



**Submission to House of Representatives
Standing Committee on Health**

**Chronic Disease Prevention and Management in
Primary Care**

National Heart Foundation of Australia

August, 2015

We all agree.

It's time to tackle chronic disease.

It's time to tackle heart disease.

What causes 20% of all hospitalisations? One in five of all hospitalisations in Australia were associated with cardiovascular disease, diabetes and chronic kidney disease in 2012–13.

Australian Institute of Health and Welfare: *Cardiovascular disease, diabetes and chronic kidney disease. Australian facts: Morbidity*, December 2014

Chronic disease is already the leading cause of illness, disability and death in Australia. ... It is expensive to treat, particularly because the current arrangements result in many unnecessary and avoidable admissions to hospital, which is the most expensive setting for health care.

Australian Government Federation White Paper: Issue Paper No 3, November 2014

While cardiovascular disease remains the single largest killer of Australians and is the most expensive disease, accounting for 11% of direct healthcare expenditure, it remains a national health priority in name only ... There is no funded action plan to drive improvements in prevention, early detection and management of CVD.

Mary Barry, National CEO, Heart Foundation
Australian Heart Disease Statistics, 2014

Ms Ley should prioritise addressing chronic disease in her new role as Health Minister. "There's no rocket science there. I think it'd be great if she can support us and everyone in the health industry in our region tackling chronic disease, because diabetes, obesity, arthritis, heart disease, they are costing the country an absolute fortune," she said.

Roz Menzies, former director at the Broken Hill GP Super Clinic
Sydney Morning Herald, December 23, 2014

"There must be high-level discussions about chronic disease management, public hospital funding, Commonwealth/State relations, prevention, and medical training ..."

A/Prof Brian Owler, AMA Federal President, December 21, 2014

There is substantial evidence on the impacts of chronic diseases on individuals, families, communities and the economy. They are the major cause of death and disability in Australia and a significant driver of health system utilisation and costs, generating billions of dollars in avoidable health expenditure each year.

Mitchell Institute for Public Health, December 2014

It's time to tackle chronic disease: Australia's 'greatest health challenge'

The Heart Foundation applauds the Standing Committee on Health for its inquiry into chronic disease management and prevention in primary care.

Chronic diseases are the leading cause of illness, disability and death in Australia, accounting for 90% of all deaths in 2011.¹ With changing lifestyles and an ageing population, chronic diseases have become increasingly common and now cause most of the burden of ill health.

Many different illnesses and health conditions can be classified under the broad heading of chronic disease. They often coexist, share common risk factors and are increasingly being seen as acting together to determine the health status of individuals. There is great potential for integrating prevention and care, and treating selected chronic diseases together, to keep people healthy for as long as possible.

To simplify, chronic disease is often discussed in terms of four major disease groups - cardiovascular diseases, cancers, chronic obstructive pulmonary disease (COPD) and diabetes, with four common behavioural risk factors - smoking, physical inactivity, poor nutrition and harmful use of alcohol.

Between them, these four disease groups account for three-quarters of all chronic disease deaths. Deaths alone, however, do not fully capture the impact of chronic disease.

Long common in Australia and other developed countries, illness and death from chronic disease is now becoming widespread in developing countries, as rising incomes, falling food prices and increasing urbanisation lead to global changes in diet, overweight and physical inactivity.^{2 3} The worldwide chronic disease 'pandemic' was the subject of a high-level United Nations meeting in 2011, which has resulted in a commitment to a 25% reduction by 2025 in mortality from chronic diseases among people aged between 30 and 70, adopting the slogan '25 by 25'.⁴

In Australia, evidence reveals big gaps in our current approach to helping people at risk of developing chronic disease, or having acute events, such as heart attacks and strokes.

Much can be done in primary care to improve detection of people with, or at high risk of chronic diseases, especially cardiovascular disease (CVD), improve management and care of patients with existing disease, reduce avoidable hospital admissions and improve quality of life for patients.

With an ageing population and more prevalent risk factors, the Australian Institute of Health and Welfare emphatically states that chronic disease is 'Australia's greatest health challenge'.⁵

Chronic diseases are the leading cause of illness, disability and death in Australia, accounting for 90% of all deaths in 2011. With changing lifestyles and ageing

population, chronic diseases have become increasingly common and now cause most of the burden of ill health.⁶

This challenge is increasingly recognised by all Australian governments - federal, state, territory and local - with the Council of Australian Governments declaring in July this year:

A new focus on primary care and keeping people out of hospital is necessary. When it comes to chronic care, the issue of diabetes, heart disease and mental health require particular attention.

And while there is much talk about the growing burden of chronic disease and the toll it takes on our community, Australia can and must do more to tackle its most prevalent and costly component: cardiovascular disease (a disease group that includes coronary heart disease, heart failure, stroke and peripheral vascular disease)⁷.

Cardiovascular disease:

- is the most costly disease group at \$7.7bn a year, or 10.4% of direct healthcare expenditure including \$4.5bn in hospital admissions and \$1.65bn in pharmaceuticals ⁸
- is highly prevalent, with 3.7m living with cardiovascular disease ⁹
- is a major cause of avoidable hospital admissions
- causes around one-third of all deaths (30%) ¹⁰
- contributes to 55% of all deaths ¹¹
- is a leading cause of the total burden of disease (14%)¹² and 23% of the fatal burden of disease¹³
- is largely PREVENTABLE.

The impact of CVD is disproportionately higher among those who live in rural and remote areas, Indigenous people and those with low socio-economic status.

The impact on rural and remote communities is particularly harsh. A recent Garvan Research Foundation report ¹⁴ found:

- CVD has a 40% higher death rate in remote areas than in major cities
- 1 in 4 four people living in regional/rural areas are suffering from CVD compared with 1 in 5 in metropolitan areas
- Rates of heart attack events in Indigenous adults aged 25 and over were 2.6 times higher than in other Australians in 2011
- If Australians living in rural/remote areas had the same death rates as urban Australians, there would have been 3,632 fewer deaths due to CVD (16.5% fewer) in rural areas in 2009-11

In the case of Aboriginal and Torres Strait Islanders, death rates from heart disease are substantially higher than the rest of the population, ranging from 1.5 to three times higher than in the non-Indigenous community.¹⁵

Importantly for Australian governments, there are a range of interventions that can address gaps in our current approach to chronic disease prevention and management.

The major areas needing attention include:

- Supporting implementation of the 'integrated health check' to ensure early detection of those at risk of vascular disease and managing these patients to keep them alive and well and out of hospital
- Increasing financial support for both primary and secondary prevention
- Ensuring early diagnosis and appropriate referrals of people with cardiovascular disease in primary care
- Improving access to – and support for - evidence-based lifestyle modification programs
- Funding the second biomedical component of the Australian Health Survey
- Improving support for primary care based palliative care services
- Increasing primary care workforce capability.

This submission puts forward evidence-based guides, models and examples of best practice to address chronic disease prevention and management in primary care, particularly in relation to cardiovascular disease.

Summary of recommendations

The Heart Foundation makes the following recommendations for best practice in prevention and management of chronic disease, particularly cardiovascular diseases, in primary care.

Chronic disease prevention: Stop disease before it starts

RECOMMENDATION 1

Provide an MBS item and blended payment to increase uptake of the 'integrated health check' (cardiovascular risk assessment, diabetes check and kidney check) to ensure people at high risk are identified and supported through on-going management. The integrated health check should also be included in the Government's proposed quality-focussed Practice Incentive Program.

RECOMMENDATION 2

Improve access to – and support for - evidence-based lifestyle modification programs for patients with, and at risk of, chronic disease.

RECOMMENDATION 3

Increase funding for prevention programs.

RECOMMENDATION 4

Fund the second biomedical survey, a key component of the Australian Health Survey.

Secondary prevention: Improving care of people with heart disease and heart failure

RECOMMENDATION 5

Improve referral to and patient attendance at cardiac rehabilitation services.

RECOMMENDATION 6

Improve the care of patients with coronary heart disease in general practice.

RECOMMENDATION 7

Improve the management of patients with heart failure via comprehensive multi-disciplinary care approaches.

RECOMMENDATION 8

Ensure routine screening and management of depression in general practice for patients who have had a heart attack and those with heart failure.

RECOMMENDATION 9

Improve quality of palliative care services/end of life care for heart failure patients.

Chronic Disease Prevention: Stop disease before it starts

Drive early detection of people with, and at risk of, chronic disease

RECOMMENDATION 1 - Provide an MBS item and blended payment to increase uptake of the 'integrated health check' (absolute CVD risk assessment, diabetes check and kidney check) to ensure people at high risk are identified and supported through on-going management. The integrated health check should also be included in the Government's proposed quality-focussed Practice Incentive Program.

Health authorities across Australia should be deeply concerned about the large number of people at high risk of a cardiovascular disease event, heart attack or stroke, but who are unaware of their risk.

Many of those at high risk remain undetected and untreated. Many will go on to have a heart attack or stroke or develop chronic disease, including heart failure.

We can prevent many heart attacks and strokes through better detection and management of risk (primary prevention), ensuring they get the advice and care they need to keep them alive and well and living independently.

This can be achieved by providing an incentive for GPs to follow existing evidence-based clinical guidelines and conduct absolute CVD risk assessments for eligible patients. This should be conducted as part of the 'integrated health check' comprising an absolute cardiovascular risk assessment, a diabetes check and a kidney check.

Risk factors for cardiovascular disease: Heart Foundation Fact Sheet 2015

Risk factors for cardiovascular disease include high blood pressure, high cholesterol, overweight and obesity, physical inactivity, low fruit and vegetable intake, alcohol and smoking. Some 9-in-10 adult Australians have at least one risk factor for CVD and one in four (25%) have three or more risk factors.

Clinical risk factors ¹⁶

- Data collected in 2011-12 found 1 in 5 adult Australians are at high risk of having a heart attack or stroke in 5 years¹⁷. Of these, almost half (47%) are not taking prescribed medication.
- In 2011-12, some 4.6m adult Australians (32%) aged 18 years and over had high blood pressure (systolic or diastolic blood pressure is equal to or greater than 140/90 mmHg or taking medication).
- One-in-three Australians aged 45 and over (2.37m Australians) have unmanaged or uncontrolled high blood pressure.
- In 2011-12, one third of adult Australians aged 18 years and over had measured high cholesterol. This represents 5.6m adult Australians. Yet only 10% self-reported having high cholesterol as a current long-term condition.

Lifestyle risk factors

- Smoking is the single most important cause of ill health and death in Australia. In 2011-12, one in six Australians aged 15 years and over smoked daily. Among Aboriginal and Torres Strait Islander people this increases to two smokers in every five (41.0%) people.
- In 2011-12, close to two in every three (63%) adult Australians aged 18 years and over were overweight or obese, with 27.5% obese and 35.3% overweight. The prevalence of overweight and obesity since 1995 has increased by 12%. Adult males were more likely to be overweight or obese than adult females.
- In 2011/12, more than a third (39%) of adult Australians aged over 15 do very little or no exercise at all.

Well-established, NHMRC approved-guidelines call for general practitioners to conduct assessments for eligible patients to detect those at risk of having a heart attack, stroke or developing type 2 diabetes or chronic kidney disease. Because these diseases often co-exist and share many risk factors, the National Vascular Disease Prevention Alliance (Heart Foundation, Diabetes Australia, Stroke Foundation and Kidney Health Australia) recommends that these assessments be done concurrently as part of an 'integrated health check'.

However, relatively few GPs routinely conduct these checks for eligible patients, therefore missing the opportunity to ensure people at high risk are managed to ensure they stay alive and well and out of hospital.

Combining a risk assessment for heart disease and stroke, a type 2 diabetes check and a kidney disease test into an 'integrated health check' is considered best practice as it consolidates the necessary checks a patient can request from their doctor.

During 2014, the then Health Minister, Peter Dutton, announced that the Australian Government would develop a new, quality-focussed Practice Incentive Payment, by consolidating five existing PIP schemes into a single program.

Undertaking integrated health checks and ensuring on-going management of patients at risk should be incorporated into the proposed quality-PIP.

A new quality-focussed Practice Incentive Payment (PIP), which includes detection and prevention of vascular and related diseases should require general practices to:

- Check eligible patients for vascular and related conditions through an 'integrated health check' which includes an absolute cardiovascular risk assessment, diabetes check and kidney disease check;
- Manage the overall risk profile of patients, stratify risk (high, moderate, low) and address their combined risk factors through advice about healthy eating, healthy physical activity and healthy weight, medical management and/or facilitating and coordinating access to evidence-based prevention programs;

- Maintain a patient register, with recall and reminder system for patients eligible for assessment and those who require management of risk;
- Record and report the proportion of eligible patients who are checked, who have their risk managed according to the relevant practice guidelines, who have a GP management plan, and who access evidence-based prevention programs.
- Support and encourage the use of primary healthcare software systems for collection, reporting and use of primary healthcare outcomes information data and its analysis for the purpose of continuous quality improvement of patient care.
- Encourage participation in shared electronic health records (PCEHR/My Health Record) as an enabler for sharing and accessing secure health information for healthcare providers and patients across the health system, to support continuity of care and patient participation.

The quality PIP should be linked to Primary Health Networks, with the Networks charged with promoting uptake of the integrated health check through education, systems support, creating linkages with relevant prevention services in the Network, measurement, and analysis of de-identified data, and reporting and evaluation via quality improvement audits.

A new, quality-focussed PIP would complement existing PIPs and encourage general practice to implement an integrated health check for the early detection and risk management of people at increased risk of developing chronic kidney disease, type 2 diabetes, heart disease or stroke. The integrated health check would link to existing systems, for example, forming an integral part of chronic disease management as an entrance point into the current Chronic Disease Management Plan mechanism.

This integrated approach to detection and prevention of vascular and related disease incorporates the recommendations of existing guidelines and policies of the National Health and Medical Research Council (NHMRC), Royal Australian College of General Practitioners (RACGP), Australian Primary Care Collaboratives program (APCC), the National Prescribing Service (NPS) and other government agencies and primary care organisations.

There is a strong role for Primary Health Networks to play in driving uptake of the integrated health check, supporting practices with uptake and reporting as well as sharing best practice and outcomes.

This is a unique and important opportunity to ensure significantly greater adherence to existing evidence-based guidelines for the detection and prevention of the major vascular and related diseases and prevention of heart attack and stroke in people at high risk.

The potential benefits include:

- Improved detection of people at increased risk of vascular and related disease
- Improved management of risk for people who have not developed disease

- Reduced prescribing and reduced use of publicly funded health coaching and health promotion services for those at low risk, with more targeted, evidence-based prescribing for medications, including statins and anti-hypertensives and behaviour change/lifestyle interventions
- Fewer avoidable hospitalisations
- Reduced red tape, due to integration with existing primary care initiatives and a system which complements other mechanisms
- Improved quality systems in general practice through targets and clinical audits to measure adherence to guidelines and continuous quality outcomes improvement.
- Improved access to shared secure clinical information and health literacy will support self-management and continuous quality improvement of patient care.

The inclusion of the integrated health check in a quality-focussed PIP is supported by the National Vascular Disease Prevention Alliance, which comprises the Heart Foundation, National Stroke Foundation, Diabetes Australia and Kidney Health Australia.

The Heart Foundation and the NVDPA also recommend that a new MBS item be established for the integrated health check.

Setting targets

The Heart Foundation would like to see Australia set national targets such as those in New Zealand, to achieve greater uptake of absolute risk assessment in primary care. Over the past few years, New Zealand has achieved dramatic increases in uptake of vascular checks in general practice. In January 2012, the New Zealand Government introduced a new national target called 'More Heart and Diabetes Checks', replacing their previous 'better diabetes and cardiovascular services' health targets.

The New Zealand Government set a target for 90% of the eligible population to have their cardiovascular risk assessed in the last five years, to be achieved in stages by 1 July 2014. The first stage targets of achieving 60% by July 2012 and 75% by July 2013 were met, with the ambitious 90% target very nearly achieved in 2014. Success has been attributed to incentives, the role of primary care organisations and government leadership, among other factors.

Supporting general practice with resources to address lifestyle risk factors

RECOMMENDATION 2 - Improve access to - and support for - evidence-based lifestyle modification programs for patients with, and at risk of, chronic disease.

Implementation of large-scale absolute CVD risk assessment and treatment programs is identified as one of the most cost-effective interventions in Australia as well as other industrialised countries¹⁸. Facilitating lifestyle risk factor modification for all patients (ie healthy, at risk, and those with chronic disease) would reduce chronic disease incidence and provide significant benefits to individuals, communities, the health system, and the economy.¹⁹ Evidence from the Australian Health Survey demonstrates that CVD risk increases rapidly with age and is higher among men than women in all age groups.

It is essential that general practice is supported with evidence-based tools and skills to help patients address the main lifestyle risk factors for chronic disease. Heart Foundation evidence-based guidelines produced tailored recommendations for health professionals delivering this care. Findings from the NSW Prevention in Practice Project²⁰ highlight the successes that can be achieved from implementing such co-ordinated strategies.

One of the roles of general practice is to identify and manage risk. However, the evidence suggests that cardiovascular risk factor control is frequently sub-optimal despite being perceived as satisfactory by clinicians themselves.

The shift from managing individual risk factors to an absolute risk management model is integral to a prevention program. A dedicated general practice CVD prevention program would include:

- integrated health checks;
- SNAP²¹ lifestyle intervention program covering: smoking cessation services; nutrition and weight management; alcohol and physical activity behaviour change programs;
- lifestyle counselling/motivational interviewing for cardiovascular disease risk factor modification.

A dedicated general practice prevention program would improve the prevention of cardiovascular disease and related chronic diseases and reduce associated death, disability and hospitalisation costs. The acquisition of motivational interviewing skills through education programs and additional upskilling in RACGP learning modules (www.gplearning.com.au) and APNA online learning (<https://apna.e3learning.com.au/>) is beneficial.

Information services such the Heart Foundation's Health Information Service may also assist. Primary Health Networks should maintain local directories of community support services and play a key role in the delivery of evidence-based education programs for general practice teams.

Federal, state and territory governments need to fund healthy lifestyle education campaigns and programs so they are available to all, including at risk populations. In addition, culturally appropriate programs must be available. Primary Health Networks must have evidence-based programs and skilled practitioners to whom they can refer patients.

Increase funding for prevention

RECOMMENDATION 3 - Increase funding for prevention programs.

In Australia, government funding for prevention programs is low by international standards. Funding for prevention programs should be increased to better address key risk factors (including tobacco smoking, physical inactivity, overweight/obesity, harmful use of alcohol and poor nutrition) to bring Australia into line with international best practice.

Government funding for public health in Australia is poor when compared with other OECD countries, ranking in the lowest third.

In 2011-12, just 1.7% of total government health expenditure went to public health activities, including prevention, protection and promotion. This was well behind New Zealand (7%), Canada (6.5%) and Slovakia (5%).²²

Funding for public health should be increased over time to 5% of total health expenditure. Such a move is in line with public expectations. A survey commissioned by VicHealth and the Public Health Association of Australia in 2010 found that a majority of respondents supported additional funds being allocated to federal and state government health budgets to prevent people from getting sick and to help people have better health (79.1% support or strongly support).

Nearly three-quarters of respondents (73.3%) supported increasing funds spent on prevention from 2% to 5% of the health budget.²³

Funding for prevention should be increased to 5% of total healthcare expenditure, with phased increases funded by small allocations from increased taxes on tobacco and alcohol. Consideration should also be given to placing a health levy on sugar-sweetened beverages.

Preventing chronic disease

While medical technology, procedures and pharmaceuticals continue to improve, a growing number of Australians are developing diseases and suffering premature death because of avoidable lifestyle risk factors.

Healthy choices have the potential not only to improve our health now and into the future, but the health of our children.

Hon Tony Abbott MP
Minister for Health and Ageing
Media Release, May 8, 2007

Fund the National Health Measures Survey

RECOMMENDATION 4 - Fund the second biomedical survey, a key component of the Australian Health Survey.

Australia cannot effectively or efficiently tackle the growing burden of chronic disease if it does not have the data to monitor progress and evaluate interventions. You simply can't manage what you don't measure.

To date, much of this data has been provided by the Australian Health Survey (2011-13), with critical biomedical data coming from the National Health Measures Survey, a survey involving 11,000 volunteers.

It is critically important for the National Health Measures Survey to be undertaken every five to six years, providing decision-makers, health professionals and researchers, among many others, the data to understand the health of the nation, the status and impact of key risk factors and the effectiveness of interventions. This will enable scarce resources to be targeted at areas that need attention.

Data derived from the survey provides vital information about cardiovascular disease, liver disease, type 2 diabetes, kidney disease and anaemia, among others, and key risk factors.

The cost of the biomedical survey - around \$15m - is insignificant compared to the cost of the chronic disease burden. For example, cardiovascular disease alone costs \$7.7bn a year in direct healthcare costs. Failure to invest in the survey, especially the biomedical component, will lead to sub-optimal investment of resources (waste and inefficiency) and poorer health outcomes for Australians.

The first Australian Health Survey has been the most comprehensive health survey ever conducted in this country, collecting key data on issues such as health status, behavioural risk factors (eg smoking, physical inactivity), service use, medications, and the prevalence of biomedical risk factors, such as high blood pressure and high blood cholesterol.

It is vital that the survey continues to inform decision-makers to achieve optimal outcomes for the Australian community. Without this data, decision-makers are, to a great extent, flying blind.

Funded longitudinal studies of population groups disproportionately affected by CVD are also essential to inform evidence-based prevention programs and monitor trends. A co-ordinated approach is needed to continue the collection of risk factor data among those who live in rural and remote areas, Indigenous people and those with low socio-economic status.

Primary Health Networks should support general practices and other primary healthcare practices with quality data systems and routinely report de-identified performance data.

Secondary prevention: Improving care of people with heart disease and heart failure

Improve care after heart attack: systematic referral to cardiac rehabilitation

Recommendation 5 – Improve referral to and patient attendance at cardiac rehabilitation services.

Cardiac rehabilitation (CR) is a component of secondary prevention and is defined as ‘all measures used to help people with heart disease return to an active and satisfying life and to prevent the recurrence of cardiac events’.

For people who have had a heart attack, it is one of the best ways to reduce the chances of having a further cardiac event.

Evidence shows that CR leads to improved clinical and behavioural outcomes, including fewer hospital readmissions, better adherence to pharmacotherapy, enhanced functional status, improved risk profiles, less depression and a better quality of life.

However, CR services are only effective if they are accessible and suitable, and if people with cardiovascular disease (CVD) are referred to and participate in them.²⁴

Disturbingly, participation rates in Australia can be as low as 25% to 31% for males and 11% to 25% for females. Aboriginal and Torres Strait Islander people are even less likely to participate than non-Indigenous Australians, despite being twice as likely to die from heart disease.²⁵

The current system of CR does not meet the contemporary needs of our health system or patients. Traditional CR models are still predominant; with around 70% of secondary prevention programs offered in Australia following the traditional model of structured, group-based exercise and education delivered in a hospital group setting.²⁶ This model presents barriers to patients who; need to return to work, are geographically restricted from attending, find the program does not fit their cultural or language needs, do not wish to attend a group format and even do not wish to navigate or pay for parking at a hospital for the six weeks of the program.

Another major barrier to patient attendance post-cardiac event is a lack of referral to a CR program, or a belief that they do not require rehabilitation and on-going management.

With limited resources and the evolution of the chronic disease care model, the emphasis on the CR specialty is being diluted resulting in nursing staff not having the time or skills to talk about on-going risk and importance of rehabilitation. Often a single CR nurse attempts to provide education and referral for all patients, during a few business days across the week. Another cultural element can be the limited support of secondary prevention by the cardiology fraternity, often leaving patients with the perception that ‘they are fixed’.

The result of all of this is a system that supports a select group of patients that get referred, and are able to complete a CR program. A recent audit in one Australian state found that in 2011, only 13% of eligible patients in the public health sector completed a CR program.

Across Australia some programs have embraced a new way of engaging and delivering CR by following the evidence for alternate models and including community-based programs, telephone-based coaching services and general practice based services. A strong body of evidence exists for multi-factorial community-based and tele-health interventions. Programs are more effective when they were flexible, focussed on patient needs and choice, based on individual risk factor assessment and risk reduction strategies, and supported by community and social services and health practitioner communication.

Recognising that CR is not a 'one-size-fits-all' proposition and that patients should be provided with a choice on how they engage with CR programs is an important step towards increasing participation.

At a federal, state and territory level, there is growing government interest in reducing avoidable hospital admissions (including readmissions) for patients with chronic disease.

Cardiac rehabilitation and secondary prevention programs are evidence-based, low-cost methods for keeping patients healthy and avoiding hospital readmissions – these readmissions can cost between \$600 and \$22,000 per visit.

Research by Davies et al (2010), Heran et al (2011) and Lam et al (2011) found that the delivery of comprehensive CR services has the potential to reduce unplanned cardiac readmissions by 28% to 56%.²⁷

In addition, a review of 48 randomised trials investigating the benefits of CR found a 26% relative reduction in cardiac mortality over five years. Therefore, increasing the number of patients who access CR should be seen as the solution to save lives, reduce the number of repeat cardiac events and hospital readmissions and thereby reduce government expenditure on repeat cardiac events.

This is demonstrated by a modelling study done by the UK National Health Service that found increasing the delivery of CR to 65% of cardiac admissions (considered the gold standard in the UK), from a low baseline, has lead to a reduction in emergency cardiac readmissions by 10% or 28,782 separations over a 12-month period. The financial impact of this reduction of cardiac readmissions equates to a potential saving of over £30 million.

A high proportion of coronary heart disease (CHD) hospital admissions are repeat events in those with known CHD. This can be prevented through secondary prevention measures such as cardiac rehabilitation which has been shown to reduce mortality and repeated hospital admissions, improve cardiac risk factor profile and improve the quality of life of people diagnosed with CHD. Heart Foundation evidence-based guidelines produced tailored recommendations for health professionals delivering these programs. However, such programs are only fully utilised through effective referral to accessible cardiac rehabilitation programs that are suitable to people's needs and enables them to participate.

The benefits of secondary prevention are well known. Research shows that cardiac rehabilitation leads to improved clinical and behavioural outcomes, reduces hospital readmissions, strengthens adherence to medication and enhances overall quality of life.

Key points

- Secondary prevention services are only effective if they are accessible and suitable to people's needs and people participate in them.

- Across the country, attendance is poor and many services are no longer responsive to the contemporary needs of patients.
- The barriers associated with poor attendance have been extensively documented and there is growing momentum for system reform.
- Immediate and long-term health gains could be accrued through allocation of funds to support better on-going management of heart disease. These gains would greatly outstrip any initial investment.
- System refinement to broaden the range of services accessible and available is required to meet the various needs of those with cardiovascular disease regardless of age, background or geographical location.
- Enhanced data collection is needed to benchmark practice, measure performance and track outcomes.
- Establishing referral to cardiac rehabilitation services as a standard component of cardiac care is essential.
- Cardiac rehabilitation should be complemented with improved ongoing management of CHD.

Improve the management of patients with coronary heart disease

Recommendation 6 – Improve the care of patients with coronary heart disease in general practice

In Australia, there are significant management or ‘care’ gaps for the treatment of coronary heart disease (CHD) in primary care, with significant disparities between guideline recommendations and actual clinical practice.²⁸

General practice is the ideal setting to address these gaps, as it is often the first point of contact and is considered the ‘gatekeeper’ for coordinating access to medicines, additional tests and referral to other providers.²⁹

As such, the Heart Foundation supports a stronger focus on improving and monitoring CHD outcomes in general practice. Heart Foundation evidence-based guidelines produced tailored recommendations for health professionals delivering this care. In addition, the Heart Foundation has developed a General Practice Management Plan³⁰ to help guide the formulation and delivery of annual care plans for CHD patients.

It is designed to support the delivery of an annual cycle of care addressing lifestyle, biomedical and psychosocial risk factors underpinned by quality use of medicines and self-management principles.

This requires appropriate support and financial incentives to enhance the delivery of quality care and improve secondary prevention.

Improvement can be achieved and gaps closed if the following measure are taken:

1. General practice should be supported and encouraged to have CVD patient registers with tracking systems and reminders as these are critical for case finding and monitoring patient progress. The Australian Primary Care Collaboratives provides case studies of successful practice registers and approaches. It is important to identify a staff member as ‘champion’ of the register and make use of MBS chronic disease management items and utilise a multidisciplinary approach and community supports for care planning and ongoing care.
2. General practice could receive financial incentives for the systematic collation of practice data and achievement of performance measured against specific clinical and other indicators (and not just process measures).
3. General practice should be supported and provided with incentives to participate in the national shared electronic program (PCEHR/My Health Record) and use electronic data extraction and tools in the prevention and management of CHD. Such tools enable practices to identify patients with CHD; recall individual patients who have gaps in their care compared to best practice; demonstrate collective patient outcomes; measure practice performance and improvements over time; and benchmark performance with other practices. Primary Health Networks are well placed to support the adoption of shared electronic health records and facilitate data collection support and monitoring that would inform clinical audit.

4. Practices should ensure that patients have been provided with high quality information (*My heart, my life* Error! Bookmark not defined.) about their condition and ongoing management. Information services such as the Heart Foundation's Health Information Service may also assist. Primary Health Networks should maintain local directories of community support services.

Modelling shows that such interventions to improve the identification and management of people living with CHD are likely to not only significantly reduce CVD deaths, but also to be highly cost effective.³¹

Improved interventions for people with CHD in Australia could reduce coronary events by as much as 15% and reduce coronary heart disease deaths by 17%.

Modelling also suggests that a comprehensive CHD program has the potential to save between 7,576 and 23,554 disability-adjusted life years (DALYs) per annum, with relatively little financial investment.³¹

The importance of secondary prevention

World Heart Federation's call for action on secondary prevention

The World Heart Federation (WHF) has recently released (June 2015) a 'road map' calling for action to reduce the growing impact of cardiovascular disease through improved approaches to secondary prevention.

Globally, 8m out of the 35m acute coronary or cerebrovascular events that occur each year are in those with previous heart disease or stroke.

Yet uptake of simple, inexpensive medications for secondary prevention to prevent repeat events in those with pre-existing disease is unacceptably low.

"The effects of secondary prevention - using a combination of proven drugs and behavioural changes, especially tobacco cessation, that substantially reduces repeat events in those with pre-existing disease - have been known for well over a decade.

But only around half of people in high-income countries that need secondary prevention actually get it. In low-income countries, this falls to below 5%. This is a global tragedy that can easily be avoided by the actions of governments and can save as many as several million lives every year."

Prof Salim Yusuf
President, World Heart Federation
June, 2015

Improve care for patients with heart failure

Recommendation 7 - Improve the management of patients with chronic heart failure via comprehensive multi-disciplinary care approaches.

General practice has an important role in helping to reduce hospital re-admission rates and mortality rates while improving the quality of life for patients with heart failure.

Heart failure is a chronic and complex clinical syndrome that affects an estimated 300,000 to 450,000 Australians, with 30,000 people newly diagnosed each year. Chronic heart failure (CHF) care places a major burden on the health system, accounting for more than 4,000 deaths annually. Hospital admissions for chronic heart failure have increased by 24% between 2002-03 and 2011-12.³²

Mortality and hospital readmissions continue to rise, a trend that is likely to continue as the population ages and grows. Prognosis remains poor, often due to late diagnosis and inadequate disease management and support.

- 20-30% of patients with mild-moderate heart failure will die within one year
- 50% of patients with severe heart failure will die within one year
- Aboriginal and Torres Strait Islander people experience chronic heart failure at a younger age and are more likely to die than non-Indigenous Australians
- Costs are estimated at between \$15m and \$33m per annum.

There is opportunity for significant positive change with limited investment.

Multi-disciplinary programs have been shown to significantly reduce unplanned hospital admissions (including readmissions) for chronic heart failure. Intensive care management interventions led by a specialised heart failure team reduce heart failure related readmissions at six months, 12 months, all cause readmission at 12 months, and all-cause mortality at 12 months.

What is needed is a dedicated general practice program to ensure comprehensive care is provided to patients, focusing on improved identification and management of patients with chronic heart failure. This includes diagnosis, referring patients to multi-disciplinary programs, optimal medical management, providing patients with high quality information (e.g. Living well with chronic heart failure) and educating patients and carers about symptom management. Primary Health Networks should maintain local directories of community support services, and play a key role in the delivery of evidence-based education programs for general practice teams.

The Heart Foundation has produced guidelines for the prevention, detection and management of chronic heart failure in Australia (attached).¹ The aim of these guidelines are to:

- obtain better health outcomes by improving the management of CHF
- reduce unwarranted variation from best practice treatment of CHF throughout Australia.

The management of chronic heart failure involves prevention, early detection, slowing of disease progression, relief of symptoms, minimisation of exacerbations, and prolongation of survival.

These guidelines provide evidence-based recommendations for the management of CHF, based on criteria developed by the National Health and Medical Research Council (NHMRC).

Current evidence clearly identifies that accessible, multidisciplinary, guideline-based chronic heart failure care improves outcomes.

The Heart Foundation supports:

- Development of robust funding models examining the role of funded care packages in chronic heart failure
- Establishment of protocols and pathways to ensure effective clinical handover and service coordination across care transitions and activation of appropriate services according to clinical need
- Streamlining of existing procedures to facilitate early diagnosis, self management, multidisciplinary care planning across primary care involvement, and appropriate access to palliative services
- Mechanisms to promote the rights of the people/carer to facilitate their active engagement with health professionals and care systems.

Meaningful data for management and benchmarking is also critical if we are to improve service delivery and outcomes for patients.

The collection of outcome data is the only accurate way of determining the effectiveness and cost of individual treatments. Practice standards can then be based upon up-to-date comparative effectiveness research.

The Heart Foundation calls for:

- Development of national data definitions for chronic heart failure
- Expansion of current cardiac registries, to include those with chronic heart failure
- Development of mechanisms to promote data linkage across care transitions
- Trialling of electronic health records for those diagnosed with chronic heart failure, so all current and future health-care providers could, with the individual's consent, have access to the same information where and when they need it
- Reducing unnecessary hospital admissions and the high rate of medical errors (18%) that occurs from inadequate patient information
- Establishment of a national mechanism for monitoring and reporting chronic heart failure care outcomes against a nationally recognised set of goals and standards
- Development of a national set of indicators and standards to evaluate, inform and improve systems of care.

Workforce planning

An appropriately trained workforce with access to specialist cardiology support is required to support patients.

The Heart Foundation recommends:

- The workforce capacity across health services is developed to deliver evidence-based care, appropriate to the local population, as identified in Guidelines for the prevention, detection and management of chronic heart failure in Australia and multidisciplinary care for people with chronic heart failure.
- Development of robust funding models for the delivery of these services.
- Examination of mechanisms to empower general practitioners and healthcare professionals in primary care to deliver evidence based care for chronic heart failure.
- Investigation into improved approaches to optimise care delivery in Aboriginal and Torres Strait Islander peoples, those from non-metropolitan areas, lower socio-economic backgrounds, and culturally and linguistically diverse (CALD) populations.

Heart Foundation evidence-based guidelines produced tailored recommendations for health professionals delivering this care. Community-based multi-disciplinary heart failure programs can reduce avoidable hospital admissions, improve quality of life and reduce overall health care costs.

Primary Health Networks should be tasked with driving improved care and outcomes for patients diagnosed with chronic heart failure and to have strong links with, and promote, multi-disciplinary heart failure programs across their networks. GPs should continue to coordinate patient care, and specialists should continue to provide input and support. Models promoted through the Heart Foundation's guide sets out principles and recommendations for best-practice.

Provide better screening and management of depression in general practice

Recommendation 8 - Ensure routine screening and management of depression for patients who have had a heart attack and those with heart failure

Up to 45% of patients can experience depression and/or anxiety following an acute cardiac event. Psychosocial risk factors are increasingly recognised as predictors of health outcomes in individuals with cardiovascular conditions and can also influence adherence to recommended treatment. A psychosocial assessment helps the clinician to provide individual, focused interventions and to identify barriers to self-care. The addition of psychosocial interventions to the standard cardiac treatment regime has been shown to reduce mortality, psychological distress and some risk factors in individuals with cardiovascular conditions.³³

As such, it is important for general practitioners to ensure all patients with CHD and heart failure are screened for depression and appropriately referred to psychosocial support services (eg psychologists, psychiatrists, social workers, occupational therapists, and counsellors), with proactive follow up with their GP.

A recent consensus statement³⁴ released by the Heart Foundation states there are high rates of depression in patients with coronary heart disease and they should be screened when they first present to their GP, using a simple scoring mechanism of choice. The statement provides a guide for health professionals on screening, referral and treatment for depression in patients with CHD.

The statement advises that routine screening for depression in all patients with heart disease is recommended, particularly:

- when a patient first presents to their doctor
- at the next follow up appointment
- 2-3 months after a CHD event
- on-going screening should then be considered on a routine basis.

The statement discusses treatments for depression, including psychological, complementary and alternative therapies, medications, and exercise and advises that referral to psychological or psychiatric services may also be considered appropriate. A support tool³⁵ for screening depression in patients with CHD has been developed for widespread use by general practice.

Provide better end-of-life care for people with cardiovascular disease

Recommendation 9 - Improve quality of palliative care services/end of life care for heart failure patients.

Palliative care services currently have limited capacity to care for chronic heart failure patients and people affected by stroke.

Collaborative work is needed to improve the capacity of palliative care services. As a first step, a study is needed to determine the nature and extent of the problem. Funding is needed to support the study and to develop policy options.

To improve the quality of palliative care services for people with heart failure, the National Service Improvement Framework lists the following critical intervention points that should inform service development:

- palliative care services should inform people and carers adequately about the future course of the illness and pathways of care
- people should be informed about values based advance directives and receive appropriate support through their GP
- programs should be in place to provide information and support to carers and reduce carer and patient health problems
- timely and appropriate access to adequate palliative care services (that are integrated with treatment services) should be improved.

With the increased implantation rates in Australia of cardiac devices, and the introduction of cardiac device registries, palliative care services also require capacity to deactivate devices at end of life when clinically appropriate. A guideline ³⁶ introduced in NSW guides implementation of these services.

References

- ¹ Australian Institute of Health and Welfare, 2011, *Key indicators of progress for chronic disease and associated determinants: data report*.
- ² Australian Institute of Health and Welfare 2012. *Australia's food and nutrition 2012*
- ³ WHO (World Health Organisation) 2011. *Global status report on non-communicable diseases 2010*
- ⁴ Beaglehole R. et al. 2011. *Priority actions for the non-communicable disease crisis*. Lancet 377: 1438–47.
- ⁵ Australian Institute of Health and Welfare 2014. *Australia's Health 2014*
- ⁶ Australian Institute of Health and Welfare 2014. *Australia's Health 2014*
- ⁷ D'Agostino RB, Vasan RS, Pencina MJ, et al. *General cardiovascular risk profile for use in primary care: the Framingham Heart Study*. Circulation 2008; 117(6): 743-53
- ⁸ Australian Institute of Health and Welfare, *Australia's Health 2014*, p51
- ⁹ Australian Institute of Health and Welfare, *Cardiovascular health*, accessed at <http://www.aihw.gov.au/cardiovascular-health/prevalence/>
- ¹⁰ Australian Bureau of Statistics, *Causes of Death 2012*, March 2014
- ¹¹ Australian Institute of Health and Welfare (2014) *Cardiovascular disease, diabetes and chronic kidney disease: Australian facts mortality*
- ¹² Australian Health and Welfare. 2014. *Australia's Health 2014*
- ¹³ Australian Institute of Health and Welfare, *Australian Burden of Disease Study (2015) Fatal Burden of Disease 2010*
- ¹⁴ Garvan Research Foundation. Medical Research and Rural Health: Garvan Report 2015
- ¹⁵ National Heart Foundation of Australia. *Australian Heart Disease Statistics 2014*
- ¹⁶ National Heart Foundation of Australia: Fact Sheet 2015
<http://www.heartfoundation.org.au/SiteCollectionDocuments/Factsheet-Cardiovascular-risk-profile-aged-45-over.pdf>
- ¹⁷ Australian Bureau of Statistics. *Australia Health Survey: User's Guide*, 2011-13. 2013.
- ¹⁸ Vos T, Carter R, Barendregt J, et al. *Assessing cost-effectiveness in prevention (ACE-Prevention)*. Final Report. University of Queensland, Brisbane and Deakin University, Melbourne. 2010.
- ¹⁹ Willcox, S. Chronic diseases in Australia: *Blueprint for preventive action*. 2015.
- ²⁰ <http://www.heartfoundation.org.au/information-for-professionals/Clinical-Information/Pages/gp-learning.aspx>
- ²¹ Royal College of General Practitioners. *Smoking, nutrition, alcohol, physical activity (SNAP): A population health guide to behavioural risk factors in general practice*, 2nd edition 2015.
- ²² Australian Institute of Health and Welfare. 2014. *Australia's Health 2014* p347
- ²³ VicHealth, Public Health Association of Australia (2011) *Healthy Australia: Public support for prevention strategies*
- ²⁴ National Heart Foundation of Australia. 2010 *Secondary prevention of cardiovascular disease*
- ²⁵ Hayman N, Wenitong M, Zangger, J, Hall E. *Strengthening cardiac rehabilitation and secondary prevention for Aboriginal and Torres Strait Islander peoples*. Medical Journal of Australia, Volume 184 Number 10, 15 May 2006
- ²⁶ Briffa TG, Kinsman L, Maiorana AJ, et al. *An integrated and coordinated approach to preventing recurrent coronary heart disease events in Australia*. Medical Journal of Australia 2009

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- ²⁷ National Health Service Improvement. 2013. *Making the case for cardiac rehabilitation: modelling potential impact on readmissions*
- ²⁸ Huang N, Daddo M, Clune E. *Heart health. CHD management gaps in general practice*. Australian Family Physician. 2009 April 38;4:241–245.
- ²⁹ Huang N, Daddo M, Clune E. *Heart health. CHD management gaps in general practice*. AFP. 2009 April 38;4:241–245.
- ³⁰ National Heart Foundation of Australia. *General Practice Management Plan for CHD*. <http://www.heartfoundation.org.au/information-for-professionals/Clinical-Information/Pages/gp-management-plan-chd.aspx>
- ³¹ National Heart Foundation of Australia. *Improving cardiovascular health outcomes in Australian general practice: facts and recommendations to support government relations and policy development*. 2010.
- ³² Australian Institute of Health and Welfare: *Separation statistics by principal diagnosis in ICD-10-AM Australia, 2002-03 to 2011-12*.
- ³³ Aldcroft S, Taylor F, Blackstock F, O'Halloran P. (2011). *Psycho-educational Rehabilitation for Health Behaviour Change in Coronary Artery Disease: A systematic review of controlled trials*, J Cardiopulm Rehabil Prev.; 31(5):273-281
- ³⁴ Colquhoun DM, Bunker SJ, Clarke DM et al (2013). *Screening, referral and treatment for depression in patients with coronary heart disease*. Medical Journal of Australia 2013; 198 (9): 483-484. <https://www.mja.com.au/journal/2013/198/9/screening-referral-and-treatment-depression-patients-coronary-heart-disease>. Accessed 1 July 2015.
- ³⁵ National Heart Foundation of Australia 2013. *Depression in patients with coronary heart disease A practical tool for screening your patients*. <http://www.heartfoundation.org.au/SiteCollectionDocuments/Depression-screening-support-tool.PDF>. Accessed 1 July 2015.
- ³⁶ New South Wales Agency for Clinical Innovation. *NSW Guidelines for Deactivation of Implantable Cardioverter Defibrillators at the End of Life*, 2014