Position Paper:
Eliminating disparities in hospital cardiovascular care
of Aboriginal* people in Western Australia.

* For the purpose of this paper Aboriginal refers to Aboriginal and Torres Strait Islander people
Eliminating disparities in hospital cardiovascular care of Aboriginal People in Western Australia

Executive Summary

Heart disease is the largest contributor to the gap in life expectancy between Aboriginal and non-Aboriginal Australians, with Aboriginal people dying at a younger age and suffering at an alarming rate from coronary heart disease, rheumatic heart disease and heart failure.

Included in the National Heart Foundation’s strategic plan is a commitment to reducing the burden of cardiovascular disease. In achieving this goal, health inequalities between Aboriginal and non-Aboriginal Australians is a crucial and urgent area of concern.

In 2009, the Heart Foundation (WA) released a position paper that identified disparities of cardiovascular care of Aboriginal people in the hospital system as a pressing priority. This came from alarming statistics that showed the rate of having a major coronary event to be three times greater among Aboriginal people1. Furthermore, Aboriginal people were six to eight times more likely to be hospitalised for acute rheumatic fever or rheumatic heart disease2. Once hospitalised, it was revealed that Aboriginal people had more than twice the in-hospital coronary heart disease death rate, a 40% lower rate of investigation and procedural intervention and a 20% lower rate of bypass surgery1.

On top of all of this, Aboriginal people were 13 times more likely to discharge against medical advice (DAMA), which greatly influences care3.

Given the extent of the problem and the urgent need for solutions, the Heart Foundation (WA) made four key recommendations in our 2009 position paper. The Heart Foundation urgently called upon the Government of Western Australia to:

1. Employ Aboriginal Healthcare professionals (Aboriginal Health Workers or Aboriginal Liaison Officers) in all tertiary hospital cardiology areas, and other hospitals that deliver care and support to Aboriginal patients.

2. Ensure that all hospitals take responsibility for developing a cultural safety plan including:
   - a high level commitment to improved outcomes for Aboriginal people
   - increased partnership with Aboriginal people and patients
   - cultural safety training for all hospital staff
   - the provision of a welcoming and culturally safe environment.

3. Provide culturally appropriate cardiac rehabilitation and follow-up care and foster strong links between hospitals, Aboriginal community controlled agencies and/or general practice.

4. Ensure that all Aboriginal people receive timely and appropriate cardiac care through:
   a. Improved access to appropriate clinical testing in rural and remote areas such as echocardiogram and biomarkers.
b. Expanded support for Medical Specialist Outreach Assistance Program to improve access to specialist medical care in rural and remote areas with serious consideration given to the successful Queensland cardiac outreach model.

c. Implementation of the Acute Coronary Syndrome (ACS) and Heart Failure Models of Care throughout Western Australia.

d. Extended public promotion of the warning signs and symptoms of heart attack and heart failure.

The advocacy surrounding the 2009 position paper needs to be continued to ensure disparities in hospital care between Aboriginal and non-Aboriginal Australians remains at the forefront of policy-makers minds. This paper provides a second edition to the 2009 position paper and seeks to highlight the successes and clarify the lessons learnt in moving towards health equality.

It should also be noted that in 2010 the National Heart Foundation jointly released a paper with the Australian Healthcare and Hospitals Association in line with the WA Heart Foundation paper entitled Better hospital care for Aboriginal and Torres Strait Islander people experiencing heart attack.¹
INTRODUCTION:
This paper provides:
- an updated version showing the progress towards these recommendations since the release of the original position paper “Eliminating Disparities in hospital cardiovascular care of Aboriginal People” in 2009, and
- an outline of recent publications and clinical findings since the release of the initial position paper in 2009.
- Updated costings

BACKGROUND
In December 2008 The WA Heart Foundation arranged a meeting with cardiologists and other WA key stakeholders to discuss issues surrounding disparities in hospital cardiovascular care of Aboriginal people.

Following broader consultation a briefing paper was finalised in November 2009 seeking commitment from government to implement the recommendations. Since the original position paper was released there has been some progress made towards addressing the disparity in hospital care between Aboriginal and non-Aboriginal Australians, however it is of paramount importance that the WA Heart Foundation continues to advocate toward adequately addressing these recommendations.

1.0 The extent of the problem
Compared with other Australians, Aboriginal people are three times more likely to have a major coronary event such as a heart attack and six to eight times more likely to be hospitalised for acute rheumatic fever or chronic rheumatic disease. Alarmingly in Western Australia, hospitalisation rates for Aboriginal people with heart failure are approximately four times the rates of the non-Aboriginal population.

A report released by the Australian Institute of Health and Welfare in 2006 provided compelling data supporting a case for action to reduce disparities of care in hospitals. Compared to other Australians, Aboriginal people had:

- more than twice the in-hospital coronary heart disease death rate
- 40% lower rate of being investigated by angiography
- 40% lower rate of coronary angioplasty or stent procedures
- 20% lower rate of coronary bypass surgery

This report recognised the limitations of the data including incomplete Indigenous Australian identification, which could mean that this population is underrepresented, and other factors that can potentially influence procedural rates including stage of presentation, consent, anticipated compliance, and access to services.

Delayed presentation to hospital can impact on the choice of treatment that can be provided to patients. For Aboriginal patients presenting with acute myocardial infarction (AMI) delay times can be significant (48 hours to one week later) and can result in presentations associated with conditions secondary to the complications of a recent AMI. Shortening delay times is critical to improving cardiovascular health outcomes in Aboriginal patients.

A patient’s willingness to stay in hospital to receive treatment also influences care. For the period 2004–2006 the rate at which Aboriginal people discharge from hospital
against medical advice (DAMA) was 13 times that of non Indigenous Australians\(^3\).

Further to this, a recent study has found that Aboriginal patients are at high risk of discharge against medical advice (DAMA) particularly after their first-ever Ischaemic heart disease (IHD) admission\(^2\). The study suggests that health service managers need specific strategies to reduce DAMA that take cultural, treatment and out-of-hospital factors into account\(^7\).

A landmark 2010 study\(^8\) in Western Australia comparing the incidence of acute myocardial infarction (AMI) and 28-day case fatality (CF) among Aboriginal and non-Aboriginal Western Australians from 2000-2004 found alarming differences between Aboriginal and non-Aboriginal people, particularly females:

- In the 25-54 year age group, age-standardised incidence rates of AMI have shown that Aboriginal males were 6.4 times more likely to have an AMI than their non-Aboriginal counterparts. In the same age-group, female Aboriginals were 13.3 times more likely to have an AMI than non-Aboriginal Western Australians. (35 times higher in females 25-29 years, 27 times higher in males 25-29 years)\(^8\)

- A study by the same authors has found that the disparity in post-myocardial infarction outcomes can be substantially attributable to the high prevalence of co-morbidities in Aboriginal people. The number of those having 5-year histories of diabetes and chronic kidney disease were double and triple respectively those of non-Aboriginals\(^9\).

Bradshaw et al. (2010)\(^10\) found that coronary revascularisation procedures for IHD were used with similar frequency in urban-dwelling Aboriginal people and a matched non-Aboriginal general population in Western Australia. However the authors state that the findings may not be generalisable to other Indigenous groups or communities since these Aboriginal participants were more likely to be employed.

Despite the alarming cardiovascular morbidity and mortality amongst Aboriginal people there are very few innovative services to address this problem in WA. A 2009 study\(^11\) found that there was limited awareness and poor implementation in WA of the NHMRC document *Strengthening Cardiac Rehabilitation and Secondary Prevention for Aboriginal and Torres Strait Islander peoples: A Guide for Health Professionals*\(^12\). The study identified the need for alternative approaches to cardiac rehabilitation and dedicated Aboriginal resources.

In a recent national study that mirrors the disparities found in cardiovascular care, Kilkenny *et al.* (2012)\(^13\) found that Aboriginal stroke patients experienced worse outcomes than non-Aboriginal patients, with significant disparities in health-care delivery and post-stroke outcomes. Aboriginal patients were found to be less likely to receive Stroke Unit care, intravenous thrombolysis or timely assessments than non-Aboriginal patients.

### 2.0 Indigenous Australian people living in Western Australia – a snapshot

There were approximately 77,607 Aboriginal Australians living in WA at 30 June 2011 (according to ABS projections based on the 2006 Census of Housing and Population)\(^14\). The WA Aboriginal population represents 3.5% of the total WA population. More than one-third of these live in the Perth metropolitan area and
around two-fifths (41%) live in remote or very remote areas, compared with only 6.8% of the total West Australian population.

3.0 Personal Perspectives

Statistical analysis of cardiovascular disease in Aboriginal people only tells a part of the tragic impact that cardiovascular disease has on Aboriginal communities and families. The experiences of patients and their families shed further light on the issues. A WA State Health Research Advisory Council (SHRAC) Research Translation Project in 2008 regarding benefits and cost effectiveness of employing Aboriginal staff in the hospital setting provided some important insights. Qualitative interviews with Aboriginal Health Workers highlighted the communication difficulties for Aboriginal patients:

"...one person had said to me he thought he was going for five different operations because he was seeing five different doctors and no one explained it to him..."

In another study that looked at Aboriginal views on improving cancer services in WA the messages were very clear about how Aboriginal people viewed hospitals. An urban patient stated:

"...they come down and they feel so isolated. They are out of their environment, lonely, and never been into a big hospital like Royal Perth or Sir Charles Gairdner, so they feel isolated, scared and frightened."

Some Aboriginal people even thought of hospitals as the place where people go to die. A rural patient stated:

"I had three aunties go down there and die. So that sort of got to me. 'you are going down there to die.' They went down there good when you see them off the plane and the next thing what.... Three or four weeks after... they died. That's not a good sign for Aboriginal people".

Some interviews conducted with a metropolitan Aboriginal focus group further confirmed the fears and concerns around a hospital environment:

“One of the biggest issues – 'how do I get in to the hospital?' ‘Follow the blue line’...which leads to an elevator. Some of these people have never been in a two storey building, let alone used an elevator. It's a very overwhelming experience, and some people just find it incredibly stressful”.

One person told a story of a family member’s hospital experience, where they noted that a little bit of courtesy could have gone a long way.

“They saw that he was from one of the communities. Without asking him, they took his mattress off the bed and put it on the floor and then began discussing him in front of him in a group. After a long time they got an interpreter in, who walked in and said 'how you going? And the patient said 'good thanks! He was a university educated fella but they had assumed so much from his appearance”.

"I remember my son, as a four year old, being incredibly sick and I took him to Princess Margaret Hospital. They wanted to send him away with Panadol. It's lucky that I spoke up about it because it turned out he had double pneumonia - they weren't even going to check him out."
Advice for hospital staff:

"Life is so easy if you just show courtesy. No one is better than you. When the doctor shows that they are concerned for you, it makes you believe that there really is something wrong and listen. But if they are rude to you, or make assumptions about you, it makes you want to do the opposite of what they say"

"treat all patients as individuals, don't assume you know about that patient, and that this patient is the same just because they are Aboriginal"

On claiming Aboriginality for reporting purposes:

“They asked me if I was Aboriginal and I said yes. The nurse looked at me and thought she was being funny by saying 'you are too clean and well-dressed to be an Aboriginal' why would anyone want to put up with those kinds of comments?"

Decisions about health care treatments are made with the best information available to the health care professionals at the time. Anecdotal evidence reports that sometimes decisions are based on assumptions due to a lack of information about a patient’s background, knowledge, lifestyle or intentions.

One example given by a health professional was an Aboriginal patient from a remote area who required a percutaneous coronary intervention with stent insertion. The patient spoke very little English and did not have an Aboriginal Liaison Officer or family member available to explain the support services available. A 'bare metal' stent was chosen as the preferred option as there was not enough information to assess the patient’s future adherence with anticoagulation medication (to prevent in-stent restenosis) and their access to medication supply.

### 4.0 The Heart Foundation’s process for developing this document

In December 2008 the Heart Foundation (WA) convened a meeting with cardiologists and cardiothoracic surgeons from the three main tertiary adult hospitals, as well as other key stakeholders involved with Aboriginal health, to address issues surrounding disparities in cardiovascular hospital care of Aboriginal Australians. Participants confirmed the complexity surrounding hospital care of Aboriginal people including anticipated compliance, incidence of patient DAMA, complex co-morbidities, the lack of Aboriginal Health Workers or liaison staff to assist with cultural safety education and translation of information, and knowledge of services available to patients. Section 5.0 discusses the key recommendations agreed by this group.

The Board of the Heart Foundation WA has also reinforced its commitment to closing the gap through the formation of a subcommittee to develop initiatives to improve Aboriginal life expectancy in Western Australia. The Board and subcommittee have endorsed the recommendations in this position paper.
5.0 Recommendations

**Recommendation 1: Employ Aboriginal Healthcare professionals (e.g. Aboriginal Health Worker or Aboriginal Liaison Officer) in all tertiary hospital cardiology areas, and other hospitals that deliver care to Aboriginal patients**

Critical to closing the gap is an Aboriginal workforce. There is good evidence that can be utilised from a WA State Health Research Advisory Council (SHRAC) Research Translation Project in 2008 regarding cost effectiveness of employing Aboriginal staff in a cardiology ward. This study explored the experience of the appointment of an Aboriginal Health Worker (AHW) in Cardiology at Royal Perth Hospital and revealed many benefits including:

- The AHW was able to identify Aboriginal status that may not be recorded on hospital admission data
- The value of yarning and education, crossing the communication divide
- Prevention of DAMA
- Provision of cultural education and support of staff, including enhancing awareness of diverse cultural differences within the Aboriginal population
- Improved Aboriginal patient follow up
- The AHW role was well received by Aboriginal patients, and staff
- Cost efficiencies from reduction in repeat hospitalisation and incomplete treatment.

The Heart Foundation recognises that there has been some progress in addressing the critical need for more Aboriginal healthcare professionals in hospital settings however more is needed. To date the following services have been implemented in WA metropolitan teaching hospitals:

- **Royal Perth Hospital**
  - Four Aboriginal Healthcare professionals including recent appointment of Aboriginal Health Liaison Officer (AHLO) in Cardiology
- **King Edward Memorial Hospital**
  - One AHW
- **Princess Margaret Hospital**
  - One AHW
- **WA Country Health Service**
  - Provides an Aboriginal Liaison service, *Country Health Connections*, which provides a meet and greet program for Aboriginal country patients and visits to each tertiary site (Royal Perth Hospital, King Edward Memorial Hospital, Sir Charles Gairdner Hospital and Fremantle Hospital) twice a week.

The Heart Foundation recommends the appointment of Aboriginal professionals with the relevant training and skills to undertake roles modelled on the existing position at Royal Perth Hospital and the outcomes of the above-mentioned SHRAC study. The appropriate support, training and mentoring of people in these positions is crucial to the success, retention and development of these appointments.

The Heart Foundation also strongly supports the need for more Aboriginal professionals across all areas of health for their inter-related links to cardiac health. Such initiatives as WA Health’s Aboriginal Cadetship Program will recruit talented Aboriginal students to undertake cadetships at its offices in East Perth. We urge the government to enhance its commitment to creating employment opportunities for Aboriginal people in roles across the health system, whether it is ward clerks,
cleaners, doctors or nurses. Aboriginal employees, in any capacity, can have a significant and positive impact on the hospital and healthcare experience for Aboriginal patients.

The current AHLO position at Royal Perth Hospital is a level 5.1 (Hospital Services Union award) at $64,318 per annum. This pay scale recognises the skills and responsibilities required to undertake this role, in comparison with the current Aboriginal and Ethnic Health Workers Agreement, which is considerably less (Level 3 first year AHW – $47,422 per annum). Remuneration for AHW’s is inadequate and, in addition, there is a lack of consistency relating to the role recognition, education, training and career structure. These workforce issues also need to be addressed.

It should be noted that The National Health and Medical Research Council’s *Strengthening Cardiac Rehabilitation and Secondary Prevention of Aboriginal and Torres Strait Islander Peoples: A guide for Health Professionals (2005)* also recommends the appointment of AHWs.

In South Australia a trial of a Nurse Liaison Service, specifically for remote area Aboriginal people who needed to travel for cardiac surgery, demonstrated very positive patient outcomes and hospital efficiencies. One of these outcomes, eliminating non attendance for surgery, demonstrated an annual saving of $380,000. (For further costing see appendix 1). We recommend discussion to explore adaptations of this model in WA.

**Recommendation 2:** Ensure that all hospitals are responsible for developing a cultural safety plan, including:
- a high level commitment to improved outcomes for Aboriginal people;
- increased partnership with Aboriginal people and patients;
- cultural safety training for all hospital staff;
- the provision of a welcoming and culturally safe environment.

Organisations that deliver care to Aboriginal people need to formally recognise their responsibility, acknowledge current performance, commit to improved performance and take steps to be accountable for this care. Aboriginal people should be central to the design, development, implementation and evaluation of health programs and service delivery. The corporate and clinical governance groups need to have explicit aims, measurable change processes and accountability for improved Aboriginal health service delivery.

The change process needs to occur at the highest levels in the health service hierarchy but also needs to be replicated and visible at all other levels, especially at the service delivery level. In order to provide appropriate/optimal care, all health professionals need to demonstrate respect and an appreciation of cultural diversity and take steps to communicate effectively with Aboriginal people. The Heart Foundation recommends mandatory training of all health staff in cultural awareness to ensure cultural safety and security to meet the needs of the community.
Health professionals need to be involved in localised cultural awareness training to gain a better understanding of the local Aboriginal community. For example, when looking at kinship and relationships in the Kimberley region, a son-in-law and mother can only communicate indirectly with each other; therefore, they are not permitted to be together in the same room. Yet for other areas of WA this cultural example does not apply. Understanding the diversity and difference between Aboriginal groups particularly in Western Australia is essential.

Commitment to ongoing funding and support for the development and evaluation of culturally appropriate education resources, such as the Heart Foundation’s *My Heart My Family Our Culture*, is necessary to address the specific health information and education needs of Aboriginal people.

Hospitals need to ensure the provision of a welcoming environment to Aboriginal patients and their families. With community consultation this should include displaying Aboriginal artwork and providing appropriate and culturally sensitive locations for families to meet, including outside spaces, and waiting rooms.

Since the original Heart Foundation position paper was released in 2009, some very pleasing developments have occurred in this direction. The Department of Health released the Office of Aboriginal Health, Reconciliation Action Plan in 2008 recognising the rich and vibrant cultures we share in our land and affirming its commitment to strengthening partnerships and creating new ways of working with Aboriginal and Torres Strait Islander People.

Progress within SMAHS include Reconciliation Action Plan (RAP) working groups and development of cultural framework documents that have mandatory compliance recommendations. On top of this, Welcome to Country is now occurring more regularly.

The WA Country Health Service has released their *Aboriginal Employment Strategy 2010 – 2014* in which one of their major aims is to increase the cultural safety of the organisation.

**Recommendation 3: Provide culturally appropriate cardiac rehabilitation and foster strong links between hospitals, Aboriginal community controlled agencies and/or general practice**

All patients with cardiovascular disease should have access to, and be actively referred to, comprehensive ongoing secondary prevention and cardiac rehabilitation programs. The benefits of these programs are well documented and include improved cardiac risk factors, reduced symptoms, morbidity and mortality. Culturally appropriate models of preventive care and rehabilitation for Aboriginal people are essential for the ongoing management of heart disease. In WA, apart from the Heart Health program operating at Derbarl Yerrigan Health Service (discussed below), there is a lack of community based culturally appropriate follow-up and cardiac rehabilitation services.

An Aboriginal healthcare professional employed in the hospital setting can be utilised to build strong links with health care services and ensure patients are referred to appropriate services and not lost to care once discharged. This person would also promote and assist with the provision of culturally appropriate inpatient cardiac rehabilitation and education in the hospital setting.
The Heart Health Program – *For Our People, By Our People* at Derbarl Yerrigan Health Service in East Perth is leading the way towards a collaborative relationship between Aboriginal people and mainstream health services to improve cardiovascular health outcomes. Based on a community development model, this program has been running since 2008 with great success, including:

- Consistent attendance
- Good outcomes (i.e. decreased BMI, waist girth and blood pressure and an increase in six minute walking test distance).
- Ownership since 2010 by Derbarl Yerrigan Health Service and the broader community.

The Heart Foundation proposes that the future direction of cardiac rehabilitation and chronic disease management for Aboriginal people in Western Australia be informed by this successful model.

**Recommendation 4: Ensure that all Aboriginal people receive timely and appropriate cardiac care through:**

a. **Improved access to appropriate clinical testing in rural and remote areas such as echocardiogram and biomarkers**

Aboriginal people are both geographically and culturally disadvantaged. In rural and remote areas there is inequity of access and care due to distances, worsened by variable workforce experience, skills and shortages.\(^{19}\)

Aboriginal people living in rural and remote areas can be distinctly disadvantaged if they do not have access to appropriate clinical testing, like echocardiogram and biomarker testing. For example early biomarker testing to detect a heart attack can lead to early reperfusion, which can significantly reduce the burden of cardiac damage and save many lives.\(^{20}\)

A similar benefit can be seen in the diagnosis of heart failure and rheumatic heart disease. Early detection of these conditions assisted by ready access to echocardiogram and specialist cardiology services (see b.) can improve quality of life, slow the progression of disease, reduce the need for invasive treatments and prevent hospital admission.

Point of care testing (where tests are performed near or at the site of a patient) can be used to make clinical decisions that will lead to improved health outcomes. This is a priority identified by the Cardiovascular Health Network.

The Department of Health has recently endorsed a policy whereby PathWest will work with Area Health Services (in particular the WA Country Health Service) to provide improved access to reliable biomarkers of heart muscle injury through the provision and support of Point of Care Testing devices. Through this program, PathWest aims to give local doctors one of the tools needed to accurately diagnose and adequately treat acute coronary syndromes in patients who present out of laboratory hours or to facilities that do not have laboratory facilities.
b. Expanded support for Medical Specialist Outreach Assistance Program to improve access to specialist medical care in rural and remote areas with serious consideration given to the successful Queensland cardiac outreach model.

Western Australia is a vast state and providing access to specialist medical services is a challenge that must be met. If heart disease is better managed in home communities, hospitalisation can be reduced and lives can be saved. The current commonwealth funding commitment to the Medical Specialist Outreach Assistance Program (MSOAP) is commendable. The Heart Foundation encourages the Government of Western Australia to continue to support and enhance this commitment and to model its approach on the Indigenous Cardiac Outreach Clinic program in Queensland. This program has been very successful and is based on a community development model that is helping the local Aboriginal community take control of their cardiac health. Beginning in 2007, a team comprising a cardiologist, a nurse, a sonographer and an Indigenous liaison coordinator, visits remote sites providing cardiac assessment and treatment planning for patients attending the clinics (Appendix 1).

Some cardiac outreach options are currently being explored in rural and regional WA. The Heart Foundation are aware that there are existing visiting cardiology services that visit regional and remote areas, however we are unsure of what is available. The Heart Foundation seeks input from providers to inform a more complete knowledge of these services, and gaps in service.

c. Implementation of the Acute Coronary Syndrome (ACS) and Heart Failure Models of Care throughout Western Australia

The Heart Foundation fully endorses the WA Health Networks Models of Care for both Acute Coronary Syndrome and Heart Failure. Since 2009, the Cardiovascular Health network has made significant progress in this area:

- Quick reference guide to ACS for country health practitioners in draft
- WA Country Health Service has developed algorithm/protocol for ACS assistance for rural practitioners.

Work towards implementation of these models of care continues, and the Heart Foundation urges the Government to commit to their full implementation to enhance cardiac care throughout WA, and to the monitoring of outcomes to ensure accountability for delivery of services to Aboriginal people.

d. Extensive public promotion of warning signs and symptoms of heart attack and heart failure

Late presentation to hospital with heart attack or heart failure can significantly impact on health outcomes and increase treatment costs. Pivotal to improving prompt presentation to health services by Aboriginal people is delivery of culturally appropriate education programs on the warning signs and symptoms of heart attack and heart failure.

Aboriginal people are one of the priority groups identified in The Heart Foundation’s Warning Signs of Heart Attack campaign. The campaign seeks to ensure Australians
can better identify, know and respond to the warning signs of heart attack, and that structural changes that can influence patient delay are addressed.

A social marketing campaign has utilised press, TV, radio, online and convenience advertising as well as Noongar radio. A suite of resources (including action plans) have been developed and widely disseminated in WA with promotion to Aboriginal people occurring at community events (e.g. NAIDOC celebrations), workplaces (e.g. mine sites) and to health professionals (Divisions of General Practice, ACCHS, hospitals, pharmacy). A strategy to engage Aboriginal people living in remote areas of Australia is being implemented in the first half of 2012.

The Heart Foundation seeks commitment from the Government to fund continued public education programs, including mass media and tailored resources that are sensitive to the needs of Aboriginal people and that aim to reduce delays in presentation to hospital.

6.0 Conclusion

As Cardiovascular disease is the major cause of death and disability, improved cardiovascular health is central to closing the gap in life expectancy for Aboriginal people. There are significant documented disparities between Aboriginal and non-Aboriginal Australians in hospital cardiovascular care.

Eliminating this disparity in care should be a central strategy for closing the gap. This paper, as an update to our initial 2009 position paper on hospital disparities, articulates four key actionable recommendations and includes estimated costs (Appendix 1) that will contribute significantly to eliminating this lack of equality. These recommendations are based on recognition that respect for culture and language is as important to closing the gap as the provision of services and resources.

The benefits of implementing these recommendations are numerous. Although closing the gap is about improving the patient journey and saving lives rather than cost deficiencies, these recommendations can be implemented at modest cost and can indeed save money (Appendix B). For example a reduction in hospital admissions for Acute Myocardial Infarction would save $25,051 per separation\textsuperscript{22}.

The emphasis of this document is on hospital care; however, action by health providers in primary care is also paramount to optimising the patient journey.

To provide equal treatment to all Australians is not about treating all people the same, it is about providing the type of services, treatment and education that caters for different needs. “If you want to treat me equally, you may have to be prepared to treat me differently.”\textsuperscript{43} The Heart Foundation urges the Government and all health providers to work together to enhance services that meet the needs of Aboriginal people, eliminate disparities in care and consequently significantly close the life expectancy gap.

This WA advocacy position paper complements the national work of the Heart Foundation with the Australian Healthcare and Hospitals Association that aims to implement and facilitate better hospital care for Aboriginal people.
Appendix 1: COSTS AND COST SAVINGS

A: COSTS

Not all of the recommendations in this position statement can be fully costed by the Heart Foundation. The following figures are indicative of costs for some, but not all, of the key programs and services recommended in this paper.

Employment of Aboriginal healthcare professionals in cardiology areas and hospitals that deliver care and support to Aboriginal patients.

The current position at Royal Perth Hospital titled Aboriginal Health Liaison Officer has been classified at a level 5.1 (Hospital Services Union award) at $83,613 (including 30% on-costs) per annum to adequately reflect roles and responsibilities of this position.

* Based on initial appointment of ten new positions

$836,130 p.a.

Remote Area Liaison Service based on the South Australian model

A Remote Nurse Liaison Service SRN Level 3 (FTE 1.0) in WA specifically for remote area Aboriginal people travelling for cardiac surgery would cost $124,152 per annum. This includes salary, Information technology and travel. Based on annual inflation rate of 2.8% in 2010, 3.5% in 2011 and projected rate of 3% for 2012 this figure would be $136,057.

$136,057

Cardiac outreach program based on the Queensland Cardiac Outreach Program

This program involves a team of four (including a Cardiologist, Sonographer, Nurse and Coordinator) visiting 16 sites 4 times per year. It is a split funding model between national MSOAP and state Cardiology Clinical Network. The North Metro Cardiac Clinical Network provides $300,000 per annum for wages, travel expenses and operational costs and the MSOAP commonwealth funding for travel, accommodation and cardiologist wages ranges from $12,000 to $21,000 per annum per site visited (depending on distance traveled from Brisbane).

* based on 7 sites @ $17,000

$459,178 p.a.

Cardiac Rehabilitation programs – based on the Derbarl Yerrigan Cardiac Rehabilitation Trial

The total set up cost for the first year of this program (2008) was $118 800 and an approximate recurrent yearly cost of half this amount. This cost includes a part time senior registered nurse and exercise physiologist to run the sessions with additional assistance from a registered nurse at Derbarl Yerrigan. The program consists of a weekly education, yarning and exercise session. In the initial year a project officer was required to drive the program and establish networks, after which the participating organisation, in this case Derbarl Yerrigan, assumed control of the program. One-off equipment costs of $13,560 (2008 prices) were also required.

** based on three sites in year one.

$390,575**
Employment of a Coordinator to facilitate implementation of programs
The provision of a Coordinator, co-located between the Cardiovascular Health Network and National Heart Foundation is essential to the facilitation, development and delivery of these initiatives.

$113,750 p.a.

TOTAL ANNUAL COST $1,935,690

B: COST SAVINGS

Many of the projects cited in this document have documented and significant outcomes and cost efficiencies. The SHRAC study at Royal Perth Hospital demonstrated that an Aboriginal Health Worker (AHW) in Cardiology could make many positive changes including achieving cost efficiencies from reduction in repeat hospitalisation and incomplete treatment. This alone can result in significant financial saving. For example, prevention of repeat admission for an acute myocardial infarction will save $25,051 per separation\textsuperscript{22}.

The South Australian trial of a Nurse Liaison Service specifically for remote area Aboriginal people travelling for cardiac surgery has demonstrated an annual saving of $590,000 through reduced no-shows, reduced cancelled surgery and improved management of Multi-resistant Staphylococcus aureus (MRSA) patients. In addition to this the increased patient through-put created revenue in excess of $600,000\textsuperscript{17}.

The evidence around cost effectiveness and mortality reduction through Cardiac Rehabilitation has been well established. Translation of this benefit to culturally appropriate cardiac rehabilitation for Aboriginal people can be readily seen each Thursday at the Heart Health program based out of Derbarl Yerrigan Health Service in East Perth. Providing culturally appropriate cardiac rehabilitation programs across multiple locations in Western Australia will surely enhance this effect.

The recommended changes in service delivery inherent in the recommendations of this position paper will promote health and encourage evidence-based practice that will inevitably reduce the burden of disease for Aboriginal people.
References:


12. National Health and Medical Research Council (NHMRC) (2005) Strengthening Cardiac Rehabilitation and Secondary Prevention for
Aboriginal and Torres Strait Islander Peoples: A Guide for Health Professionals. Australian Government.


16. Sandra Thompson, Shaoli Shahid, Lizzie Fin, Aboriginal View on Improving cancer Services: Do we care enough to act?


19. Department of Health, Western Australia. The Model of Care for Acute Coronary Syndromes in Western Australia. Perth: Health Networks Branch, Department of Health, Western Australia; 2009


Glossary

Acute Coronary Syndrome (ACS)
Definition: Medical emergencies caused by a reduction in blood supply to an area or areas of the heart muscle in association with varying degrees and types of blockage of a coronary artery or arteries. Acute coronary syndromes include heart attacks and episodes of "unstable angina", which may rapidly evolve into heart attack.

Acute myocardial infarction (AMI)
Also known as a heart attack, AMI is typically caused by a blood clot that suddenly blocks a narrowed artery, cutting the blood supply to the heart muscle. This can result in heart muscle damage.

Aboriginal healthcare professional: An Aboriginal person who is charged with delivery of care e.g. ALO, AHLO or AHW

Aboriginal Health Worker (AHW)
Aboriginal and Torres Strait Islander people who work within a holistic primary health care framework as determined by the local Aboriginal or Torres Strait Islander community to achieve better health outcomes for Aboriginal and Torres Strait Islander individuals/families and their community.

Aboriginal Health Liaison Officer (AHLO)
Title of position created at Royal Perth Hospital Cardiology

Aboriginal Liaison Officer (ALO)
Provides emotional, social and cultural support to patients and their families; advocates and liaises on behalf of patient and families.

Biomarkers:
A biochemical feature (for example Troponin) that can be used to measure the progress of disease, or the effects of treatment.

Coronary heart disease (CHD):
A disease of the arteries that surround the heart and supply blood to the heart muscle. When these arteries become partly blocked by fatty deposits (atherosclerosis), this is called coronary heart disease. This is sometimes also referred to as coronary artery disease or ischaemic heart disease.

Coronary Artery Bypass Graft (CABG) Surgery
This operation allows the blood flow to bypass the narrowed areas in the coronary arteries so that the blood can easily get to the heart muscle; sometimes referred to as CABG (pronounced 'cabbage').

Coronary angiogram:
A test that shows whether a person's coronary arteries are narrowed or blocked. A small tube (catheter) is inserted into an artery in the arm or the leg and guided towards the heart. Dye is injected into the coronary arteries and the heart chambers and pictures are taken as the dye moves through the heart, coronary arteries and chambers.

Coronary angioplasty:
A technique to improves the blood flow to the heart by using a special balloon to open a blocked artery at the point of narrowing. After angioplasty, a stent, which is an expandable metal tube (such as a coil or wire mesh) is usually placed at the newly opened part of the artery and expanded. The expanded stent is left in place to keep the artery open.
Echocardiogram:
This test uses ultrasound waves that come from a small hand piece placed on the chest wall which bounce back to produce a picture of the heart’s chambers and valves.

Heart failure:
Heart failure is an ongoing condition that occurs when the heart muscle works less effectively than normal and cannot pump as effectively as it usually does. As a result of heart failure, the heart may become enlarged or thickened and weaken over time. The heart will keep pumping, but less efficiently.

Rheumatic fever:
A disease characterised by a fever accompanied by pains in the joints and sometimes signs of heart disease. Although now generally rare in Australia, rheumatic fever is still a serious problem in some Aboriginal and Torres Strait Islander communities.

Rheumatic heart disease:
Caused by an attack of rheumatic fever during childhood, which affects the heart valves; modern surgery can repair damage to the valves or replace them. Although now generally rare in Australia, rheumatic fever is still a serious problem in some Aboriginal and Torres Strait Islander communities.