

**The Accessibility of Phase 2 Cardiac Rehabilitation Programs in Rural and Remote Australia.**

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## **Abstract**

Cardiovascular disease (CVD) continues to impose a heavy burden in terms of cost, disability and death in Australia. In 2011 cardiovascular disease was the largest single cause of mortality in Australia. CVD also contributes significantly to morbidity and impaired quality of life, as more than one million Australians live with long-term illness and disability, from conditions associated with CVD. With increases in life expectancy and an ageing population the future impact of the disease in Australia is alarming with one quarter of Australians predicted to have CVD by 2051.

Structured Phase 2 Cardiac Rehabilitation provides an opportunity for the development of a life-long approach to prevention and management of coronary heart disease for patients. Benefits include reduced mortality and reduced risk of further cardiac events; improvements in physical and social functioning, risk factor profiles and quality of life; and reduced prevalence of depression. The impact of CVD in Australia is not uniform as there is clear evidence to suggest that inequities in health outcomes, access and delivery of healthcare services exist between socio-economically advantaged and disadvantaged groups. Many rural populations in Australia do not have access to structured cardiac rehabilitation (CR) programs, and the level of support available to them in the form of unstructured CR through local general practitioners (GP's) is unclear. Despite the evidence to support cardiac rehabilitation, existing services remain underutilised (National Heart Foundation 2004, p. 11).

Accessibility is a major factor in the underutilisation of Phase 2 Cardiac Rehabilitation Programs. Previous studies on accessibility to cardiac services have been based on travel time, cost or distance only, and provide only a partial view of access to services. In reality, people trade off geographical and non-geographical factors in making decisions about health service use.

This study defines what aspects of accessibility should be studied to determine the accessibility of Phase 2 Cardiac Rehabilitation Programs in Australia. Through applying Penchansky and Thomas' (1981) dimensions of accessibility: availability, accommodation, affordability, and



acceptability and creating a spatial model of the accessibility, of Phase 2 Cardiac Rehabilitation Programs it was possible to define how accessible the programs are to rural and remote population centres. Therefore identifying areas where accessibility to these programs could be improved and where new programs or models of delivery should be established to enhance accessibility in areas that are currently poorly served.

## **Declaration**

This thesis contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution to Deborah Anne van Gaans and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text.

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## List of Abbreviations and Acronyms

ABS	Australian Bureau of Statistics
ACRA	Australian Cardiac Rehabilitation Association
ACS	Acute Coronary Syndromes
AMI	Acute Myocardial Infarction
ARIA	Accessibility and Remoteness Index of Australia
CABG	Coronary Artery Bypass Grafting
CHD	Coronary Heart Disease
CHF	Chronic Heart Failure
CR	Cardiac Rehabilitation
CVD	Cardiovascular Disease
FCA	Floating Catchment Area
GIS	Geographic Information System
GP	General Practitioner
IHWs	Indigenous Health Workers
MI	Myocardial Infarction
NCR	Not Accessing Cardiac Rehabilitation
PBAC	Pharmaceutical Benefits Advisory Committee
PTCA	Percutaneous Transluminal Coronary Angioplasty
QALY	Quality Adjusted Life Year
QOL	Quality of Life
SAMSS	South Australian Monitoring and Surveillance System
SCR	Standard Cardiac Rehabilitation
SES	Socioeconomic Status
WHO	World Health Organisation
WWT	Willingness to Travel