National Vascular Disease Prevention Alliance

Quality Practice Incentives Program

Development of a quality-focused PIP to address prevention of vascular and related diseases

1. Summary

1.1 Purpose

This paper presents a submission from the National Vascular Disease Prevention Alliance (NVDPA) on 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 to an integrated approach which recognises the interaction between these diseases and their risk factors.

The NVDPA recommends that:

1. 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 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.

2. The 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.

3. The new 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.

1.2 Context for this submission

In late May, the Minister for Health announced that “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”. This will be done in the context of reducing red tape for general practice.

The NVDPA makes this submission to support the development of a new quality-focussed PIP which includes improvement in vascular and related disease detection and prevention. 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 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.

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.

1.3 A unique opportunity

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 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. 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.

3. Background

3.1 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 deaths\(^1\). Translated into human terms, this means that every hour, five Australians die from one of these conditions\(^2\).

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 2004/05\(^2\). 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 years\(^3\).

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 unassisted\(^3\).

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).

*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)\(^4\)

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

\(^a\) 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\(^2,5,6\).

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 factors\(^7\). 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)\(^8\) 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)\textsuperscript{8}

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

3.2 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 consumption\textsuperscript{1}. 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 management\textsuperscript{9}. The primary care sector is well placed to deliver and coordinate a vascular and related disease risk assessment and prevention program. General practice is an effective channel for prevention initiatives given that the majority of Australians visit their general practitioner at least once per year\textsuperscript{10}.

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\textsuperscript{11}.
**Risk factors occur in clusters**

People tend to develop risk factors in clusters\(^\text{12}\). 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\(^\text{11,13,14,15,16}\).

**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 risk\(^\text{17}\)**

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

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 risk

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

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 disease

<table>
<thead>
<tr>
<th>Modifiable risk factors</th>
<th>Non-Modifiable risk factors</th>
<th>Related Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoking and age ≥40 years</td>
<td>Age ≥40 years (and smoker)</td>
<td>Diabetes</td>
</tr>
<tr>
<td>Hypertension</td>
<td>Family history of kidney disease</td>
<td></td>
</tr>
<tr>
<td>Obesity</td>
<td>Aboriginal or Torres Strait Islander aged &gt;30 years</td>
<td></td>
</tr>
</tbody>
</table>

How is risk managed?

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 than a major reduction in one factor, 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.
4. Proposed quality-focussed PIP: Vascular and related disease prevention component

4.1 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. Such a program would aim to increase the uptake of lifestyle and earlier medical intervention to reduce the risk of vascular and related disease onset.

This proposed component of the quality-focussed PIP addresses primary prevention of the major vascular and related diseases through early detection, risk assessment and risk management and involves:

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 the level of risk.

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 risk factors for those at risk of disease**

The aim of the second step of the PIP is to ensure evidence based care, as outlined by current guidelines, is provided to people at risk of diabetes, kidney disease and cardiovascular disease.

GPs would provide evidence-based lifestyle and medical interventions to manage modifiable risk factors. 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 these interventions which could be delivered through a range of community settings. Regular monitoring of progress against set goals would be required.

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.

III. 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.

IV. Quality improvement is incorporated

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.

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The new 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 the new PIP

5.1 Reducing the evidence-practice gap

*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 and cholesterol. This means they are likely to prescribe cholesterol lowering and 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 elevated\(^{18}\). 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\(^{19,20}\).

In 2009, the Australian Institute of Health and Welfare published a framework for monitoring the prevention of vascular and related disease\(^{21}\). 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 approach.\textsuperscript{22}

5.2 Potential benefits of an integrated approach

Reduce avoidable hospital admissions

Many hospital admissions could be avoided if risk factors were detected and managed in the primary care sector. One quarter of avoidable hospital admissions are due to complications of diabetes.\textsuperscript{23} Chronic kidney disease (regular dialysis and other hospitalisations where CKD was the principal diagnosis) is responsible for approximately 13% of all hospital admissions.\textsuperscript{24}

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 period.\textsuperscript{25}

Reduce prescribing for those not at high risk

The use of an integrated health check will help ensure that only people who would most benefit (ie 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.

Reduce red tape

The NVDPA believes that the PIP review provides an opportunity to streamline current arrangements and reduce red tape, both for Government and for practices.

By using the review to amalgamate similar PIPs, and build in an integrated health check a number of red tape reductions will occur.

- 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;
- Adopting an integrated health check will ensure that vascular and related diseases – type 2 diabetes, heart disease, stroke and kidney disease – are detected earlier, providing the opportunity to intervene earlier and avoid late stage and expensive presentation at the hospital; 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 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.

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

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 across 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

Absolute cardiovascular risk approach across Australian primary healthcare

The integrated approach recommended in this submission complements and enhances existing programs and initiatives, including:

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 have adopted absolute risk projects; ACT, Tasmania and Townsville/Mackay. The ACT program is supported by the Heart Foundation and the ACT Government.

**Central Australian Rural Practitioners Association (CARPA)**

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)**


### 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.

### 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 2014. 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 followup.

**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:

- 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.

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. References


27. Professor Rod Jackson, personal communication.