

The role of primary health care in preventing the onset of chronic disease, with a particular focus on the lifestyle risk factors of obesity, tobacco and alcohol.

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Abstract

The potential impact of primary health care in assessing and managing smoking, hazardous drinking, poor diet and physical inactivity has been demonstrated among patients who are at higher risk. Effective interventions based around the 5As approach include the assessment of risk and readiness to change, brief motivational interventions and referral of suitable patients for more intensive interventions.

Health checks have been demonstrated to improve the frequency of preventive care and support for behaviour change. However their impact on health outcomes is uncertain. Expansion of the current complexity of different Medicare items is undesirable. Health checks should focus on specific evidence based preventive actions and involve the use standardized resources such as Lifescripts and integrated health risk assessment tools. Other performance based incentives may be useful in targeting the needs of specific groups and encouraging primary health care to provide more outreach and culturally appropriate preventive care for disadvantaged groups.

General practice referral of patients needing more intensive lifestyle interventions is infrequent due to a number of factors including cost and availability of providers and services and the integration between these services and primary health care. A major role of primary health care organisations is to coordinate and broker a network of referral services to support behaviour change based on standards and quality assurance. Other key roles of primary care include the support of practices to monitor and improve their performance in providing preventive care.

Structural reform of primary health care may provide opportunities for more integrated approaches to management of the lifestyle risk factors across private and public and national and state funded services.

1. Rationale for a role for primary health care in prevention of chronic disease

Chronic vascular diseases including heart disease, diabetes, kidney disease and stroke represents a substantial and increasing portion of health care expenditure and practitioner workloads^{1 2}. Behavioural risk factors for these include smoking, poor nutrition, hazardous alcohol consumption and physical inactivity (known by the acronym SNAP). In 2001, 53% of the Australian adult population had two or three and 16% had four or more of the following vascular risk factors: tobacco smoker, physical inactivity, high blood pressure, high blood cholesterol, obesity, low fruit or vegetable consumption, risky alcohol consumption or diabetes³.

Recognition of the escalating costs and burden of chronic disease has led to an increasing research to identify effective approaches to prevention. There is now considerable evidence for the effectiveness of interventions to prevent vascular disease in high risk populations⁴. Large studies in China, Finland and USA have also demonstrated the feasibility of preventing, or delaying, the onset of diabetes in high risk patients^{5 6 7}.

Prevention of chronic disease is an important priority for the Australian health system. Early in 2006, the Council of Australian Governments in its "Plan for Better Health for All Australians"⁸ identified the importance of *promoting healthy lifestyles*, including addressing alcohol use, nutrition, smoking and physical activity. It proposed that this be achieved through:-

- *supporting the early detection of lifestyle risks and chronic disease* through a "Well Person's Health Check" in general practice for middle aged people with one or more identifiable risks that lead to chronic disease; and
- *supporting lifestyle and risk modification* through referral to services that assist people wanting to make changes to their lifestyle.

In Australia, most primary health care is provided in the general practice setting by GPs, practice nurses, and allied health providers. General practice provides care across the continuum from prevention of illness to treatment and rehabilitation, and provides consultations to approximately 86% of Australians each year⁹. Multiple guidelines have been developed to assist general practitioners in the prevention of chronic disease^{10 11}. The potential role of general practice includes the identification and provision of brief interventions to prevent chronic disease and also the referral to other services and programs¹².

2. Adoption of behavioural risk factor management in general practice

On average, Australians visit a GP five times per year. Patients expect to receive information and assistance regarding preventive health issues from their primary care providers¹³. Yet few primary care encounters in Australia involve risk-factor assessment and intervention. Evidence-practice gaps in prevention activities for chronic disease in general practice include the in-frequency of assessing alcohol consumption and smoking; counseling about hazardous drinking, smoking, physical inactivity, and diet¹⁴. In 2005–06, 34.6% of general practice encounters were with overweight patients (22.2% being obese), 25.9% with those who drank alcohol at risky levels and 17.1% with daily smokers¹⁵. However, less than one in five patients are routinely asked about their drinking^{16 17}, while two-thirds are asked about their smoking¹⁸, only up to a third are asked about exercise and physical activity¹⁹, and about 15-30% of patients get some form of dietary advice²⁰. Moreover, less than one in five of GP consultations involved an intervention to support behaviour change.

The role of primary health care in preventing chronic disease

A number of studies have explored factors influencing the management of behavioural risk factors in PHC mainly through the analysis of factors associated with self reported practice . These studies have reported associations between the management of behavioural risk factors and the following:-

- clinician age and gender²¹ ,
- personal lifestyle behaviours²² ,
- beliefs and attitudes in particular confidence to intervene and perceived effectiveness^{23 24 25 26 27} ,
- self-efficacy²⁸ ,
- working context (eg size or location of practice);
- perceived congruence with clinician role and client acceptance²⁹ ,
- and lack of knowledge, skill and confidence on the part of practitioners³⁰ .

This range of factors imply that broad training and professional development strategies may be needed to bring about lasting change to the role of primary care providers in preventive care.

There are also important contextual influences. Competing pressures on the time of both GPs and their patients, a lack of supportive organisational infrastructure, limited referral options and specific funding to support assessment, training and counselling, and an unsystematic approach to assessment and management of risk factors impede preventive care^{31 32 33} . A major barrier to implementation is the limited time available in the context of the amount of work that needs to be done. It is estimated that 7.4 hours per day would be needed by the typical GP to implement known best practice in prevention³⁴ . This implies that workforce recruitment and development strategies are needed to address the problem including the development of new categories of health professional. This may include other types of health professionals such as health assistants (HA) working with GPs and practice nurses in carrying out tasks such as recall, monitoring, education, arranging referral, follow up as and providing a link between the service and the community or target groups^{35 36} . Health Assistants such as Aboriginal health workers are already well established in Aboriginal Medical Services³⁷ . Health Assistants are being trialled in general practice in Brisbane³⁸ .

The role for other practice staff in risk factor interventions and availability and affordability of referral services is seen as a major facilitator of effective of prevention in primary health care. However these roles are constrained by system barriers such as lack of financial incentives for practice nurses to be involved in preventive care other than for immunisation and cervical screening^{39 40} .

Finally the structure and organisation of primary health care in general practice may exert a strong influence on the capacity to provide preventive care. For example larger practice size is associated with better preventive care⁴¹ but also with poorer personal continuity of primary health care. The latter has a strong influence on the likelihood of patients receiving preventive care and its effectiveness in changing their behaviour⁴² .

3. Assessment of behavioural risk factors in primary health care

Based on research evidence and other guidelines, the draft 7th edition of the RACGP Guidelines for Preventive Activities in General Practice make recommendations for the assessment of the behavioural risk factors in general practice⁴³. These are shown in Figure 1.

Figure 1: Recommendations for assessment of behavioural risk factors

Smoking

Smoking status should be assessed for every patient over 10 years of age ideally at each consultation. Those who are identified as current smokers should have their current level of nicotine dependence assessed.

Nutrition

Every 2 years, patients should be asked about number of portions of fruit and vegetables eaten per day and types of fat eaten.

Overweight and obesity

Every 2 years, body mass index (BMI) and adult waist circumference should be measured for those patients who appear overweight.

Alcohol

Every 3-4 years, patients should be asked about the quantity and frequency of alcohol intake aged 15 years and over.

Physical activity

Every 2 years, patients should be asked about the current level and frequency of physical activity.

There are also recommendations about the assessment of stages of change and risk assessment (see next section)

Readiness to change

In all cases where these risk factors are identified, patients should be assessed for their readiness to change prior to motivational counselling or referral. . There are five basic stages of change:- pre-contemplation, contemplation, determination (ready), action and maintenance during which the person has differing levels of motivation or readiness to change⁴⁴. These stages of change can guide management with motivational counselling being most apt for patients assessed as being in the contemplation stage.

4. Risk assessment tools

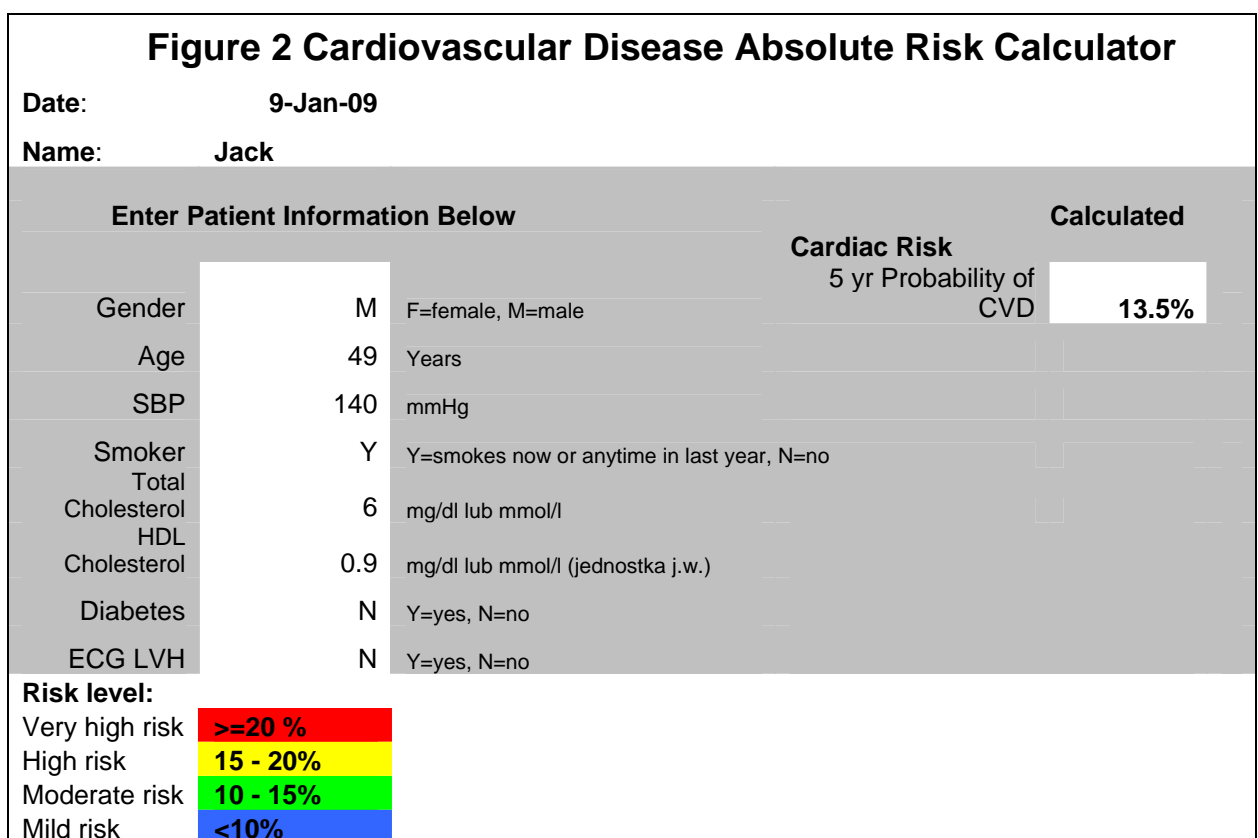
A large number of clinical practice guidelines emphasise the value of comprehensive risk assessment in primary health care. The RACGP guidelines recommend that:

- Absolute Cardiovascular Risk assessment should be performed for all adults aged 45–74 years who are not known to have cardiovascular disease or to be at high risk of cardiovascular disease. This should be reassessed every two years at a minimum (more frequently in those at risk).
- Patients should be screened for diabetes every three years from 40 years of age using the Australian Type 2 Diabetes Risk Assessment Tool (AUSDRISK).

The role of primary health care in preventing chronic disease

Risk assessment is designed to provide a framework for patient education and decision making about lifestyle changes and pharmaco-therapy. For example cardiovascular absolute risk assessment based on Framingham algorithms which predict the risk of a cardiovascular event over the next five years has been recommended in Australian general practice (See Figure 2)^{45, 46}. The AUSDRISK tool has been validated using data from the AusDiab study⁴⁷. This questionnaire weighs genetic, behavioural and physiological risk factors to produce a score that expresses the persons risk of developing type 2 diabetes over 5 years. The score is then reviewed by the GP as part of a health check⁴⁸.

Most risk assessment is performed opportunistically in general practice. The systematic identification of patients at sufficient risk to warrant an assessment is a challenge. Apart from using age as a guide, higher risk patients have been identified by asking patients to complete a self assessment form or by using routine data held on primary care databases to identify potential patients at risk if cardiovascular disease prior to seeing the GP^{49 50}.



Notes: The calculation is for 5 year risk, with relative risk reduction of 33%.
 ECG LVH is not the same as echo LVH which is a lesser risk factor,
 CVD includes the following fatal and nonfatal events: MI, angina, coronary insufficiency, sudden and non sudden coronary death stroke, TIA, PVD (claudication), LVF (symptomatic).

Our previous research suggests there is limited use of Cardiovascular Absolute Risk (CVAR) assessment in Australian general practice^{51 52 53}. Barriers to its use include inadequate computer records, inconsistencies with regulations for prescribing and lack of patient understanding of CVAR concepts. Most GPs and patients feel that that computer programs would facilitate conduct of the CVAR assessment especially if integrated into current clinical software. Multiple strategies are required to translate risk assessment into practice including communication, training and financial support.

The role of primary health care in preventing chronic disease

There are also a number of tools which are designed to assist patients to assess their own risk and prompt them to discuss this with their GP⁵⁴. Tools such as the "Diabetes PHD" developed by the American Diabetes Association which is available online provide a comprehensive assessment of risk of heart disease, stroke, kidney disease and diabetes over 30 years⁵⁵. However such tools have not been validated for use in the Australian population.

5. Systematic health checks in primary health care

The assessment of risk factors has, in the past, been conducted opportunistically in general practice. However as the number and complexity of assessments have increased this has become more difficult. This was recognized for aged care with the introduction of annual Health Assessments for patients 75 years and older as part of the Enhanced Primary Care Program in 1999. The first MBS item specifically targeting chronic disease prevention, the 45-49 year old "Well Persons" health check, was launched in Australian general practice on 1st November 2006. The health check was claimed for 7.7% of the estimated population aged 45-49 years and nearly half of all GPs had utilised the health check by the 3rd quarter of 2007⁵⁶. A number of other health checks have been developed for specific population groups (including for Indigenous, Refugee and developmentally disabled populations) but these have had low uptake. The Type 2 Diabetes Risk Evaluation (MBS Items 713) was introduced on 1 July 2008 and involves a GP assessment of patients aged 40-49 years identified as high risk through the use of the AUSDRISK tool. Its uptake has been slow (2,850 services in 3rd quarter 2008 compared to 26,443 for the 45-49 year health check in the same quarter⁵⁷) possibly due to delays in implementing referral services and the lower fee compared with the other health checks.

Evidence for effectiveness of 45-49 year health check

Planned health checks in middle aged adults are acceptable to patients⁵⁸ and have been demonstrated to improve the frequency of the assessment and management of SNAP behavioural risk factors in primary care⁵⁹. A recent systematic review found that health check visits were likely to improve the quality of preventive care⁶⁰. However evidence for the impact of health checks on health outcomes and cost effectiveness has been mixed. For example, the OXCHECK study in the early 1990s demonstrated changes in self reported fat intake, physical activity but not smoking or alcohol⁶¹. At about the same time Dowell et al reported no difference in the proportion of patients who stopped smoking or modified alcohol consumption, physical activity or weight among those who attended or did not attend UK general practices for a health check.⁶² A more recent randomised controlled trial in Danish family practices, evaluated the impact of general health screenings and discussions with GPs on the cardiovascular risk profile of a random population of patients. This found a halving in the proportion of patients at high cardiovascular risk in the intervention group. This could not be explained by differences in medication used and the effect was greater in the higher risk patients⁶³.

Evaluation of the Australian health checks

In 2007 we conducted a study which evaluated the impact of the 45-49 year health check on patient self reported lifestyle behaviour, comparing the change in lifestyle behaviour of general practice patients before and 3 months after being recalled for a health check by their general practitioner⁶⁴. The study collected both quantitative and qualitative data from the staff and patients attending health checks at 8 general practices in Central and South Eastern Sydney. This study found that conducting the health check was acceptable to GPs. GPs were influenced by their perception of what was expected by their patients and external factors such as time, funding, availability of resources and referral services. After receiving support and training

The role of primary health care in preventing chronic disease

from the Division, GPs increased both the frequency with which they identified patients' readiness to change behavioural risk factors and the amount of preventive care that they provided, particularly with regard to providing advice. The reported frequency of advice by GPs relating to each of the SNAP risk factors increased. However their referral of at risk patients remained infrequent. Patients' readiness to change their fruit and vegetable consumption and physical activity improved and there was an increase in both the consumption of vegetables and frequency of physical activity⁶⁵. The evaluation demonstrated no significant difference by gender or socioeconomic status of the local area⁶⁶.

UK research has produced conflicting evidence for the influence of socio-demographic factors on the uptake of health checks. In the 'OXCHECK' study⁶⁷ non attendance was higher among lower socioeconomic groups, smokers and obese individuals. However patients presenting for health checks in another study of 18 practices were more likely to be from a lower socioeconomic background although less likely to have had a 'full check' performed⁶⁸.

Role of practice nurses

The number of practice nurses has increased dramatically in the past few years⁶⁹. A Cochrane systematic review on the substitution of doctors by nurses in primary care concluded that that appropriately trained nurses can produce as high quality care as primary care doctors and achieve as good patient health outcomes⁷⁰. In this review nurses included not only practice nurses but also nurse practitioners, clinical nurse specialists, or advanced practice nurses, which suggests that the general practice team could be expanded to include nurses with a role in prevention.

In the UK, practice nurses have been shown to play an important role in facilitating and conducting part or all of the health checks in general practice^{71 72}. These roles may include identifying patients for health checks, assessing their risk factors and combined risk score (such as using Framingham cardiovascular algorithm based tools), providing motivational counseling, education and negotiating behavioural goals, and arranging follow up.

6. Interventions for modification of lifestyle risks in primary health care

Behavioural approaches to both individual and multiple risk factors have been applied in primary health care. There is evidence that brief interventions can be effective^{73 7475}. Most of these use or are consistent with the 5A's approach first developed as a framework for reducing alcohol consumption but which has been applied to the management of all the behavioural risk factors in primary health care (see Figure 3)⁷⁶.

Figure 3: The 5As approach¹³⁷

ASK : - ask all patients about smoking, nutrition, alcohol or physical activity

ASSESS: readiness to change, dependence (smoking and alcohol)

ADVISE : - brief, nonjudgmental advice with patient education materials (such as Lifescripts) and motivational interviewing

ASSIST: by providing motivational counseling and a prescription (Lifescript or pharmacotherapy if indicated for nicotine or alcohol dependence)

ARRANGE: referral telephone support services, group lifestyle programs or individual provider (eg dietician or exercise physiologist) and a regular follow up visit

This approach be enhanced by encouraging goals setting, self monitoring and social support over multiple contacts.

The role of primary health care in preventing chronic disease

Smoking cessation

Brief counseling interventions and pharmaco-therapies delivered in primary care are effective in increasing smoking cessation⁷⁷. At an individual patient level, primary care providers can influence smoking rates by systematically providing opportunistic advice and offering support to all attending patients who smoke. However Australian GPs currently underutilize effective treatment strategies such as referral to the Quitline, pharmacotherapy and motivational interviewing⁷⁸.

Alcohol

Brief advice to patients with at excessive levels of drinking in general practice has been demonstrated to reduce alcohol consumption by about 6 standard drinks per week⁷⁹. The minimum time required is between 5 and 15 minutes⁸⁰.

Physical activity, diet and obesity

Brief interventions to promote physical activity or healthy eating in low risk patients in primary care have not been demonstrated to be universally effective^{81 82 83 84 85}. However evidence is stronger for patients at high risk of cardiovascular or other chronic diseases especially where moderate to high intensity interventions were used. Such interventions include those which aim to achieve at least 30 minutes of moderate physical activity each day, less than 10% of diet energy as saturated fat and 30% as total fat, increased fruit and vegetable intake and reduced calories and 5% reduction in body weight if overweight or obese. The more effective programs enlist family involvement, use group counseling and provide tailored advice and follow up.

A number of randomized controlled trials have been conducted of providing standard exercise and nutrition information in general practice followed by individual or group education and counseling sessions among high risk or obese general practice patients^{86 87 88 89}. These have demonstrated positive effects on diet, physical activity, weight, blood pressure, cholesterol and quality of life.

Multiple risk factors

Interventions that target multiple risk factors interventions have been demonstrated to improve both behavioural and physiological risk factors for cardiovascular disease and diabetes, in high risk groups^{90 91 92 93}.

Role of practice nurse

A number of studies have shown that practice or other primary health care nurses can provide effective interventions to modify the behavioural risk factors. For example, a primary health care program involving risk assessments, patient education and counselling by nurses was effective in reducing blood pressure, cholesterol and smoking levels over the 2-year trial period⁹⁴. A recent European study has demonstrated that nurses providing preventive education and monitoring in general practice reduced dietary saturated fat and increased fruit and vegetable consumption, increased physical activity and reduced cardiovascular risk⁹⁵. A Cochrane review found that while dietitians were better than doctors at lowering blood cholesterol levels with dietary interventions, there was no evidence that dietitians provided better outcomes than nurses⁹⁶. A number of studies have demonstrated the value of follow up telephone calls by practice nurses to reinforce changes in physical activity⁹⁷. Practice nurses have been demonstrated to be effective in screening patients for problem drinking and providing counseling⁹⁸. However no effect of a practice nurse intervention (additional to physician and nicotine replacement) has been demonstrated for smoking cessation⁹⁹.

7. Referral pathways for high risk patients

Brief interventions by GPs may be insufficient to achieve the lifestyle changes necessary to prevent high risk patients from developing chronic diseases such as type 2 diabetes. Interventions may need to involve more intensive education and support over several months than most GPs can provide¹⁰⁰. However there is clear value in GPs initiating the assessment and education before referring patients on for more intensive education and support¹⁰¹.

The evaluation of 45-49 year health check demonstrated that GPs referred patients infrequently, particularly when compared to the frequency of advice provided by GPs to manage risk factors⁶⁵. Many GPs expressed doubts about the effectiveness of referral options, preferring to manage the risk factors within the practice despite the difficulty in doing this.

The low rate of referral by GPs has been found in other studies in Australian general practice^{102 103}. At-risk patients who do not yet have chronic disease are not well-served by the referral pathways (such as public hospital services or private allied health providers) used by GPs for people with chronic disease, (who are generally older, in poorer health and may be eligible for access to subsidised private referral).¹⁰⁴ There are also practical difficulties in communication between general practice and the other services, waiting lists for public allied health services, delays in entry into group programs, the availability at suitable times and some reluctance on the part of patients to be referred especially to group programs.

The development of lower cost alternatives for GPs to refer patients with behavioural risk factors would address some of the existing barriers with regard to GP confidence in referring. This may be overcome by Division of General Practice-brokered referral services, with which GPs are familiar and confident¹⁰⁵. Such services or programs need to meet minimum standards not only in relation to the skills and competencies of staff running them but also in the duration and the intensity of lifestyle modification offered. This has been addressed by the development of joint standards by Australian and State government health departments¹⁰⁶.

8. Financial incentives to improve preventive care

Targeted payments can help reduce financial and capacity constraints on the provision of preventive care in primary health care as well as providing an incentive. However a review of the literature conducted between 1966 and 2002 found few studies (only 8 – mostly related to immunisation), only one of which demonstrated an improvement in preventive care as a result of economic incentives for physicians¹⁰⁷. Pay-for-performance incentives introduced in 1991 in the United Kingdom were associated with large improvements in rates of immunization and cervical cytology examinations^{108 109}. More recently, the Quality Outcomes Framework in UK general practice has achieved improvements in a range of indicators for chronic disease including the recording of BMI and smoking status¹¹⁰. A large study in the US has demonstrated that pay for performance payments were associated with improvements in the proportion of patients who were up to date with preventive care recommended by the US Preventive Services Task Force especially for behavioural counselling, immunisation and screening¹¹¹. However patient satisfaction decreased.

Medicare provides some targeted payments for GPs and practice nurses to deliver and document childhood vaccinations cervical cancer screening and assessment of the elderly which have been generally successful¹¹². As noted previously, funding for health checks has been introduced in recent years. Although studies in the UK in the early 1990s suggested that those most at risk may be less likely to attend¹¹³,

The role of primary health care in preventing chronic disease

analysis of Medicare data on health checks for patients aged 45-49 and over 75 years suggest that these have relatively equitably distributed in Australia^{114 115}.

Feedback from GP participants in the 45-49 year health check study suggested a number of problems with existing Medicare arrangements⁶⁵:-

- The eligibility requirements for the preventive health checks are too restrictive. For example health check for 45-49 year olds is only available only once and there is no health check item for patients in their 50's when many GPs observe their risk factors to be deteriorating.
- The eligibility requirement for patients to have at least one risk factor is cumbersome and does not identify those at high risk as the Australian Institute of Health and Welfare estimates that 94% of males and 89% of females aged between 45 and 54 will have at least one identifiable risk factor for cardiovascular disease.¹¹⁶
- Only the Diabetes Prevention Check provides access to subsidised referral services

The plethora of Medicare items leads to confusion and some GPs opting to charge a long consultation rather than a specific preventive care item. There is also a need to improve the integration between the various prevention and chronic disease items. In particular the assessment of diabetes risk and the 45-49 year old health check overlap in age group.

It should also be noted that these incentives only operate in private general practice and that there are no incentives for state-funded primary health care workers. As these are salaried employees, increasing their focus on preventive care relies on persuasion and direction and performance monitoring by their managers.

9. Targeted prevention activities for disadvantaged populations

Targeted preventive activities may be required to address health needs of individuals and communities where:

- existing basic services may not cope with the level of illness and need present in the community (such as in some Aboriginal and Torres Strait Islander communities);
- there are adverse health outcomes resulting from factors that may discriminate against disadvantaged groups (such as cost of services or discrimination);
- there are specific cultural factors and conditions make mainstream basic services inappropriate (such as Aboriginal health and refugee health services).

Although disadvantaged populations experience significantly greater mortality and morbidity relative to advantaged individuals, they may be less likely to receive appropriate preventive care^{117 118}. Single parent and migrant families, families where the parents are unemployed, on low income or have low education levels are at risk of lower levels of age appropriate immunisation^{119 120}. General practices in socio-economically disadvantaged areas tend to provide immunizations less frequently and have fewer long consultations with their patients^{121 122 123}. Structural and patient factors may explain poorer preventive care status rather than differentials in practitioner's care for disadvantaged patients relative to more advantaged patients within the same practice¹²⁴. GPs may charge co-payments for preventive care which are likely to restrict access to preventive care particularly for low income people in areas with restricted choice of practice such as rural and remote areas. Also there is

The role of primary health care in preventing chronic disease

some evidence that GPs working in disadvantaged areas may respond to financial incentives for better quality of care including preventive care¹²⁵.

Strategies that have been shown to be effective in improving access to preventive care in primary health care include:-

- doctor and specialist nurse clinics focused on preventive care¹²⁶
- outreaching services (such as nurse run clinics for the homeless)^{127 128},
- reducing cost and other barriers to access, and
- developing culturally appropriate services, and increasing skills and resources that will enable people to adopt more health promoting lifestyles.^{129 130}

The WISEWOMAN project coordinated by the Centre for Disease Control in the US has demonstrated cost effective interventions for improving preventive care in disadvantaged groups^{131 132}. This is a multi-component intervention that comprises 1) screening of risk factors for cardiovascular disease and other chronic diseases, 2) lifestyle interventions based on the 5As approach, 3) assurance of access to needed treatment and medication, and 4) follow-up visits for monitoring and evaluation. It uses a socio-ecological model to identify partners at individual, organisational, community and state levels and tailors interventions to the target populations and settings¹³³.

10. The role of primary health care organizations in lifestyle risk factor management

In 2001 the Joint Advisory Group on General Practice and Population Health identified a key role for Divisions of General practice “in supporting general practitioners and practices with education, support and linkages”¹³⁴. Divisions needed to collaborate with State services in improving access to preventive care.

In response to development of a national framework for implementation of behavioural risk factor interventions in general practice¹³⁵, the NSW GP SNAP trial was conducted in two Divisions of General Practice with their associated Area Health Services in 2003-4. The evaluation demonstrated that a multi-strategy approach involving practice visits, training, resource provision and linkages with referral services could bring about changes to the organisation of general practice and the reported assessment and delivery of behavioural interventions.¹³⁶

The Royal Australian College of General Practitioners developed the SNAP guide¹³⁷ to assist GPs in behavioural risk factor management and this was distributed to GPs in 2005. This was followed in 2006 by the Australian government introduction of Lifescripts program. This is a ‘lifestyle prescription’ program which provides a suite of resources (including waiting room materials, assessment guidelines, assessment tools and prescription pads) which have been implemented through Divisions of General Practice which have provided training and practice visits to support their use.¹³⁸

In 2006/7 the Annual Survey of Divisions showed that 85% had a Lifescripts project. In relation to the behavioural risk factors 40% had smoking, 46% nutrition, 54% alcohol and 55% physical activity projects¹³⁹. Most of these projects involved education and support for practices with between 42-49% of Divisions providing direct diet or physical activity services for patients mostly through employment of allied health staff.

The role of Divisions of General Practice in preventive care is also supported through the National Performance Indicators program. Indicators for preventive care include

the assessment and management of risk factors for chronic disease especially smoking and weight management¹⁴⁰.

Primary Care Partnership organisations have been established in Victoria. These provide a structure for integrated health promotion and prevention activities engaging a wide range of community organisations as well as Divisions and State Health¹⁴¹.

10. Options for the future

Primary health care has an important role in the assessment management of behavioural risk factors. As previously illustrated, this potential is currently only partly fulfilled. Changing this will require action at multiple levels to address the significant attitudinal, capacity, structural and organizational barriers:-

1. Financial incentives can encourage preventive care. Assessment should be universally provided but preventive interventions should be focused on those who are at higher risk and made administratively simpler. Health checks appear to improve preventive care although their impact on health outcomes has not been clearly demonstrated. A mix of fee for service and performance targets has been successful in child immunization.
 - *Policy Options:* Rationalise the number of different types of health check items based on frequency, age and population group. Patients at risk are those likely to derive most benefit from interventions. However it should be recognized that identifying these may be difficult from primary care records and the current eligibility requirement for patients for the 45-49 year health check having at least one risk factor does not achieve this end. The evidence based preventive actions to be taken at each health check should be specified. This should include assessment and brief intervention for the behavioural risk factors and referral of high risk patients who are at contemplation or higher stages of change to appropriate allied health providers and/or group programs. The needs of specific groups may be better achieved by funding performance rather than fee for service – for example the proportion of disadvantaged or recently unemployed patients who have a health check - rather than creating a specific item for each group.
2. The Lifescripts program has developed a suite of resources designed to support brief interventions in primary health care including education and lifestyle prescriptions. They have been well accepted by practices where they have been actively supported by Divisions of General Practice.
 - *Policy Options:* Use Lifescripts as a framework for all materials designed to support brief interventions in primary health care. However these will need to be made available electronically and integrated with practice software systems if they are to be adopted more broadly.
3. Health risk assessment tools appear to be useful although evaluation studies are currently ongoing. Current evidence suggests that they are associated with an improved quality of preventive care. The diverse range of health risk assessment tools are likely to confuse primary health care providers and impede their more widespread adoption.
 - *Policy Options:* Rationalize provider health risk assessment tools and ensure integration between tools designed for consumer use and those used by primary care professionals. This is a complex undertaking and will require coordination across NGOs. An organizational framework for this exists in the Vascular Alliance which has supported work on cardiovascular risk assessment.

The role of primary health care in preventing chronic disease

4. Brief interventions in primary health care may be insufficient to achieve and maintain the level of behavioural and physiological change required to prevent diseases like diabetes. GPs currently refer infrequently to providers, programs or services for lifestyle interventions. This is due to a mixture of factors including GP attitudes, cost and availability of referral options, communication and practical constraints. There are similar challenges for self management programs for people with chronic disease in Australia and the UK¹⁴².
 - *Policy Options:* Develop a more comprehensive network of referral services and programs to support behaviour change in primary health care. This needs to be based on standards, be quality assured and to be brokered by existing primary health care services. In particular there needs to be a strong link with general practice coordinated through primary health care organisations. The role of practice nurses in providing interventions may need to be developed subject to local needs (especially where allied health providers are not available)
5. Socially disadvantaged groups especially indigenous Australians are at greater risk of chronic disease. This is partly due to their higher rates of smoking, alcohol consumption, poor diet and obesity. In general they have less access to preventive care largely because of systemic problems such as the higher workloads of GPs working in disadvantaged areas. Effective strategies to increase access include lowering costs, providing outreach and culturally appropriate services and supporting health literacy. There also an need for stronger links between primary health care and public health services to ensure access to “healthy options” such as affordable and appropriate food and support for families and communities to make lifestyle changes.
 - *Policy options:* Discourage primary health care providers from charging co-payments to disadvantaged groups for preventive care. Encourage primary health care providers which provide lifestyle modification services outside the practice and which are tailored to the needs of specific disadvantaged groups.
6. Many Divisions of General Practice are currently actively involved in supporting practices to improve the management of behavioural risk factors, providing and facilitating practices use of Lifescrpts, employing or brokering individual providers and group programs for lifestyle change and linking with state health services and NGOs.
 - *Policy Option:* Develop performance indicators for primary health care organisations more specifically focused on the assessment and management of behavioural risk factors in patients at risk of developing chronic disease. Further develop the role of primary health care organisations in coordinating individual and group referral programs for the behavioural risk factors.
7. Structural reform to primary health care may create opportunities for a more integrated approach. Overseas, patient enrollment has allowed the clear delineation of responsibility for preventive care. This allows practices to know the population they are responsible for providing care to, and recall^{143 144}. However levels of informal registration with general practice are low and probably decreasing in Australia and overseas^{145 146}. New models of integrated primary health care are being developed with support of national and state governments. These are attempting to integrate different primary health care providers within the one service including, in some cases, public and private providers funded by national and state governments¹⁴⁷. These potentially provide opportunity for more innovative allocation of roles in preventive care across different providers.
 - *Policy Options:* Include voluntary patient registration for preventive care in trials of more integrated models of primary health care. The incentive for

The role of primary health care in preventing chronic disease

such registration could be increased access to lifestyle referral providers, services or programs developed as part of the integrated service.

8. There are still many unanswered questions about role of primary health care in preventing chronic disease. Research is currently ongoing evaluating the impact of programs which integrate health assessments, brief interventions and referral services and the impact of absolute cardiovascular risk assessment in general practice . Other un-answered questions include determining the optimal:-
- balance between opportunistic and systematic health assessments (health checks);
 - frequency and population groups for health checks;
 - division of roles between primary health care providers and referral services and how these can effectively work together
 - way to provide more accessible and effective preventive care for disadvantaged groups

These options for the further development of the role of primary health care in behavioural risk factor management need to be considered within the context of broader primary health care reform and changing population health priorities for prevention. The measurable benefits are likely to include improvements to access to and the quality of preventive interventions. Mechanisms need to be established to enable these to be monitored more effectively than at present.

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