNIVERSITY OF WESTERN AUSTRALIA

DEAKIN UNIVERSITY

SUPPORT INFORMATION ENCOURAGEMENT HSA

Heart Foundation

ACvA Australian Cardiovascular Alliance

ACRA Australian Cardiovascular Health and Rehabilitation Association

Funded by NHMRC

NHMRC

BUILDING A HEALTHY AUSTRALIA

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