Better hospital care for Aboriginal and Torres Strait Islander people experiencing heart attack
Better hospital care
for Aboriginal and Torres Strait Islander people experiencing heart attack
The Heart Foundation and the Australian Healthcare and Hospitals Association (AHHA) are determined to do all we can to help close the life expectancy gap between Aboriginal and Torres Strait Islander people and the broader population.

It has been acknowledged that key drivers of the life expectancy gap include higher incidence of, and mortality from, cardiovascular disease (CVD), higher tobacco smoking rates, and disparities in the care and treatment of Aboriginal and Torres Strait Islander hospital patients.

Nationally, there has been a significant and much-needed focus on primary care and prevention, including a commitment to address smoking rates and improve chronic disease management. But there has been less emphasis on what happens when Aboriginal and Torres Strait Islander patients get to hospital.

CVD is the biggest killer of Aboriginal and Torres Strait Islander people. They develop CVD and die from it at much higher rates than other Australians, and are three times as likely to suffer a coronary event, such as a heart attack.

Landmark work published by the Australian Institute of Health and Welfare reveals that when in hospital, compared with other Australian patients, Aboriginal and Torres Strait Islander patients have:

- more than twice the in-hospital coronary heart disease (CHD) death rate
- a 40% lower rate of angiography
- a 40% lower rate of coronary angioplasty or stent procedures
- a 20% lower rate of coronary bypass surgery.

We also know that there are significant problems with pre- and post-acute care. For example, few Aboriginal and Torres Strait Islander heart attack patients access cardiac rehabilitation programs, despite the fact that rehabilitation significantly improves outcomes and reduces the chances of further heart problems.

By improving intervention rates and addressing disparities in care, we can improve Aboriginal and Torres Strait Islander patient health outcomes and life expectancy.

The Heart Foundation and the AHHA have been working together to examine the reasons for these disparities and develop policy options to address them.

While we have looked at disparities in the care of Aboriginal and Torres Strait Islander CHD patients, many of the lessons will be applicable to disparities in care for other major disease groups as well.

This report forms the centrepiece of our collaboration. Guided by our consultant, Dr Bill Coote, the report’s recommendations emerged from a policy forum held in Sydney in August 2009. These recommendations were further developed at a roundtable held at Parliament House in Canberra in November 2009.

This report has been shaped by a diverse working party, and its insight, comment and advice has been greatly valued. We also thank the many individuals and organisations that helped to make this report possible. Their stories have been both moving and disturbing. They remind us that hospital disparities are not about statistics – they are about ensuring those most in need get access to the care, treatment and outcomes that most of us expect and receive when we enter hospital with life-threatening conditions.
The messages from the report are clear.

- Some good things are happening in some places.
- More research and better, comprehensive data collection is needed.
- Addressing hospital disparities is a complex task that will involve the commitment of organisations and individuals in government and non-government sectors.

But the top line message is this: disparities are real. They are contributing to the life expectancy gap. They must be addressed – not in an ad hoc manner, but in a comprehensive and systematic way.

The Heart Foundation and the AHHA suggest that hospital disparities should be embraced by all jurisdictions, and this may best be done as part of their Close the Gap commitment.

In particular, the Commonwealth could help to drive change through the new national healthcare funding arrangements, and encouraging action at the state and territory level through reform payments. Such a process would encourage jurisdictions to develop local solutions with Aboriginal and Torres Strait Islander communities and organisations.

It is our hope that this report sparks dialogue and action that will help make hospital disparities part and parcel of the Council of Australian Governments’ ongoing commitment to close the life expectancy gap, once and for all.

Dr Lyn Roberts AM
Chief Executive Officer – National Heart Foundation

Ms Prue Power
Executive Director
Australian Healthcare and Hospitals Association
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreword</td>
<td>1</td>
</tr>
<tr>
<td>Executive summary</td>
<td>4</td>
</tr>
<tr>
<td>Summary of recommendations</td>
<td>5</td>
</tr>
<tr>
<td>Background and rationale</td>
<td>7</td>
</tr>
<tr>
<td>Policy context</td>
<td>9</td>
</tr>
<tr>
<td>Evidence on disparities in access to care</td>
<td>10</td>
</tr>
<tr>
<td><strong>The way forward: issues and recommendations</strong></td>
<td>11</td>
</tr>
<tr>
<td>Better coordinated care across the continuum for Aboriginal and Torres Strait Islander people</td>
<td>12</td>
</tr>
<tr>
<td>Better in-hospital care, through improved hospital systems and culture</td>
<td>14</td>
</tr>
<tr>
<td>Better pre-hospital diagnosis and evacuation for rural and remote Aboriginal and Torres Strait Islander people</td>
<td>17</td>
</tr>
<tr>
<td>Better access to post-hospital care for Aboriginal and Torres Strait Islander people</td>
<td>18</td>
</tr>
<tr>
<td>Better data to support quality improvement</td>
<td>20</td>
</tr>
<tr>
<td>Better awareness of issues relating to disparities in hospital care for Aboriginal and Torres Strait Islander people</td>
<td>22</td>
</tr>
<tr>
<td>Conclusion</td>
<td>23</td>
</tr>
<tr>
<td>Acknowledgements</td>
<td>24</td>
</tr>
<tr>
<td>About the Heart Foundation and AHHA</td>
<td>25</td>
</tr>
<tr>
<td>References</td>
<td>26</td>
</tr>
</tbody>
</table>
Executive summary

The Heart Foundation and AHHA jointly produced this report on hospital care for Aboriginal and Torres Strait Islander people with acute coronary syndrome (ACS). There is strong evidence that Aboriginal and Torres Strait Islander people who present to hospital with ACS do not receive equivalent hospital care to other Australians with the same condition. A 2006 report from the Australian Institute of Health and Welfare (AIHW) found that compared with other Australians, Aboriginal and Torres Strait Islander people had:

- three times the rate of major coronary events, such as heart attack
- 1.4 times the out-of-hospital death rate from coronary heart disease (CHD)
- more than twice the in-hospital death rate from CHD
- a 40% lower rate of being investigated by angiography
- a 40% lower rate of coronary angioplasty or stent procedures
- a 20% lower rate of coronary bypass surgery.

This report aims to raise awareness of these issues among governments, hospitals, clinicians and other interested parties, and to provide a basis for them to work together towards solutions that will help to close the gap in Aboriginal and Torres Strait Islander heart health.

It is the outcome of a joint Heart Foundation and AHHA project, and was guided by various consultation mechanisms, including a multidisciplinary working group (see membership list in Acknowledgements on page 24). A policy think tank was held in Sydney in August 2009 as an initial consultation activity with key stakeholders and working group members who were able to attend. A preliminary version of this report was also presented to a federal parliamentary roundtable in November 2009.

This report is intended to be used as a working document by governments, hospitals, clinicians and others, to help them to develop and implement measures to address disparities in hospital care for Aboriginal and Torres Strait Islander people with ACS. It recommends a series of interdependent, practical measures to make sure that clinicians, health services and hospitals are equipped and organised to perform within accepted guidelines and deliver quality, effective care to Aboriginal and Torres Strait Islander people with ACS.

While some additional resources will be required to implement these recommendations, they largely build on the existing expertise and commitment of health providers, and use existing facilities and services.

“We can look on the terrible state of Indigenous health in Australia and see a burden for healthcare, or we can see an opportunity. We know that simple and relatively inexpensive measures in Indigenous health can make substantial differences... The state of Indigenous health ought to matter to all Australians, and it should be regarded as an opportunity rather than a burden. Let us not miss the opportunity.”

---

* Acute coronary syndromes (ACS) refers to heart attack and unstable angina.
## Summary of recommendations

### Better coordinated care across the continuum for Aboriginal and Torres Strait Islander people

**Recommendation 1**
Networks should be developed that represent all key parties involved in the continuum of care for Aboriginal and Torres Strait Islander people with CHD (and potentially other chronic conditions), to address issues relating to continuity of care, care coordination, and service integration.

### Better in-hospital care, through improved hospital systems and culture

**Recommendation 2**
Hospitals should be made accountable, through performance indicators, for providing culturally safe environments for Aboriginal and Torres Strait Islander patients.

**Recommendation 3**
Additional quality improvement processes should be implemented to help hospitals meet cultural safety performance indicators and quality of care indicators.

**Recommendation 4**
All clinicians and hospital staff should be given effective cultural competency training.

**Recommendation 5**
Aboriginal and Torres Strait Islander people should be systemically included in hospital governance.

**Recommendation 6**
Funding should be provided to increase the number of Aboriginal and Torres Strait Islander people working in hospitals, including in liaison and clinical roles.

### Better pre-hospital diagnosis and evacuation for rural and remote Aboriginal and Torres Strait Islander people

**Recommendation 7**
Networked ECG machines should be introduced in remote clinics across Australia.

**Recommendation 8**
Travel arrangements for Aboriginal and Torres Strait Islander people from rural and remote areas who need evacuation to regional and tertiary hospitals should be improved.
Better access to post-hospital care for Aboriginal and Torres Strait Islander people

Recommendation 9
Aboriginal and Torres Strait Islander people’s access to ongoing specialist care should be improved through appropriate financing arrangements.

Recommendation 10
As well as adequately resourcing Aboriginal community-controlled health services, further measures should be introduced to improve Aboriginal and Torres Strait Islander people’s access to culturally safe and clinically appropriate services through mainstream general practice.

Recommendation 11
All Aboriginal and Torres Strait Islander people should have full access to essential and quality use of medicines.

Recommendation 12
Funding and support should be provided for the implementation of cardiac rehabilitation services for Aboriginal and Torres Strait Islander people.

Better data to support quality improvement

Recommendation 13
All hospitals should be required to collect consistent data on Aboriginal and Torres Strait Islander patients. This requirement should be built into hospital performance indicators.

Recommendation 14
An ACS register should be established.

Better awareness of issues relating to disparities in hospital care for Aboriginal and Torres Strait Islander people

Recommendation 15
An ongoing education program should be undertaken to raise awareness of disparities in Aboriginal and Torres Strait Islander people’s access to hospital care, and to build a coalition of support to help to close the gap.
Background and rationale

As suggested by Hoy, to close the gap in Aboriginal and Torres Strait Islander health, “for greatest impact, effective interventions must be fast-forwarded” and as top priority, there should be “an urgent and intensified focus on areas with the highest mortality rates”.

Cardiovascular disease (CVD) is the greatest single contributor to the gap in life expectancy between Aboriginal and Torres Strait Islander people and non-Indigenous Australians. It has been estimated that if Aboriginal and Torres Strait Islander people achieved the same level of cardiovascular health as other Australians, the life expectancy gap could be closed by 6.5 years. Given that CVD is the biggest killer of Aboriginal and Torres Strait Islander people, and that the potential for life expectancy gain is so great, this is a critical area to address to close the life expectancy gap.

ACS is the result of underlying CHD. CHD is the most common form of CVD and often arises from behavioural/lifestyle risk factors, such as smoking, poor diet and insufficient physical activity. These behavioural/lifestyle risk factors lead to biomedical risk factors, such as high blood cholesterol, high blood pressure and diabetes.

In people with CHD, the arteries that carry oxygen and nutrients to the heart muscle (the coronary arteries) are clogged and narrowed by a fatty material called ‘plaque’ or ‘atheroma’. If the coronary arteries become too clogged, the blood supply to the heart muscle is reduced. This may lead to symptoms such as angina. If a blood clot forms in the narrowed artery and completely blocks the blood supply to part of the heart, it can cause a life-threatening heart attack.

CVD refers to heart, stroke and blood vessel diseases. It is the major cause of premature death among adult Aboriginal and Torres Strait Islander people. Age-specific death rates from CVD in Aboriginal and Torres Strait Islander people aged less than 65 years were between five and 12 times higher than rates for non-Indigenous Australians. These high rates occur in both remote and urban settings.

Addressing the high rates of CVD, and in particular CHD, among Aboriginal and Torres Strait Islander people requires attention across the whole continuum of care. This continuum ranges from primary prevention and management of risk factors in the primary care setting, to emergency care, acute care and post-acute care (i.e. rehabilitation and ongoing management and secondary prevention). Each of these parts of the continuum is important and can contribute to long-term gains.

Recently, governments have been focussing on improving Aboriginal and Torres Strait Islander people’s health, particularly through the Council of Australian Governments (COAG) health reform process. Multiple programs and strategies across the continuum of care have been planned and the Heart Foundation and AHHA support these programs and strategies. In particular, the Heart Foundation and the AHHA believe that it is critical to address gaps in hospital care for Aboriginal and Torres Strait Islander people, and that rapid gain is achievable in this area.
There is very good evidence that effective treatment of ACS leads to improved health outcomes. It is vital that all Australians with ACS, including Aboriginal and Torres Strait Islander people, are provided with quality, effective hospital care that meets their needs.

Aboriginal and Torres Strait Islander people have different patterns of access to hospitals, compared with other Australians. These differences include the following.

- Aboriginal and Torres Strait Islander people are admitted to hospital at twice the rate of non-Indigenous Australians, with particularly high rates in the 35 to 64 age groups. Note that due to probable undercounting of Aboriginal and Torres Strait Islander patients, current figures for hospital admissions are likely to be underestimates.
- Aboriginal and Torres Strait Islander patients stay in hospital longer due, among other factors, to late presentation in the course of an episode of illness.
- Aboriginal and Torres Strait Islander patients admitted to hospital are less likely to have a procedure recorded. While this is partly due to factors such as the co-morbidities and the treatments available at specific hospitals, researchers nevertheless conclude “there may be systematic differences in the treatment of patients identified as Indigenous”.
- Aboriginal and Torres Strait Islander patients are much more likely to ‘self-discharge’: that is, leave hospital against advice. Estimates suggest this occurs at a rate of 19 times that of non-Indigenous Australians.

Mirroring these differentials in hospital access generally, Aboriginal and Torres Strait Islander people with ACS appear to have very different experiences of the hospital system than other Australians.

Key modern in-hospital investigations and treatments for ACS include angiography (X-rays of the coronary arteries) and revascularisation procedures (procedures that restore blood flow through blocked arteries). Revascularisation procedures include percutaneous coronary intervention (PCI – opening arteries and inserting stents to keep the arteries open) and coronary artery bypass grafting surgery (CABG or bypass surgery). However, in 2006, the AIHW reported that compared with other Australians, Aboriginal and Torres Strait Islander people presenting at hospital with symptoms of ACS had:

- a 40% lower rate of being investigated by angiography
- a 40% lower rate of coronary angioplasty or stent procedures
- a 20% lower rate of coronary bypass surgery.

It is critical that these differences are addressed. The growing burden of chronic disease in Aboriginal and Torres Strait Islander communities will result in a growing need for cardiac care, including in the hospital setting.

CHD, and consequently ACS, occur at younger ages among Aboriginal and Torres Strait Islander people than in other Australians. The Aboriginal and Torres Strait Islander population is growing. In the next few decades, large cohorts of Aboriginal and Torres Strait Islander people will move into the age groups that have a high incidence of ACS. Therefore, Aboriginal and Torres Strait Islander people’s need for cardiac care will rise significantly, particularly if lifestyle changes and reduction in risk factors are slow.

The Heart Foundation and AHHA recommend that all settings across the continuum of care be explored to improve care for Aboriginal and Torres Strait Islander people with CHD. However, this report focuses mainly on the care provided to Aboriginal and Torres Strait Islander people presenting at hospital with ACS – an area which has not had sufficient focus to date.

The Heart Foundation and Cardiac Society of Australia and New Zealand have developed guidelines for managing ACS. These guidelines provide an invaluable framework against which to develop and assess the effectiveness of policy initiatives.
The development of this report and its recommendations reflect recent government initiatives to address Aboriginal and Torres Strait Islander health issues, including disparities in access to healthcare.

The recommendations in this report support and complement recent initiatives to ‘close the gap’ in Aboriginal and Torres Strait Islander health. Australian governments, through COAG, have committed $1.57 billion over four years to reduce major health risk factors, to improve chronic disease management and follow-up, and to expand the capacity of the health workforce to tackle chronic disease in the Aboriginal and Torres Strait Islander population.

The recommendations also contribute to achieving the commitments in the National Healthcare Agreement, made between the Commonwealth and the states and territories. These commitments include facilitating access to mainstream health services and developing innovative evidence-based models of care to close the gap in the life expectancy of Aboriginal and Torres Strait Islander people within a generation.8

We have aligned our recommendations with the principles developed by the National Indigenous Health Equality Council (NIHEC), which provides strategic advice to COAG on the implementation of health measures. The NIHEC principles:

• focus on achieving equitable health outcomes for Aboriginal and Torres Strait Islander people
• support the achievement of commitments made to close the gap in Aboriginal and Torres Strait Islander health
• promote models of healthcare that are effective and culturally secure
• promote excellence and innovation
• are proactive and strategic.16

The preamble to the National Indigenous Health Equality Targets developed in 2008 at the National Indigenous Health Equality Summit noted “effective delivery of health services for any individual topic requires an adequate infrastructure for general health service delivery” and stated “it is of limited value to say a particular condition or factor is important unless it is clear what the health target is, how it is to be achieved...(and what are) the program, workforce and infrastructure requirements to provide the necessary services and the monitoring, evaluation and management processes required”.17

Our recommendations are consistent with these principles. They reflect the Heart Foundation’s long and successful experience leading the development and promotion of innovative solutions to the heart disease challenges faced by the Australian community. They also reflect the AHHA’s day-to-day involvement with clinicians and health administrators working at the ‘coalface’ in hospitals and health services.
Evidence on disparities in access to care

There is good evidence, both within Australia and internationally, of widespread and arguably systemic disparities in access to hospital care for patients with CVD from different racial and ethnic groups. As noted above, the AIHW has reported that compared with other Australians, Aboriginal and Torres Strait Islander people have more than double the in-hospital death rate from CHD, and at the same time have significantly lower rates of being investigated by angiography, of being provided with coronary angioplasty or stent procedures, and of being provided with coronary bypass surgery.1

The AIHW suggested these findings provide “a compelling case that ways must be found to eliminate the disparities”.1

Coory and Walsh, using Queensland public sector administrative data, analysed procedure rates for Aboriginal and Torres Strait Islander people with ACS treated in hospitals. Their research showed that Aboriginal and Torres Strait Islander patients had lower coronary procedure rates than other patients, after adjusting for age, sex, socioeconomic status, remote residence, hospital characteristics and co-morbidities. They found that while adjusted rates for bypass surgery were more equitable, adjusted rates for any coronary procedure (i.e. PCI or bypass surgery) were 22% lower among Indigenous patients.18

By contrast, one recent study found no significant differences in procedure rates between Aboriginal and Torres Strait Islander people and other patients admitted to hospital with ACS. This study analysed the records of patients presenting to selected Australian hospitals with chest pain.19 However, the paper was acknowledged by its authors as being unlikely to represent a complete national picture, as it was based on data from selected hospitals, with small rural and remote hospitals under-represented.

Overseas literature provides valuable lessons and suggests useful directions for Australia. In New Zealand, studies have focused on Māori and other ethnic groups’ access to healthcare. A review of studies of inpatient hospital care found that the evidence for disparities is limited, but supports broader findings of poorer quality of care provided to Māori people in relation to best practice and clinical indicators.20

In England, many studies seek to inform an ongoing debate in the UK around the so-called ‘postcode lottery’, whereby access to some health services, including cardiac services, varies depending on the region in which one lives and the level of resources available in that region in comparison with others.21

In the USA, a large body of formal research into disparities in healthcare, as well as descriptive and advocacy work, has been published over the past few decades. A frequently recurring theme is the apparent intractability of the issue of unequal access to treatment even when the reality of its existence is accepted.

In a recent narrative piece, Fitzhugh Mullan reflects on his experiences working with various marginalised groups. In 1965, as a young medical student from Chicago, he worked for the civil rights movement in Mississippi and recalls his misplaced optimism: “I was sure that the institutionalised inequity in medical care that I had seen in Mississippi would be gone by the time I set out to practice medicine on my own a few years later”.22

Petersen and Yancy summarising recent evidence from the USA, found that disparities in cardiac care had been most frequently reported with regard to costly, invasive procedures, such as cardiac catheterisation, PCI, bypass surgery, cardiac transplantation, and the implantation of defibrillators or cardiac resynchronisation devices.

In addition, they found that disparities were also evident in the rapidity with which different groups gain access to new cardiac technologies, with one example being the delayed adoption of device therapy for heart failure and drug-eluting stents for African American patients, as compared with other patients.23

Peterson and Yancy also found that disparities extend to both primary and secondary prevention. After hospitalisation for acute myocardial infarction, heart failure or stroke, African American patients were less likely than other patients to receive certain evidence-based medical treatments.21

Based on this evidence, the authors suggest focusing performance-measurement and quality-improvement efforts on care for at-risk populations. They suggest that given that caregivers respond to constructive feedback regarding quality of care, an appropriate approach may be to integrate such data measurement into systems for quality improvement.21
The way forward: issues and recommendations

Due to the limited research and documentary evidence in this area, the following issues and recommendations have been identified and developed through a consensus process, based on input provided by a range of experts through the working group, policy think tank, and parliamentary roundtable processes outlined in the Executive summary on page 4.

The recommendations are made for consideration by governments and healthcare providers. They are generally broad, rather than prescriptive, and many can be implemented with only minimal additional resourcing. Implementing these recommendations would have an impact well beyond outcomes for patients with ACS. It would also improve the quality of care provided to Aboriginal and Torres Strait Islander people hospitalised with a range of conditions, and consequently on their general health outcomes.
Better coordinated care across the continuum for Aboriginal and Torres Strait Islander people

In the Australian health sector, services are provided by a range of quite separate facilities and health providers, which are funded and managed by different entities. In the case of Aboriginal and Torres Strait Islander people with ACS, this might initially be an Aboriginal community-controlled health service or a general practice, then a local public hospital, followed by transfer to a distant capital city tertiary hospital and, after discharge, possible referral to a rehabilitation service and a visiting specialist. If access to high quality care for Aboriginal and Torres Strait Islander people with ACS is to be improved then effective coordination of care along this continuum must be developed.

There are frequent breakdowns in the flow of information between acute and primary care providers, and between tertiary and secondary hospitals. The development of a unique electronic health identifier and electronic health records are beginning to help to prevent these breakdowns, and will provide a basis of support for better coordination.

Many Aboriginal and Torres Strait Islander patients have co-morbidities that influence the eventual outcomes of CHD. Issues around continuity of care need to be addressed across the spectrum of chronic diseases and their management. Those with co-morbidities may require coordinated specialist follow-up for a number of diseases (e.g., diabetes and kidney disease in addition to CHD), but there is currently no reliable mechanism for this because a specialist focus on a single disease is common practice.

Re-admissions of Aboriginal and Torres Strait Islander patients are not uncommon. It is critical that strategies are developed to minimise re-admissions through better access to follow-up care. A noticeable concern is the lack of access that Aboriginal and Torres Strait Islander people have to cardiac rehabilitation services.

A trend in recent years has been the development of a range of clinical and service networks that aim to link clinicians and others, and better coordinate care. These networks may provide a starting point for improved coordination of care for Aboriginal and Torres Strait Islander people with ACS.

Current models for such networks include regional Aboriginal health networks in Western Australia and the Northern Territory, which have been charged with regional planning and coordination; and state cardiac clinical networks in Queensland, South Australia and Victoria, which oversee and advise on the development and implementation of cardiac services plans in those states. There is potential to either build on these models or develop new models to improve the coordination of care for Aboriginal and Torres Strait Islander people with ACS and other chronic conditions.

---

1 The experts consulted include Aboriginal and Torres Strait Islander people; service providers and organisations; cardiologists; cardiac surgeons; nursing staff; other hospital staff; general practitioners; researchers; statisticians; representatives of professional and non-government organisations; and government representatives. The majority of people have relevant hands-on experience in either receiving or providing care in the settings of interest.
The nature of these models, or networks, is likely to vary. They may be local, regional or state-based, depending on demographics, need and service provision patterns.

Initially they may be simply a forum for discussion and agreement on key issues among service providers, clinicians and community stakeholders, with the aim of improving communications and gaining stakeholder support for improving services.

There may then be potential for the networks to become coordinating bodies to ensure seamless continuity of care, possibly through the brokerage of their services.

This could, for example, include employment of Aboriginal and Torres Strait Islander people as care coordinators to plan and support the patient journey across the system.

The new Indigenous Health Authority proposed by the National Health and Hospitals Reform Commission may provide an opportunity for governments to foster the development of models for these networks.

The networks may also create the means to consider and inform the local implementation of the programs and strategies currently being implemented through the COAG’s National Healthcare Agreement.

Recommendation 1

Networks should be developed that represent all key parties involved in the continuum of care for Aboriginal and Torres Strait Islander people with CHD (and potentially other chronic conditions), to address issues relating to continuity of care, care coordination, and service integration.

Direct responsibility for sponsoring and developing networks should rest with state or territory health administrations. It is critical that Aboriginal and Torres Strait Islander organisations, professional societies and advocacy groups provide leadership to these networks. It is also essential that the networks be adequately resourced to carry out the required functions.
Better in-hospital care, through improved hospital systems and culture

The quality and effectiveness of the care that Aboriginal and Torres Strait Islander patients receive in hospital is dependent not only on the clinical appropriateness of the treatment, but also on treatment being delivered in a culturally safe manner.

It is critical that Aboriginal and Torres Strait Islander patients feel welcome and respected in the hospital setting, and that communication is appropriate and comprehensive so that they fully understand their condition and their treatment options. These are necessary prerequisites to help patients navigate the system successfully, give informed consent to treatment, and adhere with treatment regimes.

Aboriginal and Torres Strait Islander patients currently have high rates of early discharge against medical advice, not only for CVD, but also for other conditions. Appropriate and comprehensive communication will help to address this issue, and will also help clinicians to understand the Indigenous patient’s symptoms and experience, and offer the best treatment.

Achieving an environment that is culturally safe, welcoming and respectful to Aboriginal and Torres Strait Islander patients can be challenging for hospitals. Hospital culture can often be busy, hierarchical, bureaucratic and rigid. This can make it difficult to put patients at the centre of a conversation about their treatment preferences. Staff often have difficulty finding time to talk comprehensively with patients and this can make Aboriginal and Torres Strait Islander patients feel disrespected.

The current low number of Aboriginal and Torres Strait Islander staff in hospitals presents another barrier to cultural safety. Aboriginal and Torres Strait Islander staff positions are critical to supporting the patient through hospital and improving the journey across the whole of the healthcare system. Practical benefits include reducing the incidence of discharge against medical advice, improving the interface with other parts of the healthcare system, and improving compliance with post-discharge treatment regimes. However, there is insufficient funding for Aboriginal and Torres Strait Islander health worker/liaison officer positions. Even when the positions are funded, there can be problems with recruiting and retaining staff.

The 2009 Commonwealth–state national healthcare agreements, which are part of the Intergovernmental Agreement on Federal Financial Relations, include Aboriginal and Torres Strait Islander people in the health workforce as a specific output measure to be monitored. This provides a sound basis for action to increase the numbers of Aboriginal and Torres Strait Islander people in the hospital workforce.

The current lack of opportunities for Aboriginal and Torres Strait Islander people to contribute to hospital governance is also problematic. Aboriginal and Torres Strait Islander people are often powerless in the mainstream healthcare system, and this is a major factor driving disparities in care. Including Aboriginal and Torres Strait Islander representatives on hospital boards is one way to address this imbalance.

Aboriginal and Torres Strait Islander health staff can’t carry the full responsibility for making hospitals welcoming and culturally safe for Aboriginal and Torres Strait Islander people. All staff should build trust with Aboriginal and Torres Strait Islander patients and deliver effective care in a culturally safe way. Cultural safety training for all staff is critical. Many non-Indigenous people, including hospital staff (particularly the many overseas-trained staff) have limited knowledge of Aboriginal and Torres Strait Islander issues. This may make it difficult for them to know how to communicate and treat patients appropriately. Large investment in cultural competence training in the hospital workforce is needed to improve communication, trust and care. Such training needs to be properly resourced and sustainable, and evaluated for its effectiveness.
There is evidence that health disparities decrease as quality assurance in hospitals improves. Therefore improving overall hospital processes has the potential to help to address the issue of disparities in care for Aboriginal and Torres Strait Islander people.26 The Australian Council on Healthcare Standards (ACHS) recently circulated draft amendments to its health facility accreditation documentation. It proposes that, for accreditation, health facilities will need to develop guidelines on the specific needs of Aboriginal and Torres Strait Islander patients and include care planning that is inclusive of state and territory priorities. If these ACHS proposals are formalised, they will provide a platform for ensuring a mechanism for assessing adherence to any requirements on health facilities to provide culturally appropriate services exists.

States and territories, with Commonwealth Government support, should develop and implement strategies to enhance cultural safety in hospital settings by addressing issues related to hospital culture and systems. The recommendations below put forward proposals for such strategies.

### Recommendation 2

Hospitals should be made accountable, through performance indicators, for providing culturally safe environments for Aboriginal and Torres Strait Islander patients.

Hospital mission statements, cultural safety plans, accreditation processes and funding agreements all provide formal routes to help to embed cultural safety into standard hospital process and culture.

Hospital performance indicators should reflect measures of cultural safety and quality of care for Aboriginal and Torres Strait Islander patients. Robust systems are required to enable measurement and reporting against the indicators, so that success can be identified and rewarded.

### Recommendation 3

Additional quality improvement processes should be implemented to help hospitals meet cultural safety performance indicators and quality of care indicators.

Continuous quality improvement processes have the potential to support cultural reform in hospitals. The primary care sector in recent years has been supported to implement continuous quality improvement through the collaboratives model. This model is based on a plan/do/study/act approach, with service providers sharing developments with one another. Similar models could be developed for the hospital sector and could help hospitals to implement cultural safety approaches and improve quality of care for Aboriginal and Torres Strait Islander patients.
Recommendation 4
All clinicians and hospital staff should be given effective cultural competency training.
Cultural competency training should be included in undergraduate curricula for all health professionals. It is critical that on-the-job training in cultural competency is available and mandatory not only for clinicians, but also for all hospital staff who come into contact with patients and families, and for hospital executives and bureaucrats whose policy and funding decisions affect Aboriginal and Torres Strait Islander patients. This training should use evaluated, proven models.

Recommendation 5
Aboriginal and Torres Strait Islander people should be systematically included in hospital governance.
Aboriginal and Torres Strait Islander people need to be placed in positions of influence in the hospital system, including around the board table. Hospital boards also need to engage with local Aboriginal and Torres Strait Islander communities and seek community advice on how to deliver appropriate services.

Recommendation 6
Funding should be provided to increase the number of Aboriginal and Torres Strait Islander people working in hospitals, including in liaison and clinical roles.
Ongoing education and professional development, and establishing support networks for Aboriginal and Torres Strait Islander health workers, will be critical to achieving this increase.
Benchmarks should be developed and hospitals should be required to report the number of Aboriginal and Torres Strait Islander full time equivalent (FTE) staff as a percentage of all FTE. Turnover of Aboriginal and Torres Strait Islander staff should also be routinely reported to inform future policy development.
Better pre-hospital diagnosis and evacuation for rural and remote Aboriginal and Torres Strait Islander people

The majority of Aboriginal and Torres Strait Islander people now live in urban areas. However, a disproportionate number, compared with the non-Indigenous Australian population, live in rural and remote areas. These areas are less well served by health services, including cardiac services. Given the small numbers of cardiologists and other specialist staff in remote areas, and the inability to support advanced interventional and surgical units in areas of low population, patient transfers to larger centres for many procedures will remain a critical component of care for ACS.

If the management of suspected ACS is to be enhanced, it is critical that Aboriginal and Torres Strait Islander people in remote areas have good local access to key diagnostic services and specialist cardiologist advice. For example, all remote clinics in the Northern Territory now have ECGs on site, and most have a fax line and a system for ECG interpretation. However, there is still a need for further investment in diagnostic tools, such as troponin analyses (a blood test critical for assessing and managing ACS) and facilities for electronically transmitting ECG images (fax transmission is not ideal).

Access to advanced hospital services requires rural and remote people with ACS to travel. Sometimes travel involves long distances, such as from remote parts of the Northern Territory to Adelaide. It is essential that the patient journey experience improves. There is a need for adequately funded patient and escort travel. Without an escort, patients from remote areas frequently refuse to travel for treatment, often find it difficult to make treatment choices, may not consent to treatment or may discharge themselves early. Patients and their escorts must be met at airports or given sufficient funds to travel from the airport to the hospital. Appropriate accommodation should be provided close to tertiary hospitals, and emergency funds should be available for incidental expenses. This requires effective communication links between primary care clinics, regional hospitals and tertiary hospitals.

Recommendation 7

Networked ECG machines should be introduced in remote clinics across Australia.

This will enable timely diagnosis and advice for suspected ACS. Capacity for troponin testing should also be expanded.

Recommendation 8

Travel arrangements for Aboriginal and Torres Strait Islander people from rural and remote areas who need evacuation to regional and tertiary hospitals should be improved.

This will ensure an appropriate and supported patient journey, continuity of care, and appropriate discharge and follow-up procedures.
Better access to post-hospital care for Aboriginal and Torres Strait Islander people

Several measures are required to improve Aboriginal and Torres Strait Islander people’s access to post-hospital care through services and pharmaceuticals funded by the Medical Benefits Scheme (MBS) and Pharmaceutical Benefits Scheme (PBS). These measures encompass specialist care, primary care, access to pharmaceuticals, and access to appropriate rehabilitation services.

There are economic disincentives for specialists to bulk bill patients. This can impede Aboriginal and Torres Strait Islander people’s access to community-based specialists, including in urban areas. One possible solution is a special Medicare card for Aboriginal and Torres Strait Islander people. This special card would be similar to the ‘Gold Card’ for Department of Veterans’ Affairs clients and would attract a higher level of rebate for bulk-billed services and where other quality measures are met (e.g. providing updates to a disease register).

Many Aboriginal and Torres Strait Islander people who can’t easily access an Aboriginal community-controlled health service access primary care through a mainstream general practice. As well as adequately resourcing Aboriginal community-controlled health services so they can provide comprehensive primary care, it is critical to make sure that general practice provides a culturally safe and accessible (including financially accessible) service for Aboriginal and Torres Strait Islander patients. This requires effective leadership in clinics, and could be supported by education and accreditation measures.

Access to medicines is also a critical issue. Approximately 10 years ago, in recognition of major disparities in access to the PBS, Aboriginal and Torres Strait Islander people in remote areas were given access to PBS medicines free of cost through Aboriginal and Torres Strait Islander health services. This was made possible by a scheme introduced under Section 100 of the National Health Act 1953. Under the scheme, local pharmacies supply and support remote Aboriginal and Torres Strait Islander health services. This aims to give patients access to point of care medicines through their primary care professional. The scheme has greatly improved access to medicines and enabled support structures to be developed and sustained for remote Aboriginal and Torres Strait Islander people.27

The Quality Use of Medicines Maximised for Aboriginal and Torres Strait Islander People (QUMAX) Program also helps rural and urban Aboriginal and Torres Strait Islander health services to meet the needs of their communities28 and is acknowledged as another significant initiative.

The planned implementation of a PBS co-payment is recognised as an important next step towards ensuring universal access to medicines for Aboriginal and Torres Strait Islander people.29,30

Given the role of medicines in controlling risk factors for CHD, such as high blood pressure and high cholesterol, it is vital that full access and quality use of medicines is made available without delay for all Aboriginal and Torres Strait Islander people.

Finally, the evidence for cardiac rehabilitation is irrefutable. The National Health and Medical Research Council (NHMRC) have produced a national guideline Strengthening cardiac rehabilitation and secondary prevention for Aboriginal and Torres Strait Islander peoples31 but recent research in Western Australia suggests that this guideline is not being systematically implemented.32,33 It is a well-established fact that no discrete funding is available to support cardiac rehabilitation service development nationally. The implementation of cardiac rehabilitation services is an important priority to ensure continuity of care for Aboriginal and Torres Strait Islander people.
Recommendation 9
Aboriginal and Torres Strait Islander people’s access to ongoing specialist care should be improved through appropriate financing arrangements.

Recommendation 10
As well as adequately resourcing Aboriginal community-controlled health services, further measures should be introduced to improve Aboriginal and Torres Strait Islander people’s access to culturally safe and clinically appropriate services through mainstream general practice.

Recommendation 11
All Aboriginal and Torres Strait Islander people should have full access to essential and quality use of medicines.

Recommendation 12
Funding and support should be provided for the implementation of cardiac rehabilitation services for Aboriginal and Torres Strait Islander people.
Better data to support quality improvement

There is a critical need for consistent national data about hospital treatment of Aboriginal and Torres Strait Islander people.

The challenges in developing policy based on accurate data are illustrated by the 2006 AIHW report on Aboriginal and Torres Strait Islander people’s access to hospital care for ACS. It found significant disparities in the care provided to Aboriginal and Torres Strait Islander people in comparison with care provided to other Australians. This report only included data from Queensland, Western Australia, South Australia and the Northern Territory. At the time it was produced, identification of Aboriginal and Torres Strait Islander people in hospital datasets in the other states and territories was not sufficiently robust to support inclusion.

The AIHW commented:

“The identification of Aboriginal and Torres Strait Islander people is not complete in hospital and mortality data collections. The under-identification of Indigenous Australians in all states and territories affects the counts and calculation of hospitalisation and mortality rates for Indigenous Australians and may underestimate the extent of disparity. Even when Indigenous data have been recorded, it is not known how consistently the Indigenous status definition is applied in hospitals or on death registrations”.

While it can be assumed the patterns seen in hospital treatment for Aboriginal and Torres Strait Islander people in the four states and territories included are reflected nationally, this is yet to be tested and confirmed. However, it should be noted that early indications from other states and territories support the assumption that the patterns are consistent nationally.

When discussing the Productivity Commission’s recent Overcoming Indigenous Disadvantage: Key Indicators 2009 report, the commission’s chairman commented that for half of the indicators in the report, data was still not good enough to show if progress had been made.

A recent report from the Australian Health Ministers’ Advisory Council argues that performance monitoring of the stewardship role of governments in their efforts to improve Aboriginal and Torres Strait Islander health is critical. The report also notes that under-identification of Aboriginal and Torres Strait Islander people remains the main issue in most administrative data collections, and that under-identification is a major problem in many hospital data collections.

It appears that hospital staff, including clinicians, often fail to ask patients about their Aboriginal and Torres Strait Islander status. There appears to be significant variation between hospitals, with some capturing data quite well and others quite poorly.

All hospitals should be required to routinely and consistently collect data on the Aboriginal and Torres Strait Islander status of their patients. In addition, all primary care facilities should be encouraged to participate in the Practice Incentives Program Indigenous Health Incentive to identify Aboriginal and Torres Strait Islander patients within their practice who require chronic disease management care.

In addition to improving Aboriginal and Torres Strait Islander identification in hospital data, the introduction of an ACS register would provide essential planning information and would make it possible to monitor disparities in care between and within regions. Such a register would include a wide range of data, such as demographic information on patients; the source of referral; specific diagnoses; interventions undertaken; treatments provided; discharge medicines; where patients are discharged to; information on scheduled follow-up and recall arrangements; and mortality information where appropriate.

Some jurisdictions and programs in Australia have already established registers for acute rheumatic fever (ARF) and rheumatic heart disease (RHD). Such initiatives have demonstrated the potential for register-based programs to improve case detection, increase adherence, reduce recurrences, and reduce hospitalisations. They have also provided a mechanism for monitoring patient movements, orientating staff to ongoing care requirements, and identifying individuals with poor adherence to long-term therapy for targeted educational activities and other interventions. In addition, registers such as this can provide data for monitoring the success of programs and changes in disease epidemiology.
The Australian Commission for Safety and Quality in Healthcare has developed draft operating standards and recommendations on the technical design for Australian clinical quality registries. These standards and recommendations focus on “ensuring that such registries add value over and above the routine collection of data and have clearly specified and timely mechanisms to provide feedback into clinical practice, including reporting and benchmarking.”

Data collection on ACS management in hospitals would be mandatory and would feed into a national ACS register. The register would capture information on patient demographics and risk variables, as well as on the care provided within hospitals and on discharge. It is envisaged that this register would support improvements in ACS protocols within hospitals and networks, and the delivery of integrated ongoing care in the community after discharge.

Apart from supporting quality improvement at practitioner and health service level, an ACS register with links to health outcome data would help to inform bodies responsible for the development, planning, delivery and evaluation of health services at the regional, state, territory and national levels.

**Recommendation 13**

All hospitals should be required to collect consistent data on Aboriginal and Torres Strait Islander patients. This requirement should be built into hospital performance indicators.

In addition, all primary care facilities should be encouraged to participate in the Practice Incentives Program Indigenous Health Incentive to identify Aboriginal and Torres Strait Islander patients within their practice who require chronic disease management care.

**Recommendation 14**

An ACS register should be established.

Ideally, this would be a single, centralised, computerised register that is linked to local registers in regions and individual health services. The register may stand alone or be housed within a clinical department or a public health unit.
Better awareness of issues relating to disparities in hospital care for Aboriginal and Torres Strait Islander people

In conjunction with strategies to improve hospital systems and culture, an ongoing education program aimed at the medical profession, other healthcare professionals, the broader health sector and the wider community should be developed in consultation with Aboriginal and Torres Strait Islander communities.

The program’s aim would be to educate the community and health professionals about the issue of disparities in access to hospital care for Aboriginal and Torres Strait Islander people, and to build a coalition of support to help to close the gap.

It would also be an important mechanism to document, disseminate and promote the uptake of successful models of community engagement and delivery of hospital care for Aboriginal and Torres Strait Islander people.

Recommendation 15
An ongoing education program should be undertaken to raise awareness of disparities in Aboriginal and Torres Strait Islander people’s access to hospital care, and to build a coalition of support to help close the gap.
Conclusion

The Heart Foundation and the AHHA are confident that implementing the recommendations outlined in this paper will lead to improved health outcomes for Aboriginal and Torres Strait Islander people with ACS.

Leadership and commitment to improving the cardiovascular health of Aboriginal and Torres Strait Islander people is required by Commonwealth, state and territory governments and health departments, as well as within hospital departments, health professional associations and advocacy groups. Without leadership at these various levels, the necessary sustained focus required to achieve change across governance, quality improvement and risk management structures will not be realised.

The Heart Foundation and AHHA call on governments and healthcare providers to demonstrate their commitment to closing the gap in Aboriginal and Torres Strait Islander health by providing leadership in the implementation of the recommendations outlined in this paper.
## Acknowledgements

Members of the working group for the Heart Foundation/AHHA Disparities in hospital care for Indigenous Australians with Cardiovascular Disease Project

<table>
<thead>
<tr>
<th>Executive members</th>
<th>Organisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr Andrew Boyden</td>
<td>Heart Foundation</td>
</tr>
<tr>
<td>Kathy Bell</td>
<td>Heart Foundation</td>
</tr>
<tr>
<td>Dr Bill Coote</td>
<td>Consultant policy writer</td>
</tr>
<tr>
<td>Kelley O’Donohue</td>
<td>Heart Foundation</td>
</tr>
<tr>
<td>Rachelle Foreman</td>
<td>Heart Foundation</td>
</tr>
<tr>
<td>Rohan Greenland</td>
<td>Heart Foundation</td>
</tr>
<tr>
<td>Traven Lea</td>
<td>Heart Foundation</td>
</tr>
<tr>
<td>Cydde Miller</td>
<td>Australian Healthcare and Hospitals Association</td>
</tr>
<tr>
<td>Prue Power</td>
<td>Australian Healthcare and Hospitals Association</td>
</tr>
<tr>
<td>Jacque Smith</td>
<td>Heart Foundation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Working group members</th>
<th>Organisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr Clive Aspin</td>
<td>Menzies Centre for Health Policy</td>
</tr>
<tr>
<td>Stephen Bloomer</td>
<td>WA Health</td>
</tr>
<tr>
<td>Dr Alex Brown</td>
<td>Baker IDI Heart and Diabetes Institute</td>
</tr>
<tr>
<td>Rohan Corpus</td>
<td>Prince Charles Hospital</td>
</tr>
<tr>
<td>Professor Sandra Eades</td>
<td>Baker IDI Heart and Diabetes Institute</td>
</tr>
<tr>
<td>Dr Marcus Ilton</td>
<td>Royal Darwin Division of Medicine</td>
</tr>
<tr>
<td>Professor Gary Jennings</td>
<td>Baker IDI Heart and Diabetes Institute</td>
</tr>
<tr>
<td>Monica Lawrence</td>
<td>Southern Adelaide Health Services</td>
</tr>
<tr>
<td>Dr Tim Leahy</td>
<td>WA Health</td>
</tr>
<tr>
<td>Dr Malcolm McDonald</td>
<td>NT Department of Health and Families</td>
</tr>
<tr>
<td>Dr Masoud Mirzaei</td>
<td>Menzies Centre for Health Policy</td>
</tr>
<tr>
<td>David Tibby</td>
<td>Prince Charles Hospital</td>
</tr>
<tr>
<td>Dr Peter Thompson</td>
<td>Sir Charles Gairdner Hospital, University of WA, WA Institute of Medical Research</td>
</tr>
<tr>
<td>Vicki Wade</td>
<td>Sydney South West Area Health Service</td>
</tr>
<tr>
<td>Dr Warren Walsh</td>
<td>Prince of Wales Hospital</td>
</tr>
<tr>
<td>Dr Roger Wilkinson</td>
<td>Cardiologist, Queensland</td>
</tr>
<tr>
<td>Narelle Wilson</td>
<td>Heart Foundation, Royal Perth Hospital</td>
</tr>
<tr>
<td>Dr Simon Vanlint</td>
<td>University of Adelaide</td>
</tr>
</tbody>
</table>
About the Heart Foundation and the AHHA

The Heart Foundation is the leading organisation in the fight against cardiovascular disease (heart disease, stroke and blood vessel disease). Our mission is to reduce suffering and death from cardiovascular disease in Australia.

Since our establishment in 1959, we have championed the hearts of Australians by promoting health in the community, supporting health professionals and funding world-class research. As a charity, we rely on donations and gifts in wills to continue our work.

The AHHA is the only national organisation representing the public healthcare sector and the professionals working in it. The AHHA is uniquely positioned to facilitate collaboration between clinicians, academics, policy makers, administrators and politicians.

The Heart Foundation and the AHHA have formed an alliance to work to address the disparities in hospital care experienced by Aboriginal and Torres Strait Islander people who experience a heart attack. Together we are working with Aboriginal and Torres Strait Islander people and organisations; clinicians; researchers; statisticians; representatives of professional and non-government organisations; and representatives of government from across Australia to help to close the gap in Aboriginal and Torres Strait Islander heart health.
References


33. Thompson SC, DiGiacomo ML, Smith JS et al. Are the processes recommended by the NHMRC for improving Cardiac Rehabilitation (CR) for Aboriginal and Torres Strait Islander people being implemented? An assessment of CR Services across Western Australia. Australia and New Zealand Health Policy 2009; 6: 29.


