



National Vascular Disease Prevention Alliance

Submission to the Standing Committee on Health Inquiry into Best Practice in Chronic Disease Prevention and Management in Primary Health Care

7 August 2015

The National Vascular Disease Prevention Alliance (NVDPA) welcomes the opportunity to make a submission to the Standing Committee on Health Inquiry into Best Practice in Chronic Disease Prevention and Management in Primary Health Care. This paper presents an integrated approach to detect and prevent vascular and related diseases in Australian general (medical) practice. Its key feature is to move away from disease specific detection in primary care to an integrated approach which recognises the interaction between these diseases and their risk factors.

Specifically, this submission addresses the following term of reference:

6. Innovative models which incentivise access, quality and efficiency in chronic disease prevention and management.

1. Summary and recommendations

The NVDPA recommends:

1. Introduction of an Integrated Health Check which includes two major steps:
 - i. GPs 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;
 - ii. GPs 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;
2. The Integrated Health Check be facilitated by a dedicated MBS item, and the ongoing management be supported by the introduction of a blended payment, such as the proposed , quality focussed Practice Incentive Payment (PIP) which would require general practices to:
 - i. Maintain a patient register, with a recall and reminder system for patients eligible for assessment and those who require management of risk;
 - ii. Incorporate quality improvement by recording and reporting on 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.

3. The proposed quality PIP 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 reporting and evaluation via quality improvement audits.
4. The proposed PIP adopt some of the existing functions from current PIPs, noting that they share commonalities in operation and that this would also streamline both administration and operation of current PIP arrangements.
5. Commitment to continue funding for the second biomedical survey, a key component of the Australian Health Survey.

A unique opportunity

This Inquiry presents a unique and important opportunity for government to ensure significantly greater adherence to existing evidence-based guidelines for the detection and prevention of the major vascular and related diseases 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 audits to measure adherence to guidelines.

2. Background

2.1 Burden and cost of vascular and related disease

Vascular and related disease is a major contributor to the burden of disease in Australia

Chronic kidney disease, diabetes, heart disease and stroke together account for approximately one-quarter of the disease burden in Australia and two thirds of all deaths¹. Translated into human terms, this means that every hour, five Australians die from one of these conditions².

These diseases are collectively referred to as 'vascular disease' due to the damage they cause to blood vessels and the heart. Vascular and related diseases are considered the most costly to Australians, both in terms of health expenditure and in the burden of disease, measured in terms of disability and premature death. Despite the declining mortality rate due to successful initiatives in smoking reduction and treatment, cardiovascular disease (heart attack and stroke) remains the most expensive disease group, accounting for 11% of direct health care costs in 2004/05². The Australian Institute of Health and Welfare (AIHW) forecasts that type 2 diabetes will overtake cardiovascular disease to become the leading cause of disease burden in the next 10 years³.

Left undetected, these conditions can deteriorate, leading to complications and increased demands on the hospital and disability sectors. For example, diabetes can damage macro vascular and micro vascular circulation leading to a range of complications including amputations, blindness, kidney damage, heart attacks and strokes. Two thirds of stroke survivors sustain a disability that impedes their ability to carry out activities of daily living unassisted³.

Hospitalisations and pharmaceuticals are the major health cost of vascular and related disease. In 2004-05 hospital services for people with vascular and related disease cost just over \$4 billion. The next highest expense was for pharmaceuticals, which cost over \$2 billion (Table 1). It is likely that these figures are a significant under-estimate of the true cost to government and society. Recent costing analyses have shown that in 2012 the total costs attributable solely to chronic kidney disease were an estimated \$4.1 billion, made up of \$2.5 billion in direct healthcare costs, \$700 million in direct non-healthcare costs, and \$900 million in government subsidies⁴.

Medical practitioners are not always following clinical practice guidelines

Many medical practitioners in Australia are not following clinical guidelines in their treatment of people with chronic diseases, often treating the wrong patients and leading to increased health system costs. In a recent study of people with type 2 diabetes, more than half were not receiving medication for increased cholesterol or systolic blood pressure⁵. Other work indicates that clinical guidelines were only followed for 63% of people with diabetes⁶.

Vascular and related diseases share common risk factors

The vascular and related diseases are grouped together as they share many of the same risk factors, including non-modifiable risk factors such as age, sex, family history and genetics, and modifiable risk factors caused by various biomedical and lifestyle factors. Biomedical risk factors include overweight and obesity, high blood pressure, raised cholesterol, and raised blood glucose levels. Lifestyle risk factors include smoking, excessive alcohol use, poor diet, and inadequate physical activity.

Table 1: Vascular and related disease expenditure in 2004–05 (\$million)⁷

Area of Expenditure	Heart disease/Stroke (\$m)	Diabetes ^a (\$m)	Kidney (\$m)	Total (\$m)
Hospital Services	\$3,009	\$371	\$720	\$4100
Out of Hospital	\$1,133	\$288	\$37	\$1,458
Prescriptions	\$1,639	\$275	\$9	\$1,923
Specialised drugs for kidney transplantees			\$132	\$132
Research^b	\$162	\$55	\$14	\$231
Total Expenditure	\$5,943	\$989	\$912	\$7,844

a. Diabetes costs excludes out of pocket expenses and National Diabetes Services Scheme subsidies
b. Research funding figures from NHMRC.

Vascular and related diseases are largely preventable through management of risk factors

In the majority of cases, vascular and related diseases only become apparent after years of underlying progression at the physiological level, meaning that a large part of the premature death, disability and illness that is caused by these diseases is preventable through modification of lifestyle and biomedical risk factors ^{2,8,9}.

Many Australians remain at higher risk of vascular and related disease because of risk factors that can be modified. It is of great concern that 90% of Australian adults have at least one modifiable risk factor, and 64% have three or more modifiable risk factors¹⁰. Many people living at high risk of developing these diseases are unaware of their risk due to the silent nature of many symptoms. Recent data from the Australian Health Survey (2011-12)¹¹ indicates that 21.5% of Australian adults have high blood pressure, 33% have high blood cholesterol, 18% are smokers, 63% are overweight or obese and 68% are sedentary or have a low level of exercise (Table 2).

Table 2: Proportion of Australians with key biomedical or lifestyle risk factors (% of population aged over 18 years)¹¹

	High Blood Pressure (>140/90)	High Cholesterol (>5.5mmol/L)	Smokers (current)	Sedentary or Low Level of Exercise	Overweight or Obese
South Australia	23.4	35.0	18.2	67.9	66.6
Western Australia	21.0	34.7	19.4	64.7	65.2
Queensland	18.9	30.8	19.4	69.3	64.9
Tasmania	30.4	39.4	21.7	69.4	64.7
ACT	20.1	31.6	14.2	59.2	62.2
Northern Territory	15.9	29.8	25.1	66.7	62.1
New South Wales	21.3	32.3	16.1	68.9	61.1
Victoria	23.0	33.2	18.3	66.1	61.0
Australia	21.5	32.8	18.0	67.5	62.8

Monitoring and evaluation are essential for measuring progress in disease reduction

There are two areas of importance in monitoring the effectiveness of interventions. Firstly, it is essential to understand the quality of care received by people with chronic diseases from their medical practitioner. This information can be used as part of a continuous quality improvement process where General Practices audit their activities against guidelines and targets. This helps to ensure adherence to clinical practice guidelines and support better patient outcomes. The type of information gathered is discussed further in Section 4 of this submission.

Secondly, national health measure data is essential in providing decision makers, health professionals and researchers with an understanding of the

status of the key diseases and risk factors. Measuring the impact of health interventions allows governments to ensure the most effective use of limited resources. The first Australian Health Survey (2011-13), with critical biomedical data coming from the National Health Measures Survey – a biomedical survey has been the most comprehensive health survey ever conducted in Australia. It has collected information such as health status, behavioural risk factors (e.g. smoking, physical inactivity), service use, medications, and the prevalence of biomedical risk factors, such as high blood pressure, high blood cholesterol and overweight/obesity.

It is important that this survey be repeated every 5-6 years, to ensure timely information to support policy decisions. The cost of the survey is minimal compared to the cost of the chronic disease burden. Failure to continue investment in the survey, especially the biomedical component, would lead to sub-optimal investment of resources (waste and inefficiency) and poorer health outcomes for Australians.

2.2 Calculation and management of vascular and related disease risk

Modifiable risk factors present an opportunity for prevention

Although the high proportion of Australians with modifiable risk factors is of concern, this situation also presents a significant opportunity for prevention of vascular and related disease in the Australian population. Early detection of modifiable risk factors through a comprehensive assessment program can identify those people who would most benefit from targeted management through lifestyle changes and, where needed, pharmacological therapy. It has been shown that 69% of the burden of cardiovascular disease alone can be accounted for by 12 risk factors, with the major contributors being high blood pressure and high blood cholesterol, followed by physical inactivity, high body mass, tobacco use and low fruit and vegetable consumption¹. Effective prevention and management of one condition can lead to a reduction of risk of the related diseases, presenting an excellent opportunity for integration of risk management¹².

The NVDPA has led the development of guidelines for an absolute cardiovascular risk approach to cardiovascular disease prevention that takes into account an individual's overall risk profile, rather than a traditional clinical focus on single risk factors, in predicting the likelihood of later disease events and in treating the risk factors.¹⁴

Risk factors occur in clusters

People tend to develop risk factors in clusters¹⁵. It is now understood that combinations of risk factors have a cumulative or synergistic and negative impact on health, increasing the likelihood of disease development and progression.

Assessment of diabetes risk is now possible through a simple set of questions which address multiple risk factors to determine the overall risk of developing type 2 diabetes. Assessment of cardiovascular disease risk on the basis of the combined effect of multiple risk factors (absolute CVD risk) is now the recommended approach internationally because it is more accurate than the use of individual risk factors^{13,16,17,18,19}.

How is risk determined?

Due to the interrelationship of all the risk factors, the evidence that combinations of risk factors result in increased risk, and the fact that each of the vascular and related diseases is a risk factor for the others, the doctor considers all the risk factors, in addition to the presence or absence of each of the vascular and related diseases, before deciding on the appropriate biochemical tests when determining disease risk.

The risk of developing type 2 diabetes within five years can be assessed using the Australian Type 2 Diabetes Risk Test (Ausdrisk), which has been endorsed by all governments in Australia. This tool is a questionnaire which covers multiple modifiable and non-modifiable risk factors. In general practice, the presence of type 2 diabetes is determined by blood tests for fasting glucose or a glucose tolerance test. A range of risk factors is considered within the Ausdrisk tool and by the general practitioner when determining risk (Table 3).

Table 3: Risk factors and related conditions for assessment of type 2 diabetes risk²⁰

Modifiable risk factors	Non-Modifiable risk factors	Related Conditions
Smoking Blood pressure Waist circumference and BMI Nutrition Physical activity level Blood glucose	Age Sex Family history of type 2 diabetes Ethnicity	Cardiovascular disease History of gestational diabetes mellitus Polycystic ovary syndrome Patients on antipsychotic drugs

Cardiovascular risk is determined by calculating absolute CVD risk. Absolute CVD risk is the probability of a CVD event occurring within five years, expressed as a percentage. It is determined by a comprehensive assessment of a number of clinically determined risk factors, followed by entering data into an algorithm which calculates the risk level (Table 4).

Table 4: Risk factors and related conditions for assessment of absolute CVD risk¹⁴

Modifiable risk factors	Non-Modifiable risk factors	Related Conditions
Smoking Blood pressure Blood cholesterol Waist circumference and BMI Nutrition Physical activity level Alcohol intake	Age Sex Family history of premature CVD Social history including cultural identity, ethnicity and socioeconomic status	Diabetes Chronic kidney disease Familial Hypercholesterolaemia Evidence of atrial fibrillation

In Australia there is no validated tool for assessment of kidney disease risk, however, there are a number of conditions and risk factors which are known to place individuals at high risk (Table 5). The presence of kidney disease is determined by conducting blood and urine tests

in these individuals. If disease is not detected, tests are repeated at regular intervals according to guidelines.

Table 5: Risk factors and related condition for determination of high risk of kidney disease²⁰

Modifiable risk factors	Non-Modifiable risk factors	Related Condition
Smoking and age ≥40 years Hypertension Obesity	Age ≥40 years (and smoker) Family history of kidney disease Aboriginal or Torres Strait Islander aged >30 years	Diabetes

How is risk managed?

Risk stratification into low, moderate and high risk groups allows doctors to tailor disease prevention and management and to best focus resources where they can have the greatest impact on disease reduction. For all of these related diseases, once the level of risk is determined, prevention of disease development occurs by management of multiple modifiable risk factors, as the evidence shows that moderate reduction in multiple risk factors is more effective in reducing overall risk than a major reduction in one factor^{13,16,17,18,19}. Review of management and re-assessment of risk are carried out at set intervals according to the relevant guidelines. Although kidney disease risk is not specifically determined using a set tool, modification of the risk factors for any of the related diseases leads to a reduction in risk of developing kidney disease.

3. The Integrated Health Check-an integrated approach to detect and prevent the major vascular and related diseases

The NVDPA believes many deaths and much morbidity could be prevented through the implementation of a more structured and nationally supported approach to vascular and related disease risk detection and management. The Integrated Health Check would aim to increase the uptake of lifestyle and earlier medical intervention to reduce the risk of vascular and related disease onset. The Integrated Health Check would link into existing systems, for example, forming an integral part of chronic disease management as an entrance point into the current Chronic Disease Management Plan mechanism.

The Integrated Health Check would include two major steps:

i. Assessment of vascular and related disease risk for eligible patients

The aim of the first step would be to provide a high quality assessment of disease risk through collection of data on major risk factors using simple questions, tests and measurements. An Integrated Health Check to assess the risk of patients having a heart attack or stroke, or developing diabetes and/or kidney disease would be conducted initially for all eligible adults and then at appropriate periods as advised by guidelines and according to the level of risk. This check could be facilitated via a dedicated MBS item to promote the required uptake and enable appropriate data collection.

Assessment would be initiated either systematically by use of a patient register and invitation system or incidentally by the GP or practice nurse on visits for other matters. The GP or practice nurse would initially take a history to determine whether the individual can be assumed to be at high risk of disease due to the presence of one or more of the other diseases or one or more significantly elevated risk factors. If the person is not initially assessed as being at high risk, blood and urine tests are ordered to assess:

- Kidney disease risk (serum creatinine and urinary albumin to creatinine ratio);
- Diabetes risk (AUSDRISK (+/- blood glucose tests));
- Absolute cardiovascular risk.

ii. Management of those at risk of disease

The aim of the second step would be to ensure evidence based care, as outlined by current guidelines, is provided to people at risk of diabetes, kidney disease and cardiovascular disease. This work could be facilitated via the proposed quality PIP.

GPs would provide evidence-based lifestyle and medical interventions to manage modifiable risk factors, and/or refer them to appropriate evidenced based services. Appropriate lifestyle management advice would be provided and referrals would be made in all instances where people were identified as being at moderate or high risk of disease. Principal evidence-based lifestyle interventions could include: smoking cessation services; weight management, including bariatric surgery for the severely obese; exercise and behaviour change programs. GPs would refer people at risk to those interventions which could be delivered through a range of community settings. Regular monitoring of progress against set goals would be required. There is obviously a strong role for the Primary Health Networks to play in this regard.

For people who did not reduce their risk with lifestyle modification, or for those at high risk, pharmaceuticals would be prescribed, the response monitored and medication adjusted as necessary. Medical interventions could include drug treatments for high blood pressure and/or high blood cholesterol. It is important that payment to support the care of patients with chronic and complex conditions also includes those identified as being at high risk, to help ensure they do not go on to develop chronic disease, such as diabetes and chronic kidney disease, or have acute events such as heart attacks and stroke.

4. The Quality Practice Incentive Payment-support for quality improvement in general practice

The proposed quality-focussed PIP, would complement existing PIPs and encourage general practice to implement an Integrated Health Check (as would the dedicated MBS item) for the early detection and risk management of people at increased risk of developing chronic kidney disease, type 2 diabetes, heart disease or stroke and their ongoing management.

The quality PIP would include two major areas of activity:

i. Patient register, recall and reminder system

As with the existing PIPs, general practices would be required to establish and maintain patient registers, with recall and reminder systems to ensure that eligible patients are systematically identified and notified of the need for assessment or management of risk factors. Use of one system for the integrated health check provides greater efficiencies for general practices.

ii. Incorporation of quality improvement

Quality improvement can be incorporated into this PIP through setting targets and conducting audits of records to monitor the proportion of eligible patients who receive an integrated health check or who have their risk managed according to guidelines or who are participating in evidence-based lifestyle management programs according to their GP Management Plan. Targets could also be set to ensure that patients at low risk are informed and educated about risk factors and the lifestyle changes they can make to reduce their risk of future vascular and related disease.

Box 1: The Integrated Health Check and Quality PIP in practice

Assessment

Morrie, a labourer aged 57, goes to see his doctor about an injury sustained at work. While he is in the waiting room, the Practice Nurse tells him this practice is providing a program to help people his age better manage their health and asks him if he would like to take part. He would only need to answer a few questions and take a couple of tests while he is waiting for the doctor. Morrie agrees to take part. He sees the Practice Nurse in a separate consulting room where he answers questions and she collects some blood and urine for testing. Morrie sees the doctor, who cleans and stitches the wound in his leg.

Management

The following week, Morrie returns to have his stitches removed. During this week, the results of his blood and urine tests have been received and the nurse has calculated Morrie's absolute CVD risk score, his AUSDRISK score and has his blood and urine test results. These are given to the GP. The GP tells Morrie that he is at moderate risk of having a heart attack or stroke in the next five years and that he is also at high risk of developing type 2 diabetes. The doctor makes the point that Morrie needs to take his health seriously by making some lifestyle changes. They have a discussion about Morrie's lifestyle and set some goals, including to lose weight, stop smoking, and to increase his level of exercise. The GP provides Morrie with some information resources, some links to relevant information on the internet and refers Morrie to the Life! Program and to a smoking cessation program.

Review

Three months later, Morrie returns for his scheduled monitoring appointment and reports on his progress to the GP. He has managed to stop smoking, has started walking for 30 minutes four times a week and has lost 4 kgs while attending his lifestyle management program. The GP encourages Morrie to set new goals and they set a review meeting in another three months.

At six months following initial assessment, Morrie has a further integrated health check which shows he has reduced his risk but is still in the moderate risk category for both CVD and diabetes. The GP and Morrie together set new lifestyle goals to increase the exercise and lose more weight. A review is set for a further 6 months.

Quality improvement

The Practice Nurse records the following information:

- The date Morrie had his integrated health check
- Morrie's test results and risk levels
- Morrie's risk management review schedule
- All referrals Morrie has had to lifestyle programs and whether he has actually attended them.

Months later, this information is collected in the practice's regular audit and used to ensure the practice is following the appropriate guidelines.

5. Impact of these initiatives

5.1 Integrated Health Check

Significant cost savings can be made for disease prevention by targeting medications to those who will most benefit

A recent study showed that Australian GPs are not adhering to current NHMRC clinical practice guidelines when they manage cardiovascular disease risk. They base their prescribing decisions on the levels of individual risk factors such as blood pressure or cholesterol. This means they are likely to prescribe cholesterol lowering or blood pressure lowering medications to people at low absolute cardiovascular risk, if one of these risk factors is elevated, while not prescribing much needed medications to those at high risk if these factors are not elevated²¹. Similarly for diabetes and kidney disease evidence indicates that there is substantial under-treatment of patients who are at risk of disease or already have a vascular disease which may result in hospitalisation^{22, 23}.

In 2009, the Australian Institute of Health and Welfare published a framework for monitoring the prevention of vascular and related disease²⁴. It cited evidence that existing vascular and related disease assessment and management programs had limited uptake and were not well integrated or promoted as part of a national preventative health system.

Comprehensive vascular health checks have been shown to be highly cost-effective, and improving the performance of these checks has the potential to significantly impact on the costs of vascular disease care. A recent article highlighted that a cardiovascular disease prevention approach based on absolute CVD risk, can be more cost-effective than prevention under current individual risk factor practice. The study showed that 1.2 million Australians currently taking preventative drugs for raised blood pressure and raised blood cholesterol would not require them under an absolute CVD risk approach. In addition it found similar numbers of people are undertreated under the single risk factor approach²⁵.

Reduction in avoidable hospital admissions

Many hospital admissions could be avoided if risk factors were detected and managed in the primary care sector. Adopting an Integrated Health Check would ensure that vascular and related diseases – type 2 diabetes, heart disease, stroke and kidney disease – were detected earlier, providing the opportunity to intervene earlier and avoid late stage and expensive presentation at the hospital. One quarter of avoidable hospital admissions are due to complications of diabetes²⁶. Chronic kidney disease (regular dialysis and other hospitalisations where CKD was the principal diagnosis) is responsible for approximately 13% of all hospital admissions²⁷.

While Australian figures for avoidable hospital admissions for CVD are not available, a study in New Zealand found that CVD was the largest category of potentially avoidable hospitalisations, comprising 47% of avoidable admissions in the study period²⁸.

Reduction in prescribing for those not at high risk

The use of an Integrated Health Check will help ensure that only people who would most benefit (i.e. those at moderate or high absolute CVD risk) would receive pharmaceutical interventions. People with single risk factors such as raised blood cholesterol, or raised blood pressure would no longer be treated with unnecessary medication.

5.2 Quality PIP

Reduction in red tape

The NVDPA believes that introduction of a new quality PIP provides an opportunity to streamline current arrangements and reduce red tape, both for Government and for practices. This could be achieved by amalgamating similar PIPs, and building in the ongoing management that stems from an Integrated Health Check.

Specifically:

- GPs / Practices will no longer have to use a number of separate codes for different PIP payments, an issue that GPs report has resulted in reduced uptake of a number of PIP payments;
- It will be administratively simpler for Government, as it will no longer need to administer multiple PIP payment submissions for practices;
- The Integrated Health Check will provide a seamless entry point for GPs to identify which patients would most benefit from existing mechanisms such as the Chronic Disease Management Plan; and
- Audit of patient records including use of the Chronic Disease Management Plan will provide important data to support continuous quality improvement. Data collection can include numbers of eligible patients assessed, numbers managed according to guidelines and numbers participating in lifestyle programs.

5.3 Ensuring uptake

In order to ensure appropriate levels of uptake, it is important that the proposed PIP, along with a dedicated MBS item, is attractive to general practice. There are a number of features that would support implementation:

- Given the important role an amalgamated quality PIP can play in promoting the earlier detection of vascular and related disease, it should be made mandatory if practices wish to apply for other PIP payments, as with the current eHealth PIP;
- Incorporation of an educational or continuous improvement element which allows for provision of continuing professional development points. For example, using the model of the existing NPS quality prescribing PIP, a self-reporting audit of the current patient database; identification of patients who are eligible for an Integrated Health Check; and a description of processes established to ensure checks are carried out could form part of the requirement; and
- The payment rate should recognise the impact that earlier detection of vascular and related disease can have on alleviating the health system burden.

5.4 Compatibility with government policy

This submission is consistent with the approach to chronic disease identified by the Australian Government and its agencies.

Council of Australian Governments

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

Council of Australian Governments, July 2015

Australian Government Primary Health Care Advisory Group

“Managing the growing burden of chronic disease remains the biggest challenge for Australian primary health care. Studies show that between 35 and 50 per cent of people in Australia have at least one chronic disease. Just four chronic diseases account for 36 per cent of all health expenditure in Australia”.

Better Outcomes for People with Chronic and Complex Health Conditions through Primary Health Care, August 2015

Coalition health policy

"Australia's health system is under increasing pressure from rising levels of chronic disease. We need a strong primary care workforce in order to provide better care and earlier interventions for people with complex and chronic health conditions. This is essential to improving the quality of life for patients, but will also alleviate demand on hospital services. Australia's health system faces challenges due to demographic changes, increasing prevalence of chronic disease and the tyranny of distance faced by many rural and remote communities."

The Coalition's Policy to Support Australia's Health System, August 2013

Minister for Health

"This Government understands the importance of a coordinated approach to managing diabetes - one which spans all levels of government and the healthcare industry. We believe this should be done within the broader context of primary care and supporting patients with complex health conditions. It should also be done within the context of the growing burden of chronic disease on our health system. While diabetes is an insidious disease in its own right, it also contributes to – and is affected by – a range of other chronic diseases, including cardiovascular disease and chronic kidney disease. The co-morbid nature of these diseases make it essential that future approaches to diabetes consider and account for the overlapping effects that can arise from other chronic diseases. We must consider that better health outcomes for diabetes prevention and mitigation may be realised through interventions with a focus on risk factors and behaviours shared by multiple diseases. This will be an Australian focus as we seek to improve the prevention, detection, management and research methods directed at diabetes."

Hon Peter Dutton, Minister for Health, Speech to the World Diabetes Congress, Melbourne, December 2, 2013

“From early 2016, five of the ten existing PIP incentives will be streamlined into a single incentive, focussing on continuous quality improvement in general practice and we will continue to work with the Australian Medical Association and others to finalise details of the new incentive and improvements to PIP”.

Hon Peter Dutton, Minister for Health, announcement, May, 2014

Australian Institute of Health and Welfare

"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. There is great potential for integrating prevention and care, and treating selected chronic diseases together, to keep people healthy for as long as possible. Because of its personal, social and economic impact, tackling chronic disease and its causes is the biggest

health challenge that Australia faces, A growing understanding that many of these diseases arise from similar underlying causes, have similar features, and share a number of prevention, management and treatment strategies, as well as significant and increasing costs, is challenging us to transform the way in which we respond to chronic disease. Assessing the risk of cardiovascular disease on the basis of the combined effect of multiple risk factors (absolute cardiovascular disease risk) can lead to better management of modifiable risk factors through lifestyle changes and pharmacological therapy. These strategies all involve better delivery and coordination cross the health care continuum, from health promotion and prevention, to early detection where appropriate, and to primary, secondary and tertiary care. GPs and their teams can perform a key role in screening and prevention, and coordinating services. Such an approach can strengthen and transform health-care systems, resulting in more effective, efficient and timely care."

Australia's Health 2014, Australian Institute of Health and Welfare

National Chronic Disease Strategy

"Increasing the uptake and effectiveness of early detection and early treatment, therefore, offers significant opportunities for reducing the future burden of chronic disease. ... The benefits of early detection and early treatment can include reductions in mortality, complications and co-morbidities. Effective early treatment can improve quality of life and may provide potential savings to the health system."

National Chronic Disease Strategy, Australian Health Ministers' Conference, 2005

5.5 Integration with existing primary care initiatives

The integrated approach to detection and prevention of vascular and related disease presented in this submission 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. The major areas complemented or enhanced by the Integrated Health Check are described below:

National Vascular Disease Prevention Alliance (NVDPA)

The NVDPA (comprising Diabetes Australia, Heart Foundation, Kidney Health Australia and the National Stroke Foundation) completed the first Australian Guideline for the Assessment of Absolute Cardiovascular Disease Risk, with NHMRC endorsement, in 2009. Guidelines for the Management of Absolute Cardiovascular Disease Risk were released in May 2012, with NHMRC approval. These guidelines incorporate guidance on assessing absolute CVD risk in all adults over 45 years of age (35 years for Aboriginal and Torres Strait Islander peoples) who have not had a cardiovascular event.

Royal Australian College of General Practitioners (RACGP)

The RACGP calls for an absolute risk approach in general practice using NVDPA absolute CVD risk guidelines (Guidelines for Preventive Activities in General Practice, 8th edition).

National Prescribing Service Medicinewise (NPS)

NPS Medicinewise promotes absolute CVD risk assessment through its education programs. The NPS advises health professionals that “assessing multiple risk factors in your patient is more accurate than assessing single risk factors. This is because clusters of risk factors can develop that may be additive or synergistic. Assessing and addressing multiple factors may be more effective than concentrating on a single risk factor.”

Australian Practice Nurse Association (APNA)

APNA Online Learning features a fully flexible online tutorial on Absolute CVD Risk, delivering interactive courses designed specifically for nurses in primary health care and other health professionals. Absolute CVD Risk is a standing feature of APNA’s Nursing in General Practice - a national series of workshops to facilitate education and networking for nurses working in general practice across states and territories during 2014.

Pharmaceutical Society of Australia (PSA)

PSA has co-ordinated education sessions on Absolute CVD Risk for community pharmacies. They propose working with the NVDPA in developing a resource kit on Absolute CVD Risk for community pharmacies.

Improvement Foundation - Australian Primary Care Collaboratives Program (APCC)

APCC GPs and primary health care providers improve patient clinical outcomes, reduce lifestyle risk factors, maintain good health for those with chronic and complex conditions and promote a culture of quality improvement in primary health care. APCC has embraced absolute CVD risk implementation as its tenth ‘wave’ of quality improvement programs.

Primary healthcare organisations

In addition to the APCC program, three Medicare Locals adopted absolute risk projects; ACT, Tasmania and Townsville/Mackay. The ACT program was supported by the Heart Foundation and the ACT Government.

Central Australian Rural Practitioners Association (CARPA)

The CARPA Standard Treatment Manual (5th edition) has adopted an absolute CVD risk assessment approach to assessing cardiovascular risk in Indigenous patients. By July 2014, the ACHOS in the Northern Territory reported that 52% of Aboriginal people under their care had been assessed in line with guideline recommendations.

World Health Organisation (WHO)

WHO’s Global Action Plan for Non-Communicable Disease 2013-2020 calls for a ‘total risk approach’ to be taken to cardiovascular disease and diabetes using WHO guidelines for assessment and management of cardiovascular risk 2007 and WHO cardiovascular risk prediction charts 2012.

5.6 Economic impact

Absolute cardiovascular disease risk assessment will be one component of an Integrated Health Check. Economic modelling has demonstrated that the implementation of an absolute risk approach to cardiovascular disease assessment and management in Australia will provide cost-savings by sustaining health outcomes for fewer health dollars. Significant cost savings (\$7.1 billion) could be achieved if Australia adopted cheaper statin (cholesterol lowering agents) prices similar to New Zealand ²⁵.

6. What is happening elsewhere?

Experience in the United Kingdom and New Zealand has demonstrated that national implementation of vascular checks is achievable and effective.

New Zealand: More Heart and Diabetes Checks

In January 2012 the New Zealand Government introduced a new national target called *More Heart and Diabetes Checks*. The program is an integrated CVD and diabetes health check and replaces 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 over a five-year period ending in July 2014. Milestones were set and reached for 60% of all assessments to be completed by July 2012 and 75% by July 2013. New Zealand is aiming to reach a target of 90% by July 2014.

The most recent data available show that overall New Zealand had achieved 78.2% as at the end of March 2014²⁹. Preliminary results from the evaluation of the *More Heart and Diabetes Checks* program show measurable reductions in disease progression and hospital admissions in the first three-year followup³⁰.

UK: NHS Check

The need to develop an integrated health check was recognised in the UK in 2009 when the British Government introduced *Putting Prevention First* – a program of vascular checks for people in their middle age.

The UK Health Department estimated the program would:³¹

- Prevent at least 9,500 heart attacks and strokes a year (2,000 of which would be fatal);
- Prevent at least 4,000 people a year from developing diabetes; and
- Detect at least 25,000 people a year earlier with diabetes or kidney disease.

7. Conclusion

An effective and integrated program of risk detection, assessment and management is a fundamental strategy by which to reduce vascular and related disease risk and the associated burden of disease. It will lead to decreases in the burden of morbidity and mortality caused by these conditions.

A very important mechanism in supporting quality clinical practice is the use of focussed financial incentives. A conglomeration of existing PIPs into a single quality reward is a way of assisting Primary Care in managing chronic disease in a more efficient way. A dedicated MBS item number will help drive uptake from currently low levels.

It will assist in the reform of General Practice along the lines of contemporary evidence based guidelines, coordinate the care given to those with chronic disease and provide a rich, more detailed data source for care analysis and improvement.

Not only will this support a more efficient multidisciplinary care model, it will more importantly lead to greater person-centred care.

8. The National Vascular Disease Prevention Alliance

The NVDPA is an alliance between the major not-for-profit organisations leading action to tackle the burden of vascular and related disease in Australia: National Heart Foundation, National Stroke Foundation, Diabetes Australia and Kidney Health Australia. With their diverse strengths, these organisations have, independently of each other, made major contributions to vascular and related disease awareness, research and prevention in Australia. They have come together in the NVDPA to work collaboratively to reduce vascular and related disease in Australia.

The objectives of the NVDPA include reaching consensus in areas of mutual interest, such as:

- Guideline development and implementation for prevention and management of vascular disease risk;
- Vascular and related disease prevention programs, and
- Advocacy issues for people affected by vascular and related disease and any other related purposes.

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