

2nd edition

Putting prevention into practice

Guidelines for the implementation of
prevention in the general practice setting



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Guidelines for the implementation of prevention in the general practice setting (2nd edition)

Prepared by The Royal Australian College of General Practitioners 'Green Book' Project Advisory Committee

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The 1998 1st edition of The Royal Australian College of General Practitioners' (RACGP) *Putting prevention into practice: guidelines for the implementation of prevention in the general practice setting*, was an excellent introduction to the delivery of preventive health activities in general practice. Also known as the 'green book', it offered a framework for prevention and a range of effective strategies to improve prevention activities.

Since this edition, knowledge on the subject of prevention has increased significantly. We now know more about what techniques are effective, the processes involved and the most efficient methods to use. The following factors have become even more important:

- Targeting of preventable diseases
- Implementation of prevention activities and strategies in our practices
- Being effective and efficient to improve quality and reduce cost
- Utilisation of information technology and management systems
- Teamwork within the practice
- The use of community resources and support where practical
- The partnership between the general practitioner, the patient, practice staff and other health professionals.

This 2nd edition of *Putting prevention into practice: guidelines for the implementation of prevention in the general practice setting* has been created by a multidisciplinary team of experts for use by general practitioners, practice nurses and practice staff. The guidelines are intended to be a practical resource designed to strengthen prevention activities in general practice. The expert team has created an up-to-date prevention approach and identified effective prevention activities for general practice. The pressures of practice and the time constraints associated with patient consultations have been taken into account.

The companion documents, the RACGP *Guidelines for preventive activities in general practice* (6th edition) ('red book') and the NACCHO/RACGP *National guide to a preventive health assessment in Aboriginal and Torres Strait Islander peoples*, provide the evidence base for the clinical activities.

The body of evidence for prevention in general practice is substantial and evolutionary. References for this edition of the 'green book' were current at the time of going to press. For an updated reference list and a full bibliography please access our online version at www.racgp.org.au.



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How to use the guidelines



These guidelines are intended for use by general practitioners, general practice nurses and other practice staff, and divisions of general practice. The guidelines contain examples of how introduced concepts have been applied to everyday practice and a series of activities that allow reflection on how key strategies can be introduced into your practice. The guidelines are broken down into three parts.

Part 1 – Prevention in general practice

This describes general practice prevention and outlines the rationale for the increasing attention given to prevention in health management and the vital role played by general practice. It outlines an approach to planning for prevention in general practice and introduces a quality improvement model for planning successful preventive programs.

Part 2 – A framework for prevention in general practice

This outlines a prevention framework that draws together the implementation processes and strategies described in the literature and from day-to-day practice. Core elements of the prevention framework are: principles, receptivity, ability, coordination, targeting, iterative cycles, collaboration, effectiveness and efficiency – PRACTICE.

Part 3 – Applying the framework: strategies, activities and resources

This describes how the PRACTICE acronym can be applied to build systematic, evidence based preventive approaches within the consultation, practice, community and health system levels. These sections offer examples of good prevention practice and a range of effective tools and systems that can be used in day-to-day practice.

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Key messages

- Planning underpins a successful approach to improving preventive health activities for patients in your practice¹
- Successful prevention programs require the practice team to systematically plan for change
- Planning involves consideration of preventive health activities at three levels: the patient consultation, the practice and the broader community, and the health system
- The 'plan, do, study, act' (PDSA) cycle can be used to quickly and easily test ideas for improvement, and uses simple measurements to monitor the effect of changes over time

1.1 What is prevention?

Prevention can be divided into three categories:

- Primary: the promotion of health and the prevention of illness, for example, immunisation and making physical environments safe
- Secondary: the early detection and prompt intervention to correct departures from good health or to treat the early signs of disease, for example, cervical screening, mammography, blood pressure monitoring and blood cholesterol checking
- Tertiary: reducing impairments and disabilities, minimising suffering caused by existing departures from good health or illness, and promoting patients' adjustment to chronic or irremediable conditions, for example, prevention of complications (*Figure 1*).

The natural history of disease

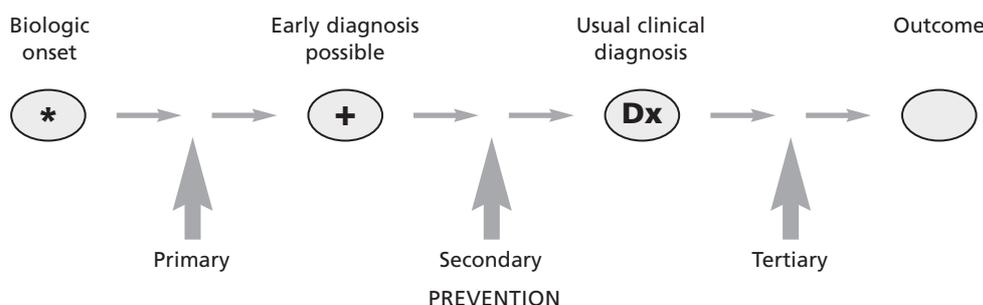


Figure 1. Primary, secondary and tertiary prevention and the natural history of disease

In the context of general practice, a 'preventive approach' incorporates the prevention of illness, injury and disease, rehabilitation of those with chronic illness and the reduction in the burden of illness in a community. A preventive approach recognises the social, cultural and political determinants of health and is achieved through organised and systematic responses. It includes both opportunistic and planned interventions in the general practice setting.

1.2 Why a preventive approach?

Australia's population in 2004 was 20 million people. Of these, 13% were aged 70 years or over. By 2020, the population is estimated to be 23–24 million, with 15–20% in this older age group. Over the past 2 decades, governments and health care providers have become increasingly concerned about the steady increase in demand for health care and our capacity as a nation

to provide quality services to meet that demand.^{2,3} Demand for all types of medical provision exceeds the availability of services.^{4,5}

One of the most compelling and sustainable responses is to implement strategies that reduce the burden of sickness in our community rather than just provide more care. We need to design and implement strategies that help maintain good health, prevent illness, and intervene quickly and effectively when ill health occurs (*Figure 2*).

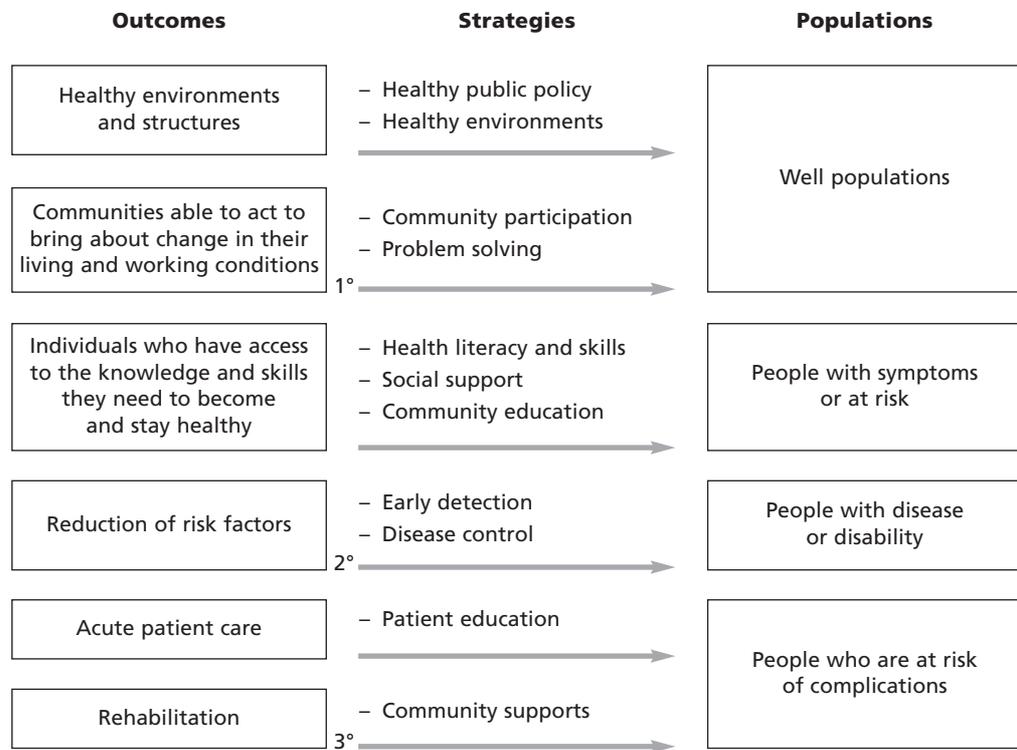


Figure 2. A model for prevention

Source: NHMRC Health Australia, 1995

1.3 Why a GP solution?

General practitioners are at the forefront of the provision of primary medical care in Australia and have enormous potential to encourage patients to take greater responsibility for their health. Through a range of proven strategies, GPs may be able to influence patients to:

- change their lifestyle⁶
- undergo screening for the early detection of a range of conditions⁷
- present for health protecting vaccinations⁸
- manage chronic conditions to improve quality of life.⁹

General practitioners and their professional associations (The Royal Australian College of General Practitioners [RACGP], the Australian Medical Association [AMA], the Rural Doctors' Association of Australia, and others) are aware of this potential. However, their ability to fulfil this preventive role is heavily constrained by factors including the workforce shortages in many outer metropolitan, rural and remote areas, and financial incentives and arrangements that do not enhance quality service.¹⁰

Evidence suggests that work pressures, lack of a supportive infrastructure and time constraints make it difficult for GPs to maintain a current working knowledge of effective and evidence based prevention. This underlies the problems of instituting early intervention strategies and utilising these strategies in daily practice.

1.4 The benefits of prevention

For patients

- Patients will often respond positively to even brief prevention activities and interventions, specifically cancer screening (including mammography,^{11,12} faecal occult blood screening, Pap tests), immunisation,^{13,14} and lifestyle changes (exercise¹⁵⁻¹⁷, smoking cessation, reduction in hazardous drinking and dietary change)
- Effective preventive care enhances quality of life, reduces unnecessary morbidity and mortality and improves health outcomes.^{18,19}

For GPs

- Satisfaction is improved by greater clarification of what is feasible, effective and worthwhile
- There is the potential to better manage risks and address fears of litigation²⁰
- Government financial initiatives and programs are available (special grants, practice manager or general practice nurse and/or other allied health professionals)
- Patients expect their GP to provide preventive care
- Patients value GPs taking a more holistic and comprehensive approach to care.²¹

For practice staff

- Efficient approaches to prevention can enhance the role of practice staff in the delivery of care²²
- Better results may be achieved through prevention²³
- Roles and responsibilities are clearer in the provision of care²⁴⁻²⁶
- Teamwork is encouraged.^{27,28}

1.5 Planning for prevention

Effective implementation is based upon the use of a clear framework and planning processes. This method is based on the common elements from a range of models and approaches including the use of a settings approach,²⁹ organisational change,³⁰⁻³² continuous quality improvement,^{33,34} systems change, PRECEDE-PROCEED, community orientated primary care,³⁵ collaboratives,³⁶ complexity theory, and diffusion theory and models.³⁷⁻⁴¹

Planning underpins a successful approach to improving prevention for patients in your practice. However, improving prevention in general practice requires:

- deciding whether you are ready for change
- flagging barriers in relation to change, and
- acknowledging difficulties and issues and thinking about how to overcome them.

Factors affecting willingness or capacity to change may be related to attitudes, skills and values of the individual, as well as the broader organisational context.

1.5.1 Stages of change

The Transtheoretical Model of Behaviour Change developed by Prochaska and DiClemente, is commonly referred to as the 'stages of change' (*Figure 3*) model and is widely used to determine patient readiness for change in many clinical settings. The model recognises that:

- behaviour change does not occur in a linear fashion
- patients progress through predictable stages of change before reaching an action stage
- every stage of change is necessary because people learn from each stage, and
- one intervention cannot be applied to all patients as some will be at different stages of 'readiness' than others.

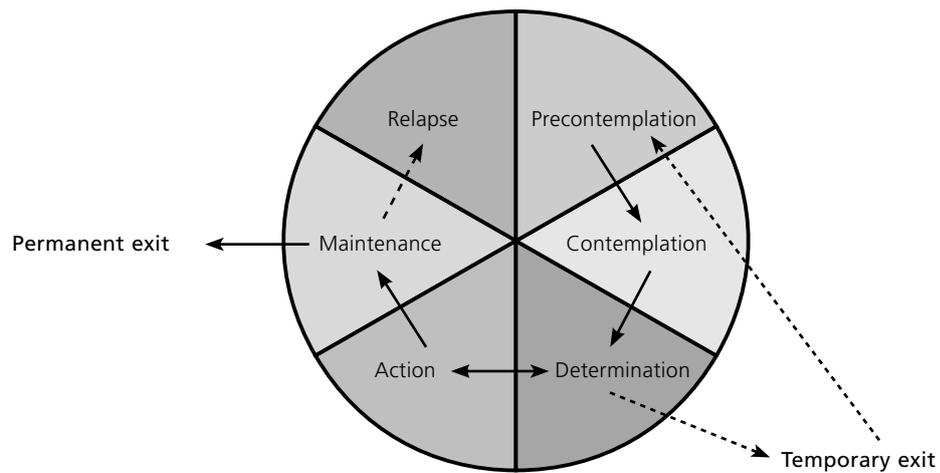


Figure 3. Stages of change model

Stages of change:

- Precontemplation: the patient is not intending to change their behaviour for at least 6 months
- Contemplation: the patient has not begun to change their behaviour but intends to do so within 6 months
- Determination: the patient has not begun to change their behaviour but intends to do so in the next 30 days
- Action: the patient has changed their behaviour within the past 30 days
- Maintenance: the patient has practised the new behaviour for at least 30 days.

Relapse occurs from time to time and patients may switch from maintenance to relapse to action in a continuing cycle.

1.5.2 Change and your practice

Knowing what needs changing and then setting goals for improving prevention performance is the first step in planning. Ultimately this is about building a sense of common purpose about what has to be changed. To get started, conduct a needs assessment:

- Ask your patients about their prevention needs and priorities⁴²
- The Practice Prevention Inventory (see *Appendix 1*) provides a tool for assessing current performance in prevention
- Use case note audits to identify areas for improvement
- Use your practice team's knowledge and your patient register to identify practice prevention priorities
- Gather and use population health data^{43,44}
- Use or adapt a set of priorities identified by a reputable source.

ACTIVITY

Discuss with staff:

- What do we want to improve?
- What is our goal?
- What changes do we need to make?
- What are the benefits to the patient, the team and the practice?
- What are the barriers to change?
- What are the consequences of not changing?
- What would facilitate change?

It may be helpful to revisit these questions with staff periodically during the planning and implementing of changes

The next step is to gather the practice team together to consider the information obtained in the needs assessment and to prioritise processes you want to change. The key to success is to choose a few areas where change is relatively simple to achieve, and where there are likely to be clear and measurable benefits for GPs, practice staff and patients. A coordinating group of interested practice staff should be convened to manage the process.

ACTIVITY

- Identify who in the practice or division will coordinate the needs assessment
- Hold a team meeting: encourage members to consider the summary information, identify priority issues, and decide which processes might be improved and to agree on where to start
- Appoint a coordinating group to drive the process and report back to the practice team on a regular basis

1.5.3 The 'plan, do, study, act' cycle

The 'plan, do, study, act' (PDSA) cycle (*Figure 4*) uses simple measurements to monitor the effects of change over time. It encourages starting with small changes, which can be built into larger improvements quickly, through successive cycles of change. It emphasises starting unambitiously, reflecting and building on learning. It can be used to test suggestions for improvement quickly and easily based on existing ideas and research, or through practical ideas that have been proven to work elsewhere.

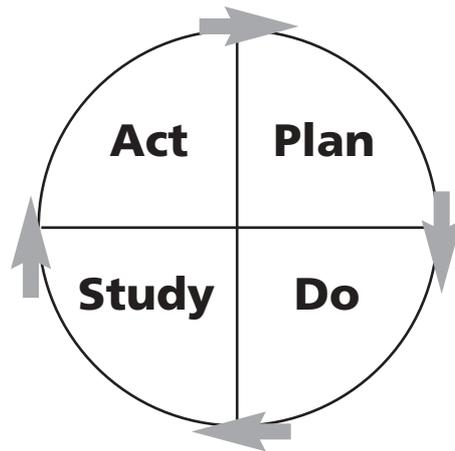


Figure 4. PDSA cycle

Plan the change (P)

- What do you want to achieve, what actions need to happen and in what order?
- Who will be responsible for each step and when will it be completed?
- What resources are required?
- Who else needs to be kept informed or consulted?
- How will you measure changes to practice?
- What would we expect to see as a result of this change?
- What data do we need to collect to check the outcome of the change?
- How will we know whether the change has worked or not?

Do the change (D)

Put the plan into practice and test the change by collecting the data. It is important that the 'do' stage is kept as short as possible, although there may be some changes that can only be measured over longer periods. Record any unexpected events, problems and other observations.

Study (S)

- Has there been an improvement?
- Did your expectations match what really happened?
- What could be done differently?

Act on the results (A)

Make any necessary adaptations or improvements, acknowledge and celebrate successes. Collect data again after considering what worked and what did not. Carry out an amended version of what happened during the 'do' stage and measure any differences.

EXAMPLE Applying the PDSA cycle – identifying patients with heart disease

	Cycle 1	Cycle 2
P	<p>The team decides to identify CHD patients through repeat prescription requests by looking for patients receiving nitrates for angina. (Patients usually place their requests in a box on the reception desk)</p> <p>The change they are going to test for is the monitoring of repeat prescriptions</p> <p>The data they are going to collect is the number of patients on nitrate prescriptions</p> <p>The reception desk box will be replaced with a notice saying that patients should hand their requests to a receptionist</p> <p>The receptionist will look at the items on the prescription requests to identify any nitrate prescriptions (a list of drug names will be printed out and stuck on the wall in reception)</p> <p>The names of patients on nitrates will be noted on a form kept under the reception desk. This will be done for 1 week, after which the numbers of patients identified will be counted</p>	<p>The practice nurses (PNs) decide to use a quick checklist when using the notes to identify patients with CHD</p> <p>PNs agree to look for the following when reviewing the notes: CHD diagnosis, a history of myocardial infarction or angina or high blood pressure</p> <p>The PNs agree to review five sets of notes each per day for 2 days</p> <p>PNs decide to see how easy it was to get the information by measuring how long it took to go through each set of notes</p>
D	<p>The repeat prescription box was removed and a simple form produced to record patient names</p> <p>A notice was put up asking patients to hand in their repeat requests to reception staff</p>	<p>The PNs divide the notes between each other and use a checklist to record patients who fulfil the inclusion criteria</p>
S	<p>After 1 week, 22 patients on nitrates had been identified and their names recorded</p> <p>The receptionists had no difficulties scanning the repeat requests, even during busy times, but had noticed that two drug names were missing from their list. They also thought it would be a good idea to record patients' birth dates as some patients had the same name</p>	<p>The PNs found there was variation, ranging from 30 seconds to 5 minutes, in the time it took to go through the notes</p> <p>Two of the PNs found no problem going through five sets of notes during a working day, but the part-time nurse found it difficult to get through her notes in the time allowed. The PNs agreed that when going through the records, it would also be useful to check if the patient had had a cholesterol check in the previous 2 years</p>

	Cycle 1	Cycle 2
A	<p>After discussion, it was decided to:</p> <ul style="list-style-type: none"> • continue identifying CHD patients and their date of birth for another month and then study the results again • update the list of nitrates to include all relevant drug names • increase the size of the print on the notice about the repeat prescription box • begin a new PDSA cycle and for the PNs to check the notes of those patients identified in order to confirm they have CHD <p>Shiong Tan, Perth, Western Australia</p>	<p>The part time PN reduced the number of notes reviewed each day</p> <p>Cholesterol checks were added to the list of markers for CHD</p> <p>The next PDSA cycle could address how to capture new diagnoses for the developing CHD register by using a checklist that administrative staff could use. The PDSA cycle could then address the percentage of patients on the current CHD register who took a particular medication and could document the need for review</p>

Cycles of improvement may occur at different levels and new actions may be planned as a result of previous cycles. Alternatively, new skills may be learned, barriers to change overcome and new areas targeted for improvement. Testing small changes sequentially means design problems may be detected and amended earlier rather than later. Similarly, performance tends to fall away with time. Repeated measurement of both process and outcomes helps to identify current performance and any areas of concern.⁴⁵ Self assessment of performance, while necessary, often overestimates performance and may not be either accurate or sufficient.⁴⁶ When reviewing your progress:

- check that your goals have been achieved
- decide if the goals have been realistic
- see if the energy invested has led to the desired degree of change. Is the return worth the effort?
- document which factors have helped or hindered the change
- are there any further strategies or measures needed to bring about the desired changes and/or improve cost effectiveness?

Resources

- National Primary Care Collaboratives at www.npcc.com.au
- National Primary Care Development Team at www.npdt.org

A framework for prevention in general practice

Key messages

- Current prevention performance can be improved. Effective implementation of prevention requires three main components⁴⁷:
 - an appropriate framework
 - clear and well defined processes
 - use of evidence based strategies
- The core elements of a prevention framework are principles, receptivity, ability, coordination, targeting, iterative cycles, collaboration, effectiveness and efficiency (PRACTICE)

Consider, that for a typical 100 patients seen by a GP:

- 10–15 patients would not have had their blood pressure measured in the past 2 years
- 20–30 adults would not have had their lipids tested in the past 5 years
- out of 60 women patients, 12–15 would not have had a Pap test in the past 2 years
- 60–70 patients would not have ever been asked about alcohol consumption
- 20 patients would not have been asked about smoking, and only 10 would have ever had advice from a GP to quit
- 30–50 people with a tetanus prone wound would not have had a tetanus booster
- five out of 15 patients aged 65 years and over would not have had an influenza vaccination this year, and 16 out of 25 would not have had the pneumococcal vaccine in the past 5 years
- 3–6 of every 20 women aged 50–65 years of age would not have had a mammogram in the past 2 years.^{48,49}

And more generally:

- Current prevention performance falls below a desirable standard
- There is a long lag time between the availability of new knowledge and its implementation into routine clinical care
- While there is good evidence that a number of implementation strategies improve the delivery of clinical care and health outcomes, practices need to carefully target which strategies they use
- Health outcomes can be improved by paying closer attention to implementation issues.⁵⁰

Levels of prevention activities in general practice which are either below a desirable level and/or below national targets include:

- enquiries about alcohol consumption and smoking
- counselling about hazardous drinking, smoking, inactivity and diet
- immunisation in adults (especially pneumococcal vaccination and patients at risk)
- cancer screening (mammography, Pap tests, colorectal cancer screening)
- assessment of other cardiovascular risk factors (including blood pressure and lipids)
- achievement of desirable endpoints for a number of chronic diseases.

A systematic approach that focuses on the relevant population is associated with improved prevention and health outcomes.

2.1 A prevention framework

Implementation is challenging and requires understanding of barriers. Consideration of the questions and issues in the prevention framework 'PRACTICE' is likely to facilitate an improvement in the delivery of preventive (and clinical) care (*Table 1*). See *Appendix 2* for a quick guide to putting prevention into PRACTICE.

P	—————>	PRINCIPLES
R	—————>	RECEPTIVITY
A	—————>	ABILITY
C	—————>	COORDINATION
T	—————>	TARGETING
I	—————>	ITERATIVE CYCLES
C	—————>	COLLABORATION
E	—————>	EFFECTIVENESS AND EFFICIENCY

Table 1. PRACTICE prevention framework

2.1.1 Principles

Has your practice:

Adopted a patient centred approach?

A patient centred approach is associated with improved patient outcomes. Key elements include:

- actively involving the patient in the consultation
- encouraging patient autonomy
- encouraging a greater patient role in decision making
- supporting patient self management, and
- adopting a more holistic approach to clinical care that includes and values prevention.

Adopted a systematic and whole of practice population approach to preventive care?

For example, does the practice identify and target all patients eligible for specific prevention through using a prevention questionnaire to identify prevention needs and assist in planning activities. The effectiveness of a preventive or clinical activity is made up of:

- the efficacy of the intervention (does it work? does it do more good than harm?)
- the number of eligible patients in the target group who are offered and accept/take up the intervention in real world settings (does everyone who need the intervention activity get it?)⁵¹⁻⁵³

You can improve effectiveness by either using more efficacious interventions or ensuring that more of the population who are eligible for an intervention receive it. General practitioners tend to focus on maximising care for individual patients. While this is highly desirable, high workloads make achievement of best practice difficult. To follow through on all recommended prevention interventions would take an estimated 7.4 hours per day for the average GP.^{54,55} It has been estimated that it would take an additional 1–2 hours each day to address chronic disease in all consultations.

The challenge for the GP is to balance the provision of best practice for the individual while ensuring all patients in the practice are being provided with good care. One strategy that looks at both the efficacy and coverage/uptake when attempting to provide best practice overall, is the consideration of the 'return on effort'. Think about what is the yield from spending a certain amount of time and how does this increase if you spend more time (see *Appendix 3*).

Incorporated strategies to identify and address health inequalities and disadvantaged groups⁵⁶ who carry a larger burden of illness, experience greater difficulties with access to preventive care and encounter more frequent barriers to improving their health status?

Some inequitable disease burden is preventable through primary and secondary prevention, encompassing health promotion and early detection and intervention. A more comprehensive approach to working in disadvantaged communities will take account of literacy, income, cultural values, access to services, and media. In this way, consideration of the capacity of individuals to participate in an informed way in preventive care becomes part of our planning for preventive services at a practice level. Understanding and accounting for this in planning preventive services is important to avoid blaming people or groups in the community for 'nonadherence'.

There is now good evidence that contextual factors are important determinants of how clinical care, including preventive care, is offered and taken up. This can be important at the one-to-one consultation, the practice, and the wider community.

Other principles guiding effective implementation

- Any implementation framework and associated strategies should be realistic, feasible, transparent and congruent with the goals and philosophy of the practice and practice staff
- Implementation of preventive activities should respect the context and complexity of general practice
- Strengthen partnerships and develop collaborative approaches to prevention
- Implementation strategies should be evidence based and outcomes focused
- The process should address both short and long term implementation (sustainability) issues, and maintain a commitment to a quality culture.⁵⁷

2.1.2 Receptivity

Receptiveness is often overlooked and needs to be considered for all those who are likely to be involved:

- Why consider change? What's in it for you and the practice? What's in it for your patients?
- What are the factors that influence whether you will take up or extend the implementation strategy/program?

Do the GPs and practice staff believe that providing a systematic and population approach to the delivery of preventive care:

- is important and worthwhile
- is feasible and realistic
- will be adequately supported
- can be made a routine part of the practice?

General practitioners and practice staff are more likely to be involved in the delivery of preventive care if they:

- believe that prevention is an important and worthwhile part of their role and congruent with professional and practice goals
- believe that they can deliver it effectively and/or efficiently
- can see the benefits and the process is worthwhile (for the GPs, patients, and larger system), or provides a relative advantage over existing approaches
- have the relevant skills
- have the time and necessary resources⁵⁸
- have patients that are receptive to their efforts
- believe that prevention is both feasible, can be tailored to the setting/context and is sustainable in their setting.⁵⁹

Are the implementation strategies used to deliver prevention activity:

- transparent (ie. everyone is clear about what needs to be done)
- respectful (eg. of abilities, skills, workload)
- congruent/consistent with your professional goals and the practice goals?

Activities implemented without discussion or engagement of participants are less likely to succeed.⁶⁰ Similarly if the process reflects values that are different to those of the GPs and practice staff, then the process will be more difficult.^{61,62} For example, adding in another task to the practice staff's existing workload without considering whether they have the time and ability to do it is likely to generate friction. Similarly, suggesting a no smoking policy in the practice will also be challenging if many of the GPs and practice staff smoke. Receptivity to a more systematic approach to implementation will be enhanced if it:

- builds on the knowledge and skills of the participants
- promotes an active engagement of them in the process
- targets key values in the practice
- is conducted in an open and supportive manner.

Do the benefits of the suggested approach exceed the costs?

Do the GPs and practice staff believe that the proposed changes will result in improved implementation? What are the costs associated with changing?

Are there mechanisms/strategies that help make the outcomes visible?

Implementation is more likely when the outcome is visible or observable. This makes implementation of many prevention activities more problematic as they are often preventing the occurrence of an illness or disease. For example, advice about smoking is provided in the expectation that the patient will be less likely to get lung cancer or heart disease. However, the patient may not feel any different (and may occasionally feel worse through giving up something they enjoy).

A useful strategy is to select appropriate (observable or measurable) proxy measures of an outcome that may not be easy to measure (eg. using blood pressure or cholesterol levels as markers of [reduced] risk for vascular disease). The prevention equivalent is to monitor the uptake of prevention activities (eg. immunisation coverage) or alternatively, the patient reported behaviour (eg. smoking status, alcohol consumption). This helps to ensure that all involved can see that something is being achieved. Providing meaningful feedback will require measurement of performance.

2.1.3 Ability

What knowledge do the GPs and practice staff need to achieve this?

Knowledge of effective and efficient prevention strategies is not sufficient. Knowledge of how to make it happen and ensure that the process is maintained is also required.^{63,64}

What are the GPs' attitudes/beliefs and values toward prevention activities and the patient's ability to change?

Positive GP beliefs and values about preventive care are associated with improved performance.⁶⁵⁻⁶⁹

Do the GPs and practice staff have sufficient skills in:

- motivational interviewing techniques/skills,⁷⁰ interviewing strategies and effective behavioural strategies
- behavioural skills for brief intervention strategies⁷¹⁻⁷⁴
- counselling skills.

Is there a supportive organisational infrastructure?

A supportive organisational infrastructure includes:

- practice policies
- accessible and evidence based guidelines
- availability of appropriate resources (eg. practice nurse)
- standing orders, protocols and procedures

- a range of delivery options (eg. delegation to a practice nurse, multidisciplinary clinics, groups, referral options)
- information management (IM) and information technology (IT) systems
- waiting room materials
- screening and information gathering materials and strategies
- consultation materials.⁷⁵⁻⁸⁴

2.1.4 Coordination

In planning and implementing prevention activities, what processes and activities will help to make it happen?

Coordination can be improved in the practice through:

- the presence of a facilitator⁸⁵⁻⁸⁷
- clarification of roles and responsibilities in prevention (eg. are there clear job descriptions? Are the various roles and responsibilities delineated?)
- good communication, keeping all staff informed
- sufficient planning, having staff attend the practice meeting, discussing delivery of the programs
- having a plan.

2.1.5 Targeting

Targeting involves:

Identifying the priority prevention areas and agreeing, including the level of need for the prevention activities

The identification of prevention areas to tackle first is influenced by a range of factors such as burden of illness, frequency, ability of the GP to alter the outcome, feasibility, professional values and preferences.

Identifying specific target groups for the prevention activity

Targeted groups can include those eligible for specific prevention activities, those at higher risk and those who express greater interest in making changes. Targeting at risk and priority populations is especially important. Prevention reduces health inequalities in disadvantaged groups and patients with chronic disease and/or 'at risk' behaviours. While an opportunistic approach to prevention targets individuals attending the practice, it rarely encompasses all patients eligible for a prevention activity. Opportunity for prevention is influenced by:

- whether patients regularly attend the practice
- whether it is known that the patient needs a prevention activity
- time to assess the need and interest and time to provide prevention
- patient interest in and response to intervention.

Setting a level of performance

Identifying a target goal provides something to aim for and also provides a benchmark to measure progress.

Identifying and addressing barriers to implementation

Knowing how well the practice is performing together with an understanding of the barriers will assist in the development of appropriate strategies to overcome the difficulties. Consider whether there is:

- adequate knowledge
- positive attitudes/beliefs about prevention
- sufficient skills
- enough time, resources and personnel
- adequate organisational infrastructure.

Deciding which implementation process(es) to use

One method of establishing both (patient) need and eligibility is to ask patients to complete a prevention survey while waiting to see you. A patient prevention survey (see *Appendix 4*) can be completed by patients in less than 4 minutes and contains the appropriate prevention activities indicated by current evidence. Patient surveys and discussing prevention with the patient may help to determine current performance and monitor progress.

Targeting the implementation process to the right level(s)

Making changes at one level without paying attention to other levels is less likely to be associated with successful implementation. Implementation needs to be targeted to each of the following levels:

- individual, eg. education, skills development, feedback, academic detailing, guidelines
- group, eg. team development, clinical audit, guidelines
- organisation, eg. organisation culture and development, continuous improvement
- larger system, eg. accreditation, payments systems/incentives, national bodies.

2.1.6 Iterative cycles***Is there a cyclical planning process that measures progress and ensures necessary adaptation?***

Measurement and evaluation is essential to determining that the implementation processes have been carried out, barriers to implementation identified, and implementation strategies have been effective. This process creates a learning cycle, hopefully leading to more effective strategies being developed and/or to discarding ineffective strategies. Improvement takes time and a commitment to reflection on progress.⁸⁸ An iterative approach will help both the GP and practice address the following questions.

Does the practice use a 'plan, do, study, act' process to review progress and develop strategies for improvement?

Assessment and feedback can be used to adjust an intervention or determine priority areas.

Does the implementation process need to be changed?

Is there a logical evidence based argument that an alternative approach is preferable to the current one? Is there evidence that the GPs and the practice are not using a preferred alternative? Can you measure your progress in implementing changes? What is the problem with the current approach? What strategies are used to identify progress? Measurement usually requires the identification of a denominator or all patients in an eligible or target group. Practice registers and patient surveys can assist the practice in identifying eligible patients to be included.

Is there an opportunity for reflection?

Deciding on a change to the delivery of preventive care requires both measurement of progress and a discussion of the findings. All those involved need to be informed of the progress in order to facilitate making further changes.⁸⁹

2.1.7 Collaboration***Are all the key players involved?***

Provision of best practice in both prevention and chronic illness would take the average GP 9–10 hours per day, therefore it would be difficult to provide high levels of prevention outside a partnership approach. Partnerships and collaboration operate at different levels: between the GP and patient, GPs and practice staff, and between the practice, the division of general practice, and/or the broader community and the health system.

There is evidence that when GPs regard patients as active partners in seeking preventive health care advice patients are more likely to adhere to treatment plans.^{90,91} This requires teamwork and respect for others' ideas and views.⁹² Referring to and communicating with certain services and community agencies may be the most cost effective way of providing some types of prevention

activities for patients. All prevention activities need to be integrated and collaborative.

To what extent does the practice coordinate with the big picture?

A range of other players are involved in promoting health and preventing disease. A number of studies^{93,94} have demonstrated that collaboration and teamwork was associated with the largest gains in prevention outcomes. Partnerships are associated with improved delivery of care.

Is there adequate teamwork?

In reflecting on teamwork you should consider the nature and extent of collaboration necessary with key players. Factors important in the development of collaboration^{95,96} include:

- adequate time to develop relationships, working arrangements and trust
- familiarity and acknowledgment of expertise
- recognition and acceptance of separate and combined areas of activity
- local advocates and champions
- adequate commitment to the process
- sufficient support and resources
- sharing of vision, goal setting, planning and responsibility
- clarification of roles, responsibilities and tasks
- decision making, problem solving and goal setting
- regular and open communication
- opportunities for cooperation and coordination.

2.1.8 Effectiveness

Much time is spent providing either ineffective care or effective care inefficiently. Effective strategies for prevention in general practice are increasingly well documented. The RACGP *Standards for general practices* (3rd edition) require practices seeking accreditation to demonstrate that they utilise appropriate guidelines in consultations with their patients.

Are GPs and practice staff strategic in their approach to implementation?

General practitioners are more effective when they focus on target conditions that have a significant burden of morbidity,⁹⁷ use an approach that has a theoretical rationale,⁹⁸⁻¹⁰⁵ and there is a clear and accepted role for the GP where the prevention target can be influenced by GP actions and the contextual issues are considered and addressed.

Do GPs use a range of implementation strategies with different groups and at different levels?

A number of systematic reviews have demonstrated that implementation strategies need to be combined strategically, address identified barriers, and use a conceptual framework.¹⁰⁶⁻¹¹² Effective strategies that support improved prevention performance in general practice include:

- identifying and instituting a prevention coordination role within the practice
- securing the services of a practice nurse
- developing a strong multidisciplinary teamwork approach
- ensuring good information management systems for efficiency
- making the best possible use of existing partnerships, divisions of general practice and other community supports.

Are GPs and practices systematic in their approach to implementation?

Do you utilise the 'less is more' approach, ie. attempt to provide some components of the prevention activities to all patients rather than providing a lot of input to fewer patients?

What implementation strategies and processes are used?

Effective implementation strategies and processes are described in Part 3.

2.1.9 Efficiency

Has the efficiency of the implementation process been considered? How feasible ('do-able') is it to provide the prevention activities routinely?

It is not possible for GPs and their practices to provide all recommended prevention services. Practices need to decide where to focus their attention in order to deliver the best possible outcomes with the available resources for the groups of patients targeted.

Have the processes been incorporated into the practice culture? Has attention been paid to making the processes sustainable?

To make prevention processes sustainable, ensure that the process is consistent with the practice and professional goals, monitor and review practice procedure and policy manuals, clarify roles and tasks, appoint a coordinator and encourage all staff to contribute.¹¹³

What is the most important contribution that the GP and practice can make to the delivery of prevention?

General practitioners should complement their prevention activities by using effective or more efficient population/community based prevention strategies. Examples include population screening programs such as mammography and Pap tests, population registers (eg. immunisation register, cancer registers) and media strategies for issues such as smoking cessation and hazardous drinking.

EXAMPLE The reality pyramid – smoking cessation

Figure 5 presents a clear case for using an integrated, collaborative, and systematic approach to prevention in general practice. The pyramid highlights the less is more (1 minute for prevention) approach. The base level of the pyramid outlines the practice infrastructure that supports the GP (and others) to provide preventive care. It emphasises the value of teamwork and demonstrates that utilising other practice resources and establishing appropriate reminder and referral systems can facilitate brief interventions. It supports the notion that it is unrealistic to expect the GP to be the sole provider of preventive care within the practice. It provides a prompt for the best use of time during a consultation, starting with a very brief intervention for most patients and then using more intense strategies with fewer patients. The interventions should cover the activities likely to have the biggest impact for the patient in most circumstances. It recognises that spending more time is often necessary, but reflects the reality that most GPs have about a minute of 'disposable' time to raise and/or discuss an issue they think is pertinent and important to the patient. The 1 minute can be spent in a number of ways. For example:

- focusing on specific evidence based guidelines
- justifying why an additional consultation is worthwhile (you might suggest to the patient that the unassisted quit rate is around 3–7%, with GP assistance, help and support, this success rate can be boosted 4–6 fold. Given the difficulty with quitting, anything that helps to maximise success seems a sensible choice provided it is acceptable to the patient)
- justifying why seeing someone else (eg. practice nurse) may be helpful
- outlining the value and effectiveness of the Quit line

John Litt, Flinders University, South Australia

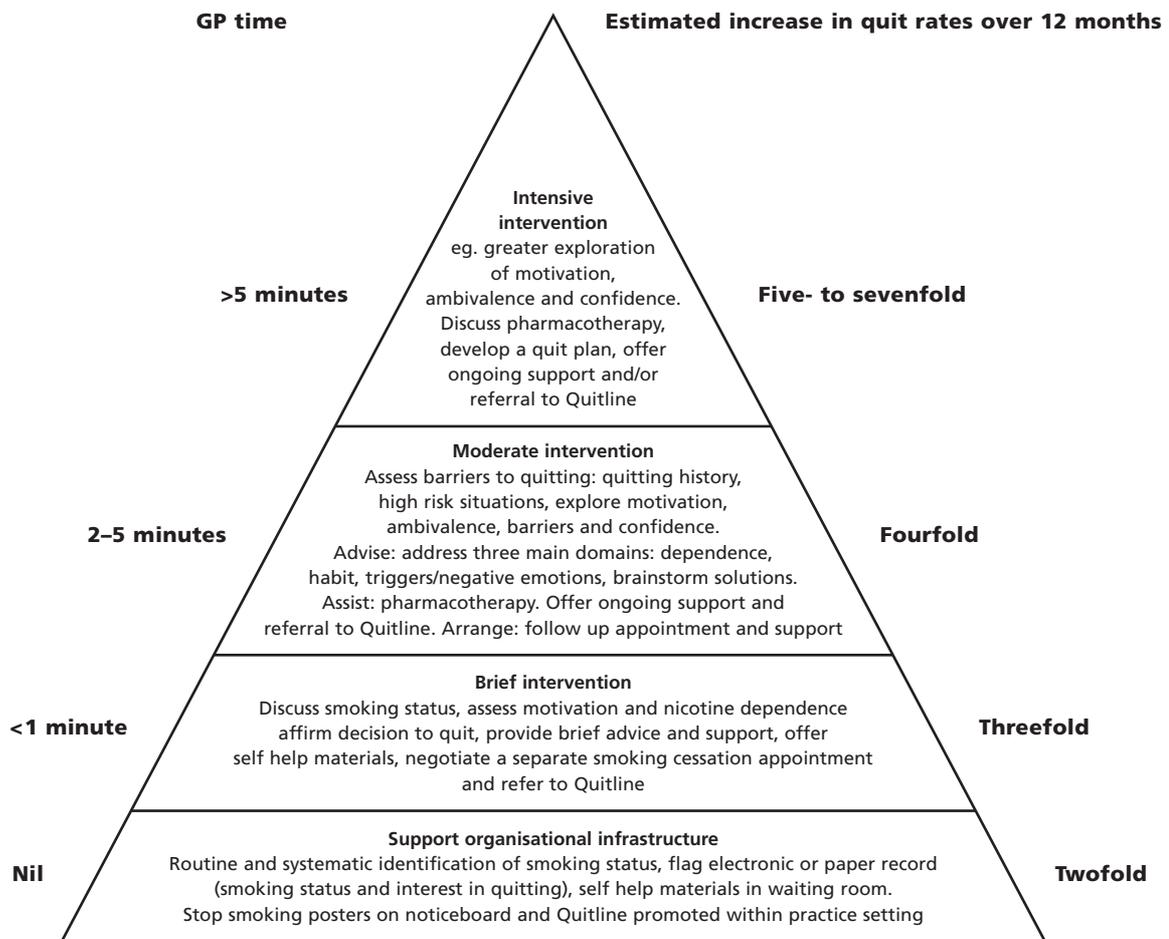


Figure 5. Reality pyramid for smoking cessation

Reproduced with permission from Blackwell Publishing: Litt J, Ling M-Y, McAvoy B. How to help your patients quit: practice based strategies for smoking cessation. Asia Pacific Family Medicine 2003;2:175-9.

2.2 Key strategies for improved prevention performance

Key messages

- Identifying and instituting a prevention coordination role within the practice
- Securing the services of a general practice nurse
- Developing a strong teamwork approach
- Ensuring good information management systems for efficiency
- Having a 'patient centred' approach to one's practice
- Using motivational interviewing techniques
- Making the best possible use of existing partnerships, including divisions of general practice, other health care providers and community supports

2.2.1 Patient centred approach

Evidence indicates that patients want an approach that 'seeks an integrated understanding of the patient's world – ie. their whole person, emotional needs and life issues... (that) finds common ground on what the problem is and mutually agrees on the management... (and) enhances prevention and health promotion, and... enhances the continuing relationship between the patient and the doctor'.^{114,115}

Strategies that support a patient centred approach within the consultation are explored in detail in Part 3.

2.2.2 A designated coordinator for practice prevention

Most practices consider that a practice manager is a key person in the practice who ensures that the financial business of the practice is well managed. Coordination of preventive (and clinical) care is also needed to ensure that the organisational infrastructure supports high quality care. A practice prevention coordinator may assist in the implementation of the prevention plan, clarify roles and responsibilities, and support and foster teamwork.^{116–118}

EXAMPLE The role of the clinical coordinator

Our practice has recently employed a clinical care coordinator whose primary responsibility is to liaise with GPs, practice based allied health providers and other community based providers to ensure the coordination of care for patients. This primarily involves organisation of patient appointments, patient follow up, general support for practice based staff, staff education and coordination of practice room occupancy.

Richard Bills, Central Highlands Division of General Practice, Victoria www.chdgp.com.au

2.2.3 Practice nurses

The employment of a practice nurse (PN) may reduce the GP's workload and provide more rapid access to care for patients.^{119,120} Other areas in which PNs have been shown to be effective includes counselling patients with health problems related to their lifestyle, including smoking, hazardous drinking, nutrition, immunisation, and chronic disease including cardiovascular disease, asthma and diabetes.

Practice nurses may be cost effective as they can be supported through a range of Australian Government incentive programs including the Practice Incentives Program (PIP) Practice Nurse Incentive, 3+ Asthma Program, Diabetes Program, 75+ health assessment, Aboriginal and Torres Strait Islander peoples health assessment, immunisation, wound management, Pap test Medicare rebates, the Nursing in General Practice Training and Support initiative, and training scholarships.

EXAMPLE A practice nurse clinic

A PN runs a 'healthy lifestyle clinic'. Patients are charged \$5.00 for this service. The PN uses a questionnaire to elicit patient needs and interests which can lead to further appointments at the practice including the weight loss clinic, the GP, or other providers (such as allied health).

Mary Mathews, Monash Division of General Practice, Victoria www.monashdivision.com.au

EXAMPLE 75+ health assessment

The PN can manage the overall process of the 75+ health assessment by:

- reviewing the practice database to identify people aged 75 years and over eligible for health assessments (during this process the patients who have died, moved or entered residential care may be eliminated)
- sending invitation letters or contacting patients, or flagging the case notes to prompt the GP to ask the patient about the assessment at the next visit
- organising appointments to visit the patient's home to collect comprehensive information required for the assessment. This may include risk of falls, fire alarms, security, food hygiene, medication management and social issues
- organising an appointment for each patient to see the GP, and informing the GP of the issues identified
- finalising the assessment after the consult with the GP and organising any further action that is required (eg. referral to other services)
- updating the recall and reminder system for repeat assessments.

Mary Mathews, Monash Division of General Practice, Victoria www.monashdivision.com.au

Resource

- Australian Divisions of General Practice has developed a series of business cases for PNs in a range of urban and rural practices at www.adgp.com.au/site/index.cfm?display=4002&filter=i&leca=71&did=27843450

Defining the role of the practice nurse

General practice nursing in Australia identified four different, but overlapping, dimensions of PN responsibilities:

- clinical care: reflects the nurse's responsibility to undertake clinical based procedures and activities
- clinical organisation: reflects the responsibility to undertake activities that require management, coordination and higher level administration of clinical activities, particularly a systems approach
- practice administration: reflects the responsibility to undertake activities that provide administrative support to the general practice as a business enterprise, and
- integration that reflects the responsibility to develop effective communication channels within the practice and between the practice and outside organisations and individuals.

The document 'Nursing in general practice competency standards' recognises that the role of nurses in general practice varies according to a number of factors including the population profile of the practice, the general practice structure and employment arrangements. The authors suggest that in accordance with education preparation, professional nursing standards, relevant registration and general practice context, nurses could be involved in conducting clinics, health assessments and chronic disease management.

In considering preventive care, the PN role could include:

- activities focused on individual patients (eg. 'hazards in the home' assessments and diabetes management)
- group activities (eg. asthma or diabetes clinics)
- clinical organisation responsibilities (eg. managing recall and reminder systems and patient registers, patient education materials, patient surveys and the notice board)
- integration responsibilities in both the practice and the community (including communication, prevention planning and coordination, liaison and advocacy).

EXAMPLE The role of the practice nurse in reducing GP workload

Some months into her job, one PN began managing the computerised diabetes and asthma registers, reviewing patient care plans and entering test/follow up reminders in the clinical record. Incidentally, this ensures the practice is eligible for Service Incentive Payments. Patients are impressed by the follow up, and feel 'cared for' and 'supported' and the GPs feel 'less pressured'. Along with local GPs, this PN has organised occasional health information and screening sessions covering a range of topics including cerebrovascular disease, diabetes, and men's health, and is now enrolled for training in order to undertake Pap tests and provide counselling, with a view to further reducing GP workload and work pressures.

Beth Royal, Robinson Street Medical Centre, Camperdown, Victoria

Resources

- *General practice nursing in Australia* provides a comprehensive list of specific prevention activities for the PN at www.racgp.org.au/nursing
- The Hunter Urban Division of General Practice's Practice Nurse Program at www.hudgp.org.au/index.cfm?fuseaction=homepage
- The Monash Division of General Practice resource directory at www.monashdivision.com.au/
- The General Practice Divisions of Victoria provides examples of job descriptions for PNs at www.gpdv.com.au

- Nursing in general practice competency standards at www.anf.org.au/nurses_gp
- Department of Health and Ageing Nursing in General Practice website at www.health.gov.au/internet/wcms/publishing.nsf/content/pcd-nursing-index
- Nursing in general practice – a guide for the general practice team at www.rcna.org.au/pages/nsggp.php

2.2.4 A practice prevention team

'Teams out perform individuals acting alone... especially when performance requires multiple skills, judgments and experiences'. Most of teamwork builds on commonsense ideas like the importance of goal setting and mutual accountability. There is often a natural resistance to moving beyond individual roles and the accountability that goes with that, and this would need to be addressed. Barriers to overcome include fear of being personally disadvantaged in the team, past experiences that haven't achieved benefits, and the pressure of existing workload. Teamwork involves members from different areas accepting their responsibility for the overall progress in achieving that goal. They:

- share an understanding of the goal and what it means
- understand their role in contributing to achievement of the goal and are confident in their skill levels
- understand the processes for sharing necessary information and problem solving, and know that these processes work for them
- respect and cooperate with each other
- share a supportive environment (good systems infrastructure, support from their division of general practice, accessible and relevant training programs).^{121–123}

EXAMPLE Diabetes screening in general practice – using a tickbox!

Diabetes screening in general practice has significant reach in terms of population numbers, as the target group covers all ages and income spectrums. One practice trialled the Diabetes Association 'tickbox' over a 1 month period (patients were 40 years of age and over). Patients filled in the 'tickbox' while waiting, and took it with them into the consultation. Staff marked the clinical records with a red tick when the patient completed the tickbox. At the start of each day, records without a red tick were noted and patients asked, as they attended, to fill in the tickbox. At the end of the trial it was decided to incorporate the tickbox into routine practice with the age limit raised to over 50 years. The diabetes trial was designed, run and reviewed by all staff at the practice.

Elaine Green, Leschanault Medical Centre, Australind, Western Australia www.leschmed.com.au

EXAMPLE The 'buddy system'

In order to ensure 'stress free' communication in a rural environment, a practice comprising four full time GPs and one part time GP, two registrars, four part time PNs, three full time and three part time receptionists and one school based trainee instituted a disciplined approach toward communication. Teamwork was the key to the approach, which was called the 'buddy system'. This worked on the principle of 'keep it simple, but cover all bases!' The aim was to have happy, efficient staff and satisfied patients. The buddy system ensured that there was always a person or group that could deal with any tasks arising, thus reducing the risk of things being put to one side, forgotten or misplaced. GPs were paired up, according to procedural interests and rostered days off. Each pair was then matched with a non-GP, full time staff member 'buddy'. Each group was also assigned a part time staff member to cover other issues (eg. days off). The system ensures there is continuity from day-to-day for checking mail, pathology results, writing script requests and handling patient enquiries and requests. The system was advertised through the practice newsletter. Once patients became aware of whom to contact, communication became even more streamlined.

Jo Heslin, Denis Medical Clinic, Yarrawonga, Victoria

Resources

- General Practice Divisions Victoria. Better capacity, better care. A resource kit for assisting general practices achieve quality outcomes for chronic disease management at www.gpdv.com.au/gpdv/
- Management and Research Centre, University of South Australia. Team kick-start – a planning and organising guide for work teams at www.m-arc.com.au/resources_publications.asp
- Commonwealth Department of Health and Ageing. Making your practice work better, a resource kit for general practitioners. Contact your local division of general practice to obtain a copy

2.2.5 Effective information management

General practice information management can harness information resources and capabilities that can create value for the practice as a business entity as well as improving patient care in prevention and delivering efficiency gains.

Benefits from managing health information strategically include:

- The delivery of more consistent and better quality of patient care: this can be to all patients or to targeted groups through:
 - increased adherence to guidelines^{124,125}
 - reminders¹²⁶
 - screening¹²⁷
 - electronic health records
 - use of practice registers
- Reduction in the likelihood of medical errors:
 - response to prompts and reminders
 - better identification of needs, either opportunistically or in summary sheets
 - improved accuracy of information through better legibility of records and greater disclosure of sensitive information
 - improved organisation of clinical information
- Improved efficiency
 - prescribing
 - saves GP time by directly gathering information from patients
 - improved storage of information (eg. pathology and imaging, medications)
 - reduced duplication of tests
 - increased use of generic prescribing¹²⁸
- Improved communication (amount and format) between GPs, patients and health care sectors through:
 - the sharing of data, including discharge summaries
 - record linkages
 - patient education
- Improved access
 - to care (eg. telehealth)
 - to information (eg. automated education voice messages, the internet)
- Improved clinical decision making through access to:
 - computerised clinical decision support systems
 - high quality information (eg. Cochrane reviews)
 - quality patient education material
 - more complete health summaries¹²⁹.

Other benefits include:

- acceptable for patients
- reduced costs.^{130,131}

If you have a prevention plan, your information management system will become a tool for monitoring progress.

Resources

- Australian Government Department of Health and Ageing Broadband for health at www.health.gov.au/ehealth/broadband
- Chaos to clarity: GP internet training manual – using the internet to find clinical, evidence based information by Peter Schattner and Karen Young at www.monashdivision.com.au select 'resource directory' then 'evidence based medicine' then 'chaos to clarity: GP internet training manual'
- National Electronic Health Transition Authority (NeHTA) is the overarching group coordinating information about IT advances and issues in health care and is responsible to the Australian Health Ministers' Advisory Committee at www.nehta.gov.au
- The General Practice Computing Group (GPCG) at www.gpcg.org

2.2.6 Utilising available supports

Divisions and practices

Make the best possible use of your division of general practice and other expertise to plan and review prevention activities and to development a system to support your practice. Many provide a prevention coordinator and IT support to assist with prevention. A list of divisions and their specific projects can be found at www.phcris.org.au

Payment incentives

Payment incentives are one of several motivators for strengthening prevention activities in general practice. Practices should be aware of the full range of government funded initiatives that can support prevention practice.

EXAMPLE Diabetes management

A metropolitan division of general practice reported that practices continually request support in diabetes management and complication prevention. In response, the division developed a range of strategies and services that GPs and practices can use to suit their individual needs. These include:

- An external diabetes register and recall program based in the division and styled on the 'CARDIAB database'. GPs send in their clinical patient data to the division where it is collated. The division then audits the GP's care against clinical management guidelines. A recall list is sent monthly to each practice to remind them which patients need to be reviewed
- A diabetes/asthma support program is available for PNs who coordinate the Medicare Diabetes Annual Cycle of Care and the Asthma 3+ Visit program. The practices allocate GP and practice nursing time to this program. The division provides annual diabetes and asthma in-service programs for PNs, and there is also access to the division's diabetes/asthma educator
- The division employs qualified and experienced diabetes/asthma educators and contracts their services to provide regular clinics. The division collaborates with community health services, providing access to comprehensive diabetes education to complement the GP's medical management, at low cost and with a minimal waiting time. A diabetes educator, dietician, community health nurse and podiatrist facilitate the program, which is run in both English and Chinese.

Leigh Barnetby, Whitehorse Division of General Practice, Victoria www.wdgp.com.au

Resources

- Primary Health Care and Research & Information Service at www.phcris.org.au
- Up-to-date information about Practice Incentive Payments and Service Improvement Payments is available from the Department of Health and Ageing at www.health.gov.au/internet/wcms/publishing.nsf/content/home and Medicare Australia at www.medicareaustralia.gov.au

Applying the framework – strategies, activities and resources

Key messages

- Target all patients for relevant preventive care and focus on those who will most benefit from preventive care
- A 'patient centred' approach during the consultation is time efficient and evidence based. It enhances partnership and adherence
- Be systematic

3A. The consultation

The consultation is a core component of general practice. Most are effective and run smoothly. Nevertheless, many GPs express dissatisfaction when patients have unrealistic expectations, do not adhere to medical advice or fail to take responsibility for their own behaviour. Patients also express dissatisfaction with some consultations due to lack of sufficient information or explanation about what is wrong or what needs to happen next. They may get frustrated that the doctor is not listening or disagree about what their problem is. Hence, it is useful to reflect on the conduct of your consultations. Evidence suggests that:

- patients want GPs to explain more and to be more 'patient centred'^{132,133}
- patients often don't follow advice
- GPs report a lack of confidence in assisting patient motivation or addressing adherence issues
- Poor adherence, frustration and dissatisfaction for both the GP and the patient may result from lack of agreement about the problem
- GPs underutilise effective organisational strategies associated with improved GP practice and patient adherence.

3.1 Principles

- A patient centred approach should be considered
- Strategies that assist patient motivation and adherence issues should be considered
- Effective and driven organisational strategies associated with improved GP practice should be adopted.

3.2 Receptivity

The 'stages of change' model applies to both GPs and practice staff in considering the introduction of specific preventive strategies. Have you been thinking about a preventive care strategy such as establishing a recall system, or prompting all patients with a question about their smoking status? Have your practice staff expressed concern or interest in running a mini-clinic or working more closely with a community service?

Using a planning process will help you determine what processes are most likely to be successful for your state of readiness (see *Part 1*). To increase patient receptivity consider re-assessing your motivational interviewing skills and the tools that will support patient adherence.

3.2.1 Motivation

Motivational interviewing and brief behavioural interventions are useful skills that help the GP assist patients to change their health related behaviour. 'Motivational interviewing' has been defined as 'a directive, patient centred counselling style for eliciting behaviour change, by helping patients to explore and resolve ambivalence' and has been shown to be effective in a number

of areas in the primary care setting, including smoking cessation, hazardous drinking, physical activity, nutrition and diet, and chronic disease.

Patients vary greatly in their motivation to change behaviour and to adhere to treatment plans for chronic disease. Addressing behaviour change is one of the biggest challenges the GP faces in prevention. Complementary approaches to addressing motivation are:

- focus on the practical and circumstantial factors that might inhibit motivation (eg. patients' understanding of the health issues, belief in their ability to change, cultural and gender differences)
- use of motivational interviewing techniques to explore and understand the patient's motivation. This is a useful approach when patients show a degree of ambivalence.

Motivational interviewing involves systematically directing the patient toward motivation to change, offering advice and feedback when appropriate, selectively using empathetic reflection to reinforce certain processes and seeking to elicit and amplify the patient's discrepancies about their health related behaviour to enhance motivation to change.

Patients will be motivated to make changes if they believe there are benefits and that the costs of remaining the same are high. However, if patients believe there are few benefits arising from the specific behaviour, and significant costs associated with making a change, they are likely to remain unmotivated (*Figure 6*).

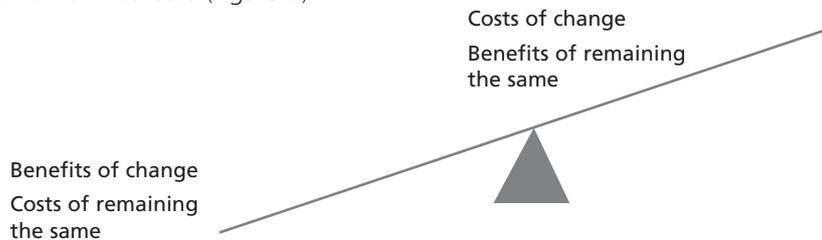


Figure 6. Cost benefit balance

3.3 Ability

3.3.1 Motivational interviewing strategies

- Regard the person's behaviour as their personal choice. Acknowledge that:
 - ambivalence is normal
 - patient decisions may be well researched
 - there are both benefits and costs associated with the behaviour, and highlight these to the patient
- Let the patient decide how much of a problem they have
 - explore both the benefits and costs associated with the problem as perceived by the patient
 - use the patient's own language and examples when exploring their concerns
 - encourage the patient to rate their motivation to change out of 10 and explore how to increase this score. If the score is already high, ask them what is contributing to this high score
 - repeat the process (score how confident the patient is in being able to change, where 10 = very confident) when looking at the patient's confidence to change
- Avoid arguments and confrontation
 - confrontation, making judgments or moving ahead of the patient generates resistance and tends to entrench attitudes and behaviour
 - externalising the problem minimises resistance (eg. come alongside the patient, focus on the discrepant beliefs/values of the patient)
 - accept that patients may be contrary to suggestion
 - avoiding direct patient confrontation doesn't mean that you accept the patient's beliefs and values

- Encourage discrepancy
 - change is likely when a person’s behaviour conflicts with their values and what they want
 - the aim of motivational interviewing is to encourage this confrontation to occur within the patient, not between the doctor and patient
 - highlighting any discrepancy encourages a sense of internal discomfort (cognitive dissonance) and helps to shift the patient’s motivation
 - when highlighting the discrepancy, in the first instance, let the patient make the connection.

A decision balance is a useful tool to summarise the above information and identify areas of discrepancy. It can be used to systematically explore a patient’s motivation and their beliefs about a particular behaviour. Write down what the patient likes and dislikes about this behaviour, and document the good and bad aspects of changing this habit or adhering with treatment. Alternatively, get the patient to do this as an exercise. They could present it at the follow up visit (Table 2).

	Like	Dislike
Stay the same	Relaxes, helps to unwind, tastes nice, social activity	Increasing anxiety and forgetfulness, putting off making decisions and not being able to think clearly, restless sleep, often waking up worrying, gaining weight (s/he used to be trim and fit), fear of being out of control, increased marital friction and arguments
Change (eg. cut down on drinking)	Possible better control of anxiety, able to remember things and cope with the business more, less arguments with spouse, less stomach upsets	Uncertainty about how to cope when stressed, loss of social contact with mates, loss of enjoyment associated with having a few drinks

Table 2. Decision balance: patient drinking at a hazardous level

3.3.2 Issues and strategies to address patient adherence

Lack of acceptance of GP advice and nonadherence are common in the clinical setting. Patients often need to be encouraged to manage their own health, including lifestyle, health related behaviour, and chronic diseases in conjunction with the GP. This helps the patient understand their health condition, be involved in decision making, follow agreed plans for health care, monitor symptoms, and manage the impact of the condition.

GP factors

Strategies that promote better patient adherence include^{134,135}:

- regular clarification and summarising of health information
- the use of empathy and humour
- the use of motivational interviewing techniques
- being receptive to patient questions
- listening to patient concerns
- clear, concise and nonjudgmental advice.

A large number of preventive activities are not offered to the patient because the GP either forgets or is unaware that the activity is recommended. Systematic strategies can be introduced to reduce this risk, including:

- using computerised prompts at the time of the consultation to identify whether a preventive activity is due and to recommend activities
- reviewing the patient prevention questionnaire (completed by the patient in the waiting room) and/or the patient's health summary sheet
- setting up a regular review and monitoring system
- scheduling regular appointments for review with support from the PN have a significant influence on patient adherence
- establishing common ground with the patient
 - what are the patient's main concerns?
 - what do they think the problem is?
 - what are their expectations of the prevention activity/treatment?

Intervention factors

Some treatments may only have a modest impact (eg. changing diet to lower cholesterol) or may require more than one agent (eg. a medication for hypertension until adequately titrated or second antihypertensive added). Other treatments are designed to have an effect on an outcome that is extremely uncommon. For example, in women aged 30 years, the risk of dying from coronary heart disease is two deaths per 100 000 women (at age 50 this rises to 51 deaths per 100 000 women). There is only small benefit in prescribing a statin for a 30 year old woman who has a cholesterol level of 6.5 mmol/L and no other risk factors. To prevent one coronary heart disease death per year, one would need to treat 100 000 women with this profile. This is known as the number needed to treat (NNT). *Appendix 3* describes the rationale for NNT and how it is calculated.

Be realistic about the impact and check whether factors other than the patient are contributing to a less than expected outcome (eg. inadequate or ineffective treatment). Routinely ask about adherence. Ask about NNT to help you (and the patient) identify and determine the likely benefit of intervention.

Patient factors

Patients are less likely to adhere to treatment if they perceive that there is little or no benefit to them. Uncover what the patient feels about the problem behaviour and the impact on their health. Explain to the patient the behaviour and its consequences. Patients vary in their understanding of what is required of them and only remember 3–4 main things from a consultation. Patient understanding is facilitated by opportunities to ask questions, sufficient time to digest the information provided, simple messages and use of diagrams, and reinforcement and support.^{136,137}

Check what the patient remembers and understands. Reinforce key messages by:

- repetition and summary (especially at the end of the consultation)
- keep the messages simple
- give handouts, drawings and leaflets to aid understanding (these may be personalised)
- reinforce behaviour
- link adherence to routine activities (eg. cup of coffee at breakfast, cleaning teeth)
- encourage the use of patient held records (eg. immunisation card, personal health summary).

Patient adherence varies with the condition being treated. While adherence may be consistent across different therapeutic regimens, it is useful to check adherence with each different therapeutic regimen. If adherence requires a change in the patient's behaviour, remember that behaviour change requires three main ingredients¹³⁸:

- concern over the current behaviour
- belief that change will be associated with benefits
- belief in the ability to change.

Patient beliefs and expectations about the treatment are a potent influence on their adherence. Patients may also react to the GP 'checking up on them'. While they generally acknowledge that such enquiry is part of the clinical process to see if things are improving, such enquiry may generate sensitivity, especially when the patient's health related behaviour has direct impact on the illness (eg. smokers and patients drinking at hazardous levels). Ask about their beliefs and expectations. Explain how the patient's behaviour is related to their condition without victim blaming. Put adherence on the agenda for discussion. Identify and acknowledge patient's concerns.

If adherence is difficult, then the patient is less likely to adhere. Simplify the regimen:

- divide into incremental steps
- link the activities required to daily routine or key events such as the patient's birthday
- set achievable goals
- achievement of even small steps helps to sustain the patient through the process
- tailor the intervention to the patient's circumstances and abilities
- identify significant antecedents and consequences (eg. high risk situations for slip ups with smoking)
- provide feedback regarding the benefit achieved.

Consider whether now is the right time for the patient to consider change. The context and timing of behaviour change can play a significant role in either impeding or facilitating change. Support has a strong impact on adherence. Enlist support from significant others. Provide support to the patient by regular follow up visits or contact with the PN. Decision aids, computer decision support systems and patient education/information material can all help to prompt the GP or practice staff to provide various prevention activities, reinforce key messages or facilitate the decision making process.

ACTIVITY

Can you identify how supportive your practice infrastructure is to the provision of preventive care within the consultation?

Does your IT system prompt you about patients eligible for preventive activities?

Do you have ready access to appropriate decision aids and patient education materials?

Is there an opportunity for provision of counselling by a PN?

3.3.3 The use of decision aids

'Decision aids' are 'tools or strategies that help the patient make a decision, and are especially useful when the information is complex, unclear or conflicting'. They help the patient to understand the options and to consider personal value that may be placed on benefits and risks. They also help to involve the patient in management decisions. Decision aids may increase the patient's realistic perceptions of treatment, lower decision conflict and are especially useful with passive or indecisive patients. Patients may feel happier about their consequent decision.

EXAMPLE Use of patient held records

All patients with multiple problems, on multiple medications, and the elderly, receive an A4 clear plastic sleeve containing a full health summary on one side and a patient drug sheet on the other. The sheet is brought to every consultation and updated or replaced as necessary. Copies are given to the carers of the frail elderly, hostel workers and nursing home staff. It is suggested to the patient that these sheets be placed in a conspicuous place at home and taken by the patient to hospital, to specialist visits and to any allied health appointments. When an admission to hospital is notified, these data plus relevant progress notes and pathology, are faxed to the hospital.

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Resources

- 10 tips for safer health care: what everyone needs to know is available in 23 languages at www.racgp.org.au/10tips
- The 'Adverse medicine events line' provides advice and collects adverse incident reports on the use of medicines (1300 134 237)
- *Better practice guidelines on complaints management for health care services* from the Australian Council for Safety and Quality in Health Care at www.safetyandquality.org/articles/Action/guidecomplnts.pdf
- South Australian Whole of life immunisation card (adult and child) available from the South Australian Immunisation Coordination Unit 08 8226 7107 or at www.dh.sa.gov.au/pehs/immunisation-index.htm

3.4 Coordination

Coordination issues in the consultation arise where:

- patient care is shared between the GP and PN or others external to the practice
- patients have complex health issues.^{139,140}

Effective coordination requires:

- good communication between the parties, including adequate referral mechanisms and documentation
- a clear plan with clarification of roles and responsibilities.

The *SNAP guideline* provides examples of plans that assist patients to make changes in their behaviour. Encouragement of self management of chronic disease also involves a planning process.

EXAMPLE NSW trial of SNAP implementation

A project to develop and evaluate a model of an integrated approach to management of the four behavioural risk factors in general practice was trialled in two New South Wales' divisions of general practice. The intervention included practically orientated clinical training for GPs and nurses in *SNAP*, behaviour change and motivational interviewing, provision of the *SNAP guideline* and patient education materials, training of practice staff to set up recall and reminder systems, visits to each practice within the division to determine practice needs and support, and liaison with external stakeholders. While a number of barriers to implementation remained at the end of the trial, GPs reported significantly increased confidence in their ability to assess the stage of change of patients and to do this more often, and increased confidence in using motivational interviewing techniques. Many practices established registers for patients with chronic diseases and patient education materials were more commonly provided.

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Resource

- The *SNAP guideline* links a series of common risk factors (including obesity, high blood pressure, physical inactivity, poor nutrition, raised blood cholesterol, alcohol abuse and tobacco smoking) with largely preventable chronic diseases (including CVD, type 2 diabetes, osteoarthritis and osteoporosis, asthma, and emphysema) at www.racgp.org.au/guidelines/snap

3.5 Targeting

Are you aware of the outstanding, eligible prevention activities needed for your patients?

Do you know:

- how many children are overdue for the measles immunisation?
- if the smoking status of every patient in the practice is documented in the case notes and/or their health summary sheet?
- how many patients with diabetes haven't seen you in the past 12 months?

3.5.1 Assessing and targeting priority groups and individuals for prevention

There is reliable information available regarding target populations for prevention activities and the additional risks faced by disadvantaged individuals, especially Aboriginal and Torres Strait Islander peoples. Access this information when planning and reviewing preventive activities and assessing level of risk.

An effective strategy is to ask patients to complete a 'prevention survey' in the waiting room before they see you. The time in the consultation is therefore better spent providing information, exploring concerns or negotiating for a separate appointment if the prevention issue is likely to take more time. As the time a patient waits to see the doctor is a significant predictor of their level of satisfaction, getting them to provide you with this important information while they wait is beneficial.

The Patient Practice Prevention Survey (see *Appendix 4*) can be completed by patients in less than 4 minutes and contains appropriate prevention activities indicated by current evidence. You may also wish to directly ask patients whether they have considered particular prevention activities.

A GP recommendation or brief advice in many prevention areas frequently helps to redress patient concerns and misperceptions. There are a number of reasons why patients do not take up prevention activities.

Immunisation

In children, failure to immunise is often related to forgetting, missed opportunities, intercurrent illness or false contraindications (eg. presence of a URTI). In adults and the elderly, it is often due to patients forgetting, concern about side effects or bad reactions, or misconceptions about a vaccine (eg. effectiveness, getting the illness from the vaccine).

Lifestyle changes (SNAP)

While most patients would agree that GPs have a role in assisting lifestyle change, they express considerable ambivalence about how GPs should approach this role. Many patients remain somewhat pessimistic about the potential impact of GP advice and would react if the GP offered advice regarding smoking cessation at every visit. Many smokers view seeking help or assistance as a sign of weakness or the need for a crutch. They believe they should be able to quit on their own, despite evidence to the contrary.¹⁴¹ A similar pattern emerges for patients who drink at hazardous levels. Both smoking and drinking are considered sensitive topics by both GPs and patients.

Pap tests

A number of factors influence the likelihood of an eligible woman to have a Pap test.¹⁴²

Patients who have not had a recent Pap test are more likely to:

- be older
- come from a lower socioeconomic group
- come from a non-English speaking background
- attend a GP infrequently
- have had a negative previous experience of a Pap test or are fearful or embarrassed about the procedure
- have been sexually abused
- be less convinced of the benefits of screening for cervical cancer
- be fearful of developing cancer
- not have had a reminder sent by the doctor
- have not found time to have a Pap test or forgotten that one was due.

There are lower levels of Pap tests performed in eligible women if the GP:

- is older
- male
- does not use a computerised or case note reminder system
- does not send reminder letters to the patient
- does not raise the issue.¹⁴³

Mammography

A number of factors influence the likelihood of a woman having a mammogram.¹⁴⁴

These include:

- fear about the results of screening
- convenience
- belief that it is not needed
- belief in the efficacy of mammography
- absence of symptoms
- a recommendation by the GP influences the likelihood that a woman will have a mammogram
- discomfort or pain.

3.5.2 Targeting practical and circumstantial factors

There are many common barriers that can be addressed within the consultation. Consider these examples:

- The patient has a poor understanding of the relationship between the health problem and its likely causes. Explain how the health problem is linked to the health related behaviour and provide written information on the subject
- The patient doesn't understand the likely benefit they could experience as a result of the suggested actions. Highlight the health benefits and provide written information on the topic. The GP could use a decision aid to show this benefit (eg. cardiovascular risk calculator)
- The patient believes that it is 'too late' for change
- The patient is reluctant to accept responsibility for making a change. Is it a lack of recognition of a problem? Explore their beliefs and expectations about the issue and how things will be improved. Ask about previous attempts to change. Determine how difficult it is for the patient to change and whether they feel they are able to change? Check the environmental context and support systems
- The patient lacks confidence in their ability to change. Identify the most difficult factor to change or the hardest thing about changing. Ask the patient what would help to overcome this difficulty. A longer appointment could be proposed to focus on motivational techniques, and to identify perceived barriers and sources of support
- There are difficulties or barriers due to cultural or gender difference, or other reasons. Consider referral to, or offer a list of appropriately matched providers or counsellors. A longer appointment could be proposed to further explore the problem
- The patient lacks support to make changes. Additional support is a potent factor in facilitating change. Studies on the management of diabetes in particular population groups, for example Aboriginal and Torres Strait Islander peoples or adolescents, have shown that including a support person with the same condition in consultations improved the patients' retention of information and facilitated understanding of the condition and its treatment. Suggest that the patient invite a partner, friend, relative or carer to the next appointment. There could be follow up by telephone. Consider an appropriate support group that covers the problem
- There is lack of success despite patient effort. Remember that initial successes and failures are powerful influences on the patient. Make change incremental, achievable and realistic.

EXAMPLE Sustainable patient centred consultations – 'sharing tricks'

One patient who suffered from a particular illness had three sisters who had the same condition. She asked me if her sisters could come to her consultation (I made it clear that I could only deal with one consultation at a time). They had some difficulties negotiating follow up appointments at appropriate intervals and ensuring they all attended the same session, but there were several advantages to this arrangement. First, the sisters provided great support for each other by using their own cultural family support mechanisms. Second, if I had not been able to offer a 'family approach', they would have been unlikely to attend the practice again. Third, it was important that the sisters talked among themselves, as they benefited from peer learning and shared information. At follow up consultations, they usually checked the information they had been given and sought out more information on issues that were not clear or that they needed to know more about. This ensured that the consultations were formed around issues of importance to the sisters. I call this 'sharing tricks'.

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3.5.3 Assessing opportunities for prevention activities

The readiness of patients to engage in prevention activities is vital for the success of prevention interventions.¹⁴⁵ Opportunity for prevention is influenced by:

- whether patients regularly attend the practice (infrequent attendees get less preventive care)¹⁴⁶
- whether it is known that the patient needs a prevention activity
- time to assess the need and interest; time to provide prevention
- patient interest in and response to intervention
- availability of other health professionals in the practice who are interested and competent to assist and have the time to do so.

3.6 Iterative cycles

It is important to periodically review implementation interventions to determine whether they are effective in helping patients.¹⁴⁷ Improvements frequently come from small adjustments. Regular review provides the opportunity for feedback and reflection.¹⁴⁸ Ask the patient about changes that have occurred. Set up review appointments to monitor progress. While this is common with many chronic illnesses it is an underutilised strategy with many lifestyle interventions despite the evidence of the effectiveness of regular review. Review progress at practice management and team meetings. While the GP's relationship with the patient continues over time, prevention strategies may change. Similarly, most behaviour change involves a cyclical process with many patients relapsing after attempting to make changes. Remember:

- patients may change their mind about the acceptability of a prevention activity after refusing initially
- the patient's status may change over time (eg. recent ex-smokers may relapse to smoking again)
- patient motivation also fluctuates with time and may require boosters and additional discussion to clarify their interest in changing.

3.7 Collaboration

3.7.1 A 'patient centred' approach

From the GP's perspective, the role of the consultation is to interpret the symptoms, establish whether there is illness, manage appropriately, and then inform and educate the patient.¹⁴⁹ Whereas, from the patient's perspective, the role of the consultation is to resolve their concerns, reduce anxiety about possible diagnoses and outline management, if any is needed.¹⁵⁰ A 'patient centred' consultation ensures that the patient's perspectives are addressed.¹⁵¹ The doctor attempts to more actively involve the patient in the consultation, respecting their autonomy and encouraging their role in decision making. The doctor also embraces a more holistic approach that includes health promotion and disease prevention.

Encouraging more active patient involvement and inclusion in the consultation has a number of benefits. There is clarification of what is expected of you by the patient and stronger patient autonomy, patient responsibility and patient self management. As a result, there is increased patient and doctor satisfaction and better adherence to the recommended prevention activities and therapeutic regimens. There may be an increased demand for and use of appropriate referrals to other health services professionals and agencies. This can reduce the cost of care through the use of more efficient resources and having better informed patients. At the same time, the communication processes are improved. A patient centred approach (*Figure 7*) includes exploration of the patient's disease and illness experience. Patients need to be asked specifically:

- what they think is wrong with them
- what their feelings and fears about the problem are
- what is the impact of the problem on their daily functioning, and
- what they expect of the GP during the consultation.

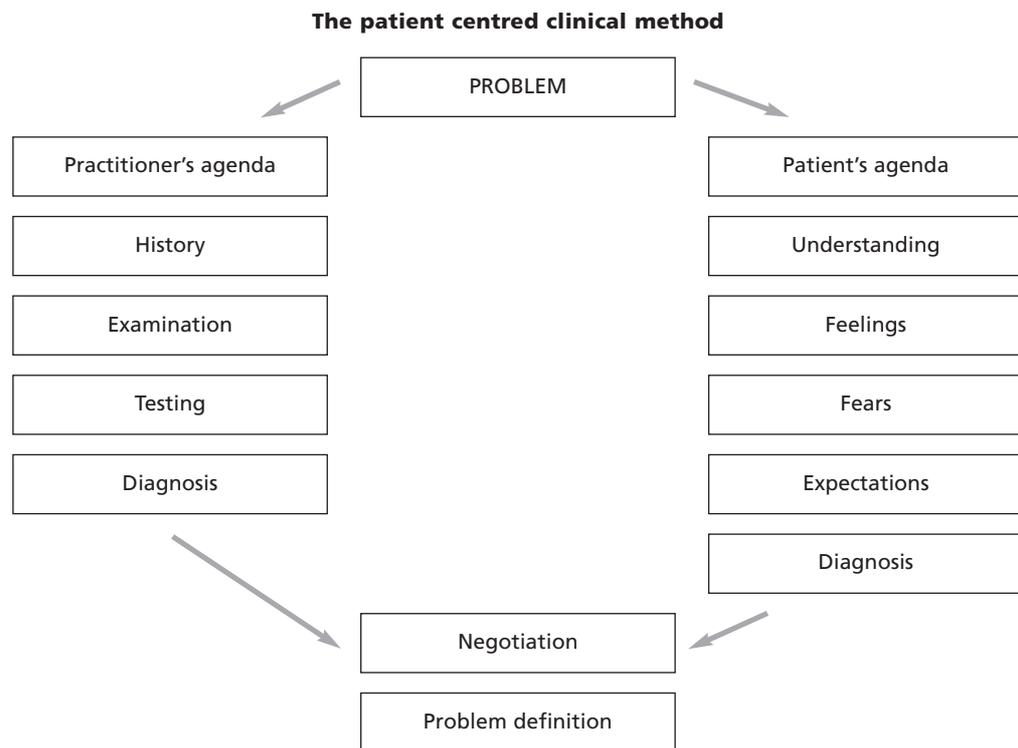


Figure 7. The patient centred model

Source: Levenstein J, et al. A model for the doctor-patient interaction in family medicine. *Fam Pract* 1986;3:24–30

There is now evidence that many other factors determine how clinical care, including preventive care, is offered and accepted by patients. These include the patient's literacy, income, cultural values and their access to services. The attitudes and beliefs of GPs and all health workers contribute to the variations in the provision of care to patients. It is incorrect to assume that socioeconomically disadvantaged people are less interested in health information. During the consultation, GPs could do the following:

- reflect on their approach and attitudes, ie. avoid victim blaming
- explore the social circumstances and barriers that patients face^{152,153}
- help patients address then prioritise their own adverse circumstances
- identify and collect data
- understand the patient's social circumstances (this should be done in a sensitive manner).

3.7.2 GP strategies and tools to support partnerships

A number of strategies can be used to increase patient involvement in their own health care during the consultation. These include:

- good communication, motivation and motivational interviewing
- identifying and dealing with resistance and nonadherence from the patient
- use of decision aids to facilitate patient adherence.

Good partnerships are antithetical to a victim blaming approach. The latter is characterised by the patient being made aware that the health problem is 'their problem' and believing that it is the patient's fault for their predicament rather than a combination of factors that include the patient and their environment and circumstances. A number of factors contribute significantly to the building of effective doctor-patient partnerships.^{154,155} These include:

- responding to affective cues
- being empathetic
- providing ongoing support
- ensuring open and clear communication.

These activities also contribute to the development of trust, which also contributes to greater patient satisfaction and adherence. Good communication between a GP, PN, health care provider and the patient is known to strengthen the relationship between the two and hence has benefits for the both the practitioner and the patient.

3.7.3 Self management strategies

Patient self management strategies complement a patient centred approach and have been found to be effective in different groups (eg. disadvantaged) and in a range of prevention and chronic diseases including diabetes, asthma, chronic back pain and chronic obstructive airways disease (COAD).

Key self management principles include:

- engaging the patient in decision making and management of their illness, including setting appropriate goals
- using evidence based, planned care
- improving patient self management support (eg. enlisting other health professionals and supports, and better linkages with community resources such as seniors centres, self help groups, skills and support programs)
- a team approach to managing care.

3.8 Effectiveness

The 'gold standard' for evidence on which to plan preventive activities is the randomised controlled trial (RCT). In theory, this evidence tells us which interventions work and those that do not. However, because RCTs tend to have strict criteria they often exclude people with comorbidity and those who visit the GP infrequently. These latter features are more common in disadvantaged groups, so RCTs have limited applicability to the whole population. When considering disadvantaged communities, the guidelines on undertaking preventive activities may need to be supplemented with evidence about uptake and implementation.

A GP recommendation or brief advice in many prevention areas is one of the most potent influences on both patient intentions and prevention related behaviour.

Resources

- *Smoking cessation guidelines for general practice* at www.health.gov.au/internet/wcms/publishing.nsf/Content/health-pubhlth-publicat-document-smoking_cessation-cnt.htm
- The *Australian Medicines Handbook* at www.amh.net.au/
- The Central Australian Rural Practitioners Association (CARPA). Treatment and reference manuals at www.carpa.org.au
- Cochrane database at www.cochrane.org/index0.htm
- The National Health and Medical Research Council at www.nhmrc.gov.au
- NACCHO/RACGP *National guide to a preventive health assessment in Aboriginal and Torres Strait Islander peoples* at www.racgp.org.au/aboriginalhealthunit/nationalguide
- RACGP *Guidelines for preventive activities in general practice*, 6th edition ('red book') at www.racgp.org.au/redbook/
- *Therapeutic guidelines* at www.tg.com.au
- *Diabetes management in general practice* at www.racgp.org.au/guidelines/diabetes
- Evidence based guidelines for diabetes at www.nhmrc.gov.au/publications/synopses/cp86syn.htm
- The Australian Resource Centre for Healthcare Innovations (ARCHI) provides a range of resources including information on chronic diseases at www.archi.net.au
- The RACGP has a link to an exercise physiologist search engine at www.racgp.org.au/referrals

- *Sharing health care guidelines* at www.racgp.org.au/guidelines/sharinghealthcare
- *Medical Observer* maintains a list of clinical guidelines produced by a range of Australian health care organisations at www.medicalobserver.com.au/clinicalguidelines/
- National Institute for Clinical Studies at www.nicsl.com.au
- New Zealand Guidelines Group at www.nzgg.org.nz
- E-guidelines United Kingdom at www.eguidelines.co.uk
- Scottish Intercollegiate Guidelines Network (SIGN) at www.sign.ac.uk
- Agency for Healthcare Research and Quality at www.ahcpr.gov/
- Health professionals summary card on the clinical practice guidelines for the psychosocial care of adults with cancer at www.ncci.org.au/services/psych_guidelines.htm
- Primary care cancer kit at www.cancer.org.au

The average general practice consultation takes around 15 minutes therefore it is important to choose a strategy that is likely to be both effective and efficient. You can either adapt your preventive activities to the time available, or set aside time to mention prevention for all patients. The 'reality pyramid' approach may help with the latter option. Spending longer on an area is generally associated with a bigger impact, but in many situations, the result is not a linear effect. It is vital to be practical in assessing what you can achieve in the limited time frame of a consultation. However, you can still achieve a significant amount with brief interventions.

There is considerable evidence that for some patients, brief interventions for prevention, even 1 minute or less, can increase uptake and improve outcomes. Clear, brief nonjudgmental GP advice is effective in reducing hazardous drinking and smoking. A clear GP recommendation also results in a significant improvement in influenza vaccination rates, pneumococcal vaccination in the elderly, mammography and Pap test rates.

Systematically applied, brief interventions enable the GP to be better organised and targeted, further enhancing practice effectiveness. Spending just 1 minute on prevention with each patient provides greater opportunity to increase coverage of prevention to a greater proportion of patients. A crucial component of many interventions is referral to reputable and specialised services. Develop a resource directory based on positive patient feedback following their use of particular referral services. Where service provider choices are limited, the benefits of good partnerships and a multidisciplinary team approach are essential.¹⁵⁶

The *SNAP guideline* and Lifescripts materials can help to frame lifestyle intervention strategies into activities that can be achieved in less than 1 minute, or in 1–5 minutes, using the 5A framework (*Table 3*).

Resources

- Australian Government Department of Health and Ageing Lifestyle Prescriptions at www.health.gov.au/lifescrpts
- Australian Government Department of Health and Ageing Sharing Health Care Initiative at www.health.gov.au/internet/wcms/Publishing.nsf/content/sharing+health+care+initiative_1

	Ask	Assess	Advise	Assist	Arrange
Smokers	Do you smoke?	<ul style="list-style-type: none"> – Interest in quitting – Barriers to quitting – Nicotine dependence 	Provide brief, nonjudgmental personalised and clear advice to aid quitting	Offer relevant pamphlets	Follow up or referral
Follow up soon after	Hazardous drinkers Do you drink? How much on a typical day? How many days a week?	<ul style="list-style-type: none"> – Concern about drinking – Interest in cutting down – Barriers to cutting down 	<ul style="list-style-type: none"> – Provide brief, personalised and non-judgmental clear advice to cut down – Highlight other benefits of cutting down 	Enlist support	Offer relevant pamphlets on safe drinking levels and ideas to help reduce intake Follow up soon after

Table 3. One minute interventions using the 5A framework for assisting smokers and hazardous drinkers

In thinking about interventions consider efficient and practical strategies. For example:

- getting the patient to raise the issue of prevention. This may be achieved by using a patient questionnaire, posters, prompts and cues situated in the waiting room
- being aware of the main barriers to prevention (see earlier discussion of barriers). GP recommendation is a potent influence on patient behaviour and practices
- organising a clinic (eg. vaccination, chronic disease)
- running a prevention group (eg. a 'men's health night')
- arranging outreach visits (eg. indigenous health visits)
- planning separate consultations for longer intervention where appropriate. Many prevention activities and the assessment and management of chronic disease require considerable time. While screening may be performed during a consultation for another problem, it is useful to schedule a specific appointment for a more structured assessment. This is already supported by government incentives for conditions such as asthma and diabetes. However, it can be applied to smoking cessation, other lifestyle changes and many chronic conditions where follow up is advised
- delegating or referring the task. There are also benefits to patients when appropriate referrals are offered during consultations. Some examples of prevention activities that may be referred to your PN include:
 - coordination of prevention activities
 - clinical information collection for the 75+ health assessment
 - coordinating the waiting room prevention questionnaire and entering the information into the computer
 - immunisation
 - chronic disease management (in conjunction with the GP), especially obtaining clinical information and routine investigations
 - lifestyle counselling (eg. smoking cessation)
 - health promotion and health education activities
 - patient follow up
 - the arranging of other support services
 - communication with others involved in a patient's care.

Key messages

- Make prevention activities routine and simple to sustain
- Be systematic and use a 'whole of practice' approach. Plan what you need to do
- Implement strategies that are transparent, respectful and congruent with the goals of patients, GPs and your practice staff
- Measure and reflect on successes and failures

3B. The practice

Traditional approaches to behaviour change have focused on the individual. These approaches assume that the key barriers relate to the individual GP's knowledge, attitudes and skills and the usual intervention was educational. Research suggests that there are usually several barriers operating at multiple levels that act as barriers to change and improvement. The potential barriers could be:

- structural (eg. financial disincentives)
- organisational (eg. inappropriate skill mix or a lack of facilities or equipment)
- peer group (eg. local standards of care not in line with desired practice)
- individual (eg. skills, attitude or knowledge)
- professional-patient interaction (eg. problems with information processing).

By intervening at various levels it may be possible to address barriers that often appear in the doctor-patient interface, the consultation.

Beyond this concept it has been argued that there are four levels at which interventions are needed to improve health care:

- the individual health care professional
- the health care team: in general practice, the practice team
- the organisations providing health care support, and
- the larger health care system in which general practice is located.

Each level has a differing set of levers and strategies and it is important to have interventions at all levels to ensure sustained improvement.

3.9 Principles

- The approach to the implementation of preventive care should be systematic and whole of practice orientated.¹⁵⁷⁻¹⁵⁹ This involves a shift in perspective for many practitioners who are used to focusing on individual patients and their needs
- Attempts should be made to identify and address health inequalities and disadvantage
- By participation in multidisciplinary teams general practice has overcome barriers in providing high quality preventive care in areas of significant disadvantage. Linking patients with welfare services to ensure they maximised their access to available benefits has been found to be a useful approach to addressing disadvantage in the general practice setting
- Implementation strategies should be evidence based and outcomes focused¹⁶⁰⁻¹⁶²
- Approach should be realistic, feasible, transparent and congruent with the goals and philosophy of the practice and practice staff.

Implementation of prevention activity should respect the context and complexity of general practice. Improvement of care is not necessarily improved by the removal of variability. A strategic approach will make allowance for local knowledge of the context and issues.

The process should address both short and long term implementation issues. Much effort is expended in setting up programs and activities without paying attention to sustainability. Factors associated with practice routine include:

- organisational memory – reflects the shared interpretations of past experiences that are relevant to current activities (includes social networks, paper based manuals and computerised memory)
- adaptation – implementation strategies need to be adapted to local context and circumstances (such a process also facilitates engagement and ownership)
- values – the program should reflect the collective values and beliefs of the practice.

3.10 Receptivity

While GPs generally accept the benefit and value of providing preventive care, it may be more of a challenge to persuade the practice staff.¹⁶³ Barriers to greater practice staff involvement include:

- questioning the need for change
- additional work in an already busy schedule without any additional resources
- insufficient time and other competing demands
- not seen or believed to be part of their role/responsibility
- potential medicolegal issues
- lack of training.

It is important to identify what the practice staff view as benefits for them. From empirical studies, the benefits of having them actively involved include:

- good evidence for both effectiveness and efficiency^{164,165}
- opportunity to contribute directly to the practice goals and values
- enhanced team work and job satisfaction.¹⁶⁶

3.11 Ability

Think about the areas where capacity may need to be enhanced:

- Understanding and knowledge (regular staff meetings, bulletins and a practice manual help to consolidate understanding of what is required)
- Skills (eg. setting up practice registers, searching clinical databases, counselling skills, motivational interviewing techniques, specific clinical knowledge)
- Supportive organisational infrastructure
- Practice policies – a common and useful strategy to promote and standardise a range of activities
- Prevention policies, include:
 - practice no smoking policy
 - use of a range of health promotion materials in the waiting room
 - use a reminder system to provide systematic preventive care
 - early case detection using scientifically validated guidelines
 - immunisation for GPs and practice staff
 - all new patients to complete patient prevention survey
 - regularly attending patients to have a completed health summary sheet
 - all diabetic patients to be entered onto a practice diabetes register and be invited to attend at least one consultation per year
- Accessible and evidence based guidelines

- IM/IT components – practice registers (eg. age, sex, disease), reminder systems, screening and information gathering systems, data storage, electronic linkage (eg. pathology, imaging, discharge summaries)
- A range of delivery options (eg. delegation to a PN, multidisciplinary clinics, groups, referral options).

3.11.1 Alternative ways of delivering prevention activities

Clinics

Clinics may focus on a specific problem or a target group and may save the GP time by involving the PN. Think about whether you have the necessary resources and the return on effort. Evidence suggests that clinics have a positive impact on vaccination, Pap tests, and provision of care to the elderly and other groups. The effectiveness of clinics has been unclear in the management of some conditions such as asthma, and may have higher cost with outcomes that are only equivalent to hospital based clinics. There may also be an inefficient use of specialist resources and problems with time and practicality.

Before you decide to set up a clinic, investigate what other practices are doing, what has worked well, and what assistance your division of general practice can offer. Assess the likely costs and benefits. If you work in conjunction with an Aboriginal health service or a youth group, you might be able to access hard to reach patients.

EXAMPLE Exercise enablers

A division of general practice organised training for interested people to become 'exercise enablers', using the Active Script model. GPs could then refer patients to the exercise enabler. Similar strategies have been developed in other divisions for other health conditions (eg. shopping tours for patients with weight problems). One practice even trained an instructor in Tai Chi, who in turn offered sessions to patients.

Rob Grenfell, West Vic Division of General Practice, Victoria www.westvicdiv.asn.au

Recruiting other health care practitioners/lay health workers

A lay health worker has been defined as 'any health worker carrying out functions related to health care delivery; trained in some way in the context of the intervention; and having no formal professional or paraprofessional certificated or degreed tertiary education'. The diversity of studies and settings have made it difficult to confidently assess their impact except in certain situations (eg. immunisation and promotion of breastfeeding).

Collaborative care

Partnerships with other health care professionals may increase support for the GP, thereby increasing the quality of care of patients. Collaboratives are a more involved process with an emerging track record of health improvements.

Resource

- Department of Health and Ageing patient education materials at www.health.gov.au/pubs

EXAMPLE Working together for better mental health

Improved access to allied health services was identified as one component of the Better Outcomes in Mental Health Initiative. The co-location of allied health professionals (including psychologists, social workers, mental health nurses, occupational therapists, Aboriginal health workers) within the general practice was piloted as a model of service delivery. Benefits expressed by GPs included increased confidence in managing mental illness knowing a system of support is available and accessible, and improved knowledge sharing leading to early intervention and prevention of the development of more serious mental illness. Allied health professionals reported improved collaboration and shared care with GPs and improved provision of continuity of care. Patients reported less stigma attending the practice, costs are kept minimal and affordable, and improved coordination in the management of mental health conditions.

Fremantle Regional GP Network, Western Australia www.frdgp.com.au

Patient group sessions

One way to increase the effectiveness of a patient session and minimise the time spent by the practice is to invite community groups or organisations to provide sessions for patients. Group sessions have been found to be effective for smoking cessation, diabetes, and minimising illicit drug use. It might be useful to hold the first session with practice staff as the audience if the provider is not already known to your practice. Examples include a diabetes clinic held by the GP and PN, along with the relevant state or territory Diabetes Association, or an information session for patients with cancer run by a local self help group.

EXAMPLE 'Afternoon tea with my GP' – An innovative model for group education and health promotion

Over 6 years ago, a division of general practice began running 'Afternoon tea with my GP' sessions on a Saturday afternoon in practice waiting rooms. Since that time, education sessions in line with the seven National Health Priority Areas have been delivered. In addition, the division has collaborated with organisations such as BreastScreen and the National Heart Foundation to offer sessions on specific topics such as: 'Are you at risk for diabetes?', 'Taking steps to improve your heart health', 'Women's midlife health issues', 'Seniors' physical activity', 'Children's preventive health', 'Asthma management' and 'Myths surrounding breast cancer'. This model provides a flexible way to deliver health messages to groups of patients in an interactive and cost effective manner. The nonthreatening and familiar venue of the GP's waiting room combined with the relaxed and interactive nature of the session encourages patients to return to their GP for further information. The division coordinates the sessions and arranges advertising. This model not only facilitates networking and collaboration between general practices and allied health, but also promotes the role of PNs as health educators.

Fremantle Regional GP Network, Western Australia www.frdgp.com.au

3.11.2 Providing quality prevention information

Patient education materials increase adherence with medication and therapeutic regimens, improve retention and recall of information, and can provide a cueing/prompting effect. Patient education materials tend to be more effective when delivered personally to the patient, tailored to interest in changing behaviour and targeted to the patient's characteristics. On average, patients commonly wait 15–20 minutes in the waiting room before seeing a GP. The waiting room is an effective environment to prompt patients about a range of prevention areas using the noticeboard, interactive media, a patient practice prevention survey, and brochures on physical activity and healthy eating. Prompting and/or providing educational material to patients in the waiting room can:

- increase the likelihood of their raising preventive issues during the consultation
- improve the knowledge and understanding of their condition and other health problems
- prime health related behaviour change
- increase patient satisfaction

- distract the patient from focusing on how long they have been waiting to see the GP (a potent source of dissatisfaction)
- offset the time and sensitivity associated with raising the topic directly by the GP.

Be strategic with your patient information

- Make the information topical
- Increase the amount and range of materials available, use themes or current topics. Change them regularly and make sure they are up-to-date. Information that hasn't been 'turned over', or isn't either recent or relevant is more likely to be ignored by patients
- Reinforce health messages and campaigns. Many state health departments have a health events calendar that may offer suggestions such as seasonal health issues, health promotion campaigns and key days
- Consider having a practice newsletter for the waiting room
- Information is more likely to be noticed and read if the information relates to a specific personal health problem or issue. Have leaflets/posters available in different languages and gear your selection of topics to the interests, concerns and ethnic/language mix of your practice population (see *Appendix 5*).
- Make displays visually engaging and avoid a cluttered notice board. Remember, less is more. Ensure that leaflets have an adequate font size. Many leaflets are in too small a font to be read by patients sitting in the waiting room. Succinct summaries and catchy headings all help to engage the patient's attention. The receptionist could ask people about the displays or materials, focus their attention on what is available or new, or give handouts when patients register for appointments.

EXAMPLE Anyone for a walk?

One practice has set up a gentle walking group. On certain lunch times a staff member would go walking with any patients that were interested. This means that the practice not only promoted healthy activities, but also was active in its involvement.

Mary Mathews, Monash Division of General Practice, Victoria, www.monashdivision.com.au

EXAMPLE Men's health at the local pub!

Male patients are often reluctant to discuss preventive care in the surgery. To address this, one general practice established a series of informal evenings at the local pub to talk about a range of male health topics such as prostate cancer, diabetes and heart disease. These evenings proved to be extremely popular. Men found the environment a lot less threatening and enjoyed the informal atmosphere and opportunity to ask questions.

Rod Pearce, Athelstone, South Australia

ACTIVITY			
Consider your prevention targets and the type of patient you hope to reach. This table may help you to understand what information you will provide for each target group and how the information will be provided.			
What information will you provide?	How and where will patients access information?	What media will you use?	Name/description of material
Smoking			
Nutrition			
Exercise			
Obesity			
Cervical screening			
Breast screening			
Diabetes			
Hypertension			
Alcohol intake			
Cholesterol levels			
Immunisation			
Injury prevention			
Sun exposure			
Mental health			
Alternative and complementary medicines			
Contraception and STIs			
Community services			
Other			

Resources

- DISCERN – checklist to assess the quality of patient education materials at www.discern.org.uk
- The Victorian Department of Human Services Better Health Channel at www.betterhealth.vic.gov.au
- The Department of Health and Ageing 'Health Insite' at www.healthinsite.gov.au
- Communicating with patients. Advice for medical practitioners at www.nhmrc.gov.au/publications/synposes/e58syn.htm

Managing patient information

Identify the staff member/s who will be responsible for putting your patient information strategy into practice. That person will be required to:

- maintain supplies of hard copy materials
- review suitability of materials
- rotate materials around new or topical issues.

As poster storage is difficult, you should consider laminating posters and store using skirthingers. Many handouts can be found on clinical software or the internet. Make a folder containing these handouts (or their location on the medical software or web addresses).

Internet

The internet can provide direct access to potentially high quality information¹⁶⁷ and innovative formats such as interactive voice messages and interactive programs that interview patients, provide them with tailored information and feedback or address health concerns. Web based resources have a number of potential advantages over paper based education materials, including:

- rapidly increasing and direct access to a wide range of up-to-date educational materials
- greater flexibility and utility of the presentation of information tailored to the individual user
- more effective presentation of information to enable informed decision making
- the opportunity to connect and convey the experiences of others with the same or similar conditions and the ability to access and interact with others in a social support network
- the ability to supply information to a rapidly expanding demand. Up to 4.5% of all searches on the internet are health related with increasing interest expressed by patients and consumers
- efficiency through expanding information and access without substantive increases in cost.

Nevertheless,

- quality and authority of information is variable and can be quite poor
- accessing good and accurate information can be difficult
- individuals have variable skills in accessing quality information
- currently the disadvantaged tend to have less access.

Considerations when reviewing internet sites for prevention information are:

- access – the site should be readily assessable and documents downloadable
- accuracy – read the content and ensure it is up-to-date, accurate and balanced. There should be references to the source of the information
- clarity, readability and ease of use – is the purpose of the site clearly stated? Is the information easy to read? Is the site logically organised and easy to navigate?
- credibility – check the author and the sponsors and their credentials. Does the group have a track record?
- privacy – does the site have a privacy policy? Is transfer of information encrypted?
- purpose – is there a conflict of interest, a bias or advertising of some type? Investigate any links associated with the site
- ethics – are there any conflicts of interest? Is the sponsorship transparent?

Other electronic resources

- Educational voice messages
- Automated and/or interactive phone follow up and support
- Interactive computer programs
- Electronic patient-doctor communication

Resources

- Judge is a partnership between the charity Contact a Family and Northumbria University (UK). Judge has developed a checklist to cover the criteria patients should apply to websites at www.judgehealth.org.uk/consumer_guidelines.htm
- Organising Medical Networked Information (OMNI) is a searchable site that contains high quality health and medicine internet sites at omni.ac.uk
- MedHunt is a medical search engine provided by the Health On the Net Foundation (HON) at www.hon.ch/MedHunt/
- Doctors Reference Site at www.drsref.com.au

3.11.3 The patient register

There is evidence that where patient registers are established, there is increased provision of appropriate investigations and preventive care activities.

Combining a reminder system with a practice register ensures that the reminder system will be both systematic and geared to the targeted population. Computerised registers also provide automated reminders, generate mailing lists of those overdue for preventive activities, and help to minimise repeated data entries that may occur with manual systems.

A patient register is a list of patients attending the practice for a particular demographic risk group or condition. It contains patients' dates of birth, addresses, gender and any conditions requiring follow up. Computers and associated software have greatly simplified the task of setting up a register and the functions performed are highly recommended. There are several forms of patient registers:

- age-sex register (eg. patients over 65 years of age)
- at risk register (eg. abnormal Pap test or warfarin therapy)
- prevention register (eg. immunisation)
- disease register (eg. asthma).

Registers help you to:

- systematically target patients in a particular group
- flag when a preventive activity is offered and completed
- identify those overdue for a preventive activity.

Developing one or more patient registers is advisable and need not be separate entities, but rather can be incorporated into an existing system. Having a computerised register may present patient records in a format that would allow specific health areas to be analysed. Patient registers may also complement population registers when the latter are available.

If you already have a register, you may wish to expand its scope to take account of other groups in your target list. This would enable your practice to provide reminders, recalls, prompts or 'invitations' and to be more efficient (*Table 4*). Over time, the register could cover a greater proportion of patients, building a patient profile for your practice.

Resources

- The National Prescribing Service prescribing software guides are designed to assist health professionals to use software packages as more than just 'prescription writing packages'. The NPS has step-by-step instructions for extracting data from common clinical software systems at www.nps.org.au/site.php?page=1&content=/html/resource.php&id=3
- Many divisions of general practice have guides to support the establishment of computerised registers and recall systems. Contact your local division for further information

Item	Examples of use	Comment
Age	Link to reminder systems (eg. immunisations under 5 years of age)	Essential (often already collected)
Gender	Age related (eg. link to reminder system for mammography screening)	Essential (often already collected)
Socioeconomic status	Identify target groups for prevention strategies and patients at risk	Optional (difficult to collect – divisions may have this information)
Cultural background	Identify target groups for prevention strategies and surveillance of patients at risk (including indigenous patients)	Desirable (may be self identified)
Abnormal results	List patients with abnormal screening results	Essential (GP identified)
Strong family histories (eg. cancer)	Regular monitoring for patients at risk	Essential (GP or patient identified)
Chronic conditions	Identify the patients for management (eg. annual thyroid function testing)	Desirable (self or GP identified)
Specific medications	Identify patients (eg. anticoagulants)	Desirable (self or GP identified)
Other		Data of specific interest to individual practice
Overall	Identify disease prevalence in practice population, quality assurance	Useful (accuracy may vary depending upon completeness and patient attendance) Desirable (register provides a denominator essential for evaluating care)

Table 4. Developing your practice register

Points to consider

- Check whether your division of general practice maintains any registers or provides assistance with setting up a practice register, and consider using or linking to these where relevant
- Consider the Developing Practice Registers Chart above and list what must be included in your register(s), what to include from the chart and what to add given your priority groups
- Consider negotiation with your division as to whether their registers may be adapted to your practice priorities
- Share information with registers in other practices
- If you develop your own register(s) decide on the tasks to be undertaken and who will be responsible for them
- Consider an alternative (or complementary) register available (eg. cervical cancer screening, familial cancer registry, cancer registry, diabetes register, Australian Childhood Immunisation register).

ACTIVITY

Setting up a register:

- What data items will be included?
- Who will oversee the setting up and maintenance of the register?
- How will the register be used for recall, reminder and appointments?
- How will the register be utilised for referrals?
- Monitor and review performance of the register (including data entry and quality)
- Explain the register to patients (including how privacy is protected)

3.11.4 Reminders, recalls and prompts (flags)

Reminders are used to initiate prevention, before or during the patient visit. They can be either opportunistic or proactive. Recalls are a proactive follow up to a preventive or clinical activity. Prompts are usually computer generated, and designed to opportunistically draw attention during the consultation to a prevention or clinical activity needed by the patient. Using a recall system can seem complex, but there are three steps you can take:

- be clear about when and how you want to use these flags
- explore systems used by other practices, your division of general practice, and information technology specialists to ensure you get the correct system
- identify all the people who need to be recalled and place them in a practice register. This will help to ensure that the recall process is both systematic and complete.

EXAMPLE Paper based recall system

The RACGP Recall Reminder Pads are an example of a noncomputerised follow up reminder system. Fill in the recall details and give your patient their copy, which is yellow. The GP or other practice staff member should complete the details in the stippled area of the recall reminder, which is white. The recall reminder copy, which is pink, may be filed with the patient's history or with the recall card in the index box. The recall card is filed by month and year and can be colour coded. When required, the history is checked and if still relevant, the stippled area on the recall reminder is separated and discarded before posting the recall reminder copy. Action taken and outcome can be listed on the recall card kept in the index box.

RACGP, www.racgp.org.au

EXAMPLE The efficient use of reminders

Rather than sending a reminder to all elderly patients for their influenza vaccination in February/March, wait until April/May when a case note review (or review of your register) should identify the 10–20% of eligible patients who haven't had the vaccine. There will be less administrative work and fewer reminders generated to every elderly patient.

John Litt, Flinders Medical Centre, South Australia

3.11.5 Health summary sheet

Health summary sheets (HSS) are a useful aid to identify what prevention has been done and to prompt for what needs to be done. Patient information from registers and patient prevention surveys may be incorporated into the HSS.

The HSS can be kept in a hand held file or on computer and documents active medical problems, relevant past medical history, current medications, immunisations, allergies, operations, as well as prevention and risk factor information. The HSS may only target a single chronic disease or particular condition (eg. diabetes, antenatal record, 75+ health assessment).

EXAMPLE Updating health summaries

One practice has decided on a step-by-step approach to updating the HSS involving all practice staff. At regular intervals the practice focuses on one aspect of the HSS and moves progressively through all subject areas.

Mary Mathews, Monash Division of General Practice, Victoria, www.monashdivision.com.au

Resources

- RACGP Health Record www.racgp.org.au/healthrecords
- RACGP *Standards for general practices* (3rd edition) www.racgp.org.au/standards
- RACGP Recall reminder pads may be ordered from the RACGP website at www.racgp.org.au/healthrecords

3.12 Coordination

The practice based prevention activities will require coordination. Think carefully about the capacity of the practice team to institute prevention:

- would strategies such as providing evidence based information and cultural awareness workshops help to educate particular staff about prevention?
- how does the team cope with change?
- what types of incentives would encourage the team to institute prevention?
- is there a problem with time or access to resources?

3.13 Targeting

- Ask your patients about their prevention needs and priorities (see *Appendix 4*)
- The Practice Prevention Inventory (see *Appendix 1*) can help your practice assess its current performance in prevention
- Use case note audits to identify areas for improvement
- Use your practice team's knowledge and your patient register to identify practice prevention priorities (*Table 5*)
- Speak to your division of general practice about accessing population health data^{168,169}
- Use or adapt a set of priorities and/or activities identified by reputable sources (eg. Australian Bureau of Statistics, Australian Institute of Health and Welfare, RACGP *SNAP guideline*, National Institute of Clinical Studies).

Group	Target activity	Measure	Example
Patients	Health behaviours	Prevention activities due or performed Adherence?	Practice Prevention Questionnaire, Auckland Lifestyle Questionnaire, Lifescript assessment survey
GPs and practice staff	Practice infrastructure	Inventory of implementation activities in the practice setting	Practice Prevention Inventory, SNAP inventory
Division/state	Prevention activities, partnerships with community organisations	Programs and activities	Division of general practice needs survey (www.healthpromotion.act.gov.au)
	Health needs	Morbidity, disadvantage, health needs	CD DATA 2001 (ABS 2003), division needs survey
National	Divisions of general practice activities	Membership activities, infrastructure	Divisions of general practice annual survey (PHCRIS 2004) (www.phcris.org.au/)
	Immunisation levels	Childhood immunisation coverage	Australian Childhood Immunisation Register (www1.hic.gov.au/general/acircirhome)
	Range of health needs	Surveys, reports	Australian Institute of Health and Welfare (www.aihw.gov.au/), National Institute of Clinical Studies (www.nicsl.com.au/)
	Aboriginal health issues	Reviews of programs, resources	Australian Indigenous Health Bulletin (www.healthinfonet.ecu.edu.au/frames.htm), Aboriginal health check (www.health.gov.au/internet/wcms/publishing.nsf/Content/health-epc-atsiinfo.htm/\$FILE/sffahc.pdf)

Table 5. Needs assessment tools

3.13.1 Patient surveys

Patient surveys and discussing prevention with the patient will help determine current performance and monitor progress.¹⁷⁰ Feedback can be used to adjust an intervention or determine priority areas. A patient prevention survey administered in the waiting room has a number of advantages:

- it helps identify groups at risk who may need a prevention activity
- completing the survey in the waiting room helps to distract the patient from thinking about the waiting time
- it primes the patient to think about their health habits
- it increases the likelihood that a range of health habits are discussed with the GP or PN
- it is both feasible to do and acceptable to patients.

Many practices use a simple patient prevention survey to gather appropriate information from patients (see *Appendix 4*).

EXAMPLE A patient prevention survey in ‘practice’

As a way of providing the GP with information that the patient had documented, the RACGP Patient Prevention Survey was adapted for all patients who attended the practice to complete. A separate questionnaire for children was also developed, but later withdrawn due to resourcing issues. Once completed, all information was put onto the clinical software by reception staff. Practice staff have long had a process whereby they stamp on the case notes that the patient has filled in a questionnaire. Staff then ask any patients presenting who have no ‘stamp’ to complete a questionnaire. Over time, the questionnaire had evolved from a general source of information for the GP to more specific issues requiring recall and follow up.

Elaine Green, Leschenault Medical Centre, Australind, Western Australia

Before you implement a patient prevention survey

- Have a clear statement of purpose and identify your survey target group
- Decide who will manage the survey process (eg. how will it be administered? How many people will be surveyed? How to manage patient expectations and questions from the survey?)
- Decide who will collate responses and how this will be done
- Decide how the information will be used and for what purpose
- Decide what assistance, if any, can be given to patients to complete the survey. You should consider literacy, dexterity, language barriers and privacy.

The survey should be given to every patient and updated every 2 years. To organise and review all the surveys is a massive task, so identify the priorities and focus on one issue at a time.

Information from surveys can be incorporated into a patient register and/or patient health summaries. This activity will help toward meeting accreditation requirements of having a completed HSS on regularly attending patients.

To ensure that there is adequate time to address any issues arising from the patient survey, ensure you indicate to the patient that a separate appointment will be needed to address their responses.

ACTIVITY

Managing the survey process – tasks and roles

Tasks	Whose role?	When?
Establish the survey protocol (to whom, when, explanations)		
Distribute survey, answer patient questions		
Transfer the information to both patient files and your patient register		
Identify a process coordinator/ prevention facilitator		
Review and revise patient survey questionnaires based on feedback from patients		

3.13.2 Case note audit

Case note audit is a 'systematic and objective method of analysing the quality of care provided by clinicians. They are a way of identifying areas for improvement and assessing how well your practice is achieving its goals.¹⁷¹ Case note audit requires:

- a systematic evaluation of an aspect of care
- a comparison of the results against some standard, either implicit or explicit
- an assessment plan to improve the quality of care provided.

Several principles are worth keeping in mind when you conduct an audit:

- Purpose: focus on education and relevant to patient care
- Control: should be directed by clinicians and/or peers
- Standards: ideally this should be explicit and set by appropriate clinicians or others participating
- Method: should be nonthreatening, repeatable (reliable), simple, and cause as little disruption as possible
- Records: adequate clinical records and retrieval systems are essential. Computerised records with electronic recording of key information greatly facilitate this process.

With the development of the right audit tool, the process can be undertaken by administrative staff in the practice as necessary. An audit will allow the monitoring of interventions made or messages given and patient uptake of the interventions. In turn, this will allow increased focus on problem areas. Case note audit offers a number of advantages in assessing clinical performance including:

- the ability to determine need, assist with problem solving and attainment of goals
- assessment of information that reflects the doctors clinical activities and quality of care
- acceptability as a marker of clinical performance consistent with the PDSA cycle

Problems associated with an audit include:

- legibility of the records
- difficulties in distinguishing between errors of both omission (not doing an activity) and commission (forgetting to record the activity in the case notes)¹⁷²
- variable impact on improving the quality of care^{173,174}
- many preventive activities that occur in the consultation are more likely to be underdocumented by the GP than more traditional clinical activities (hence audit frequently underestimates GP performance when compared with patient report)
- relatively time consuming and expensive, especially if conducted by doctors
- may not be representative of all the patients treated
- variability in the consistency (reliability) of assessment especially when compared with other evaluation techniques (eg. patient survey,¹⁷⁵ simulated patient visit and GP self report).

Use your practice team's knowledge

The members of your team may be able to help you with the needs of your patients based on interactions with them at the practice. There may be trends noticed in health issues for some patients coming to the practice. Use team meetings to identify trends.

3.13.3 Gathering and using population health information

The practice can gather and summarise information in priority prevention areas to develop a practice population profile covering:

- burden of disease
- socioeconomic disadvantage
- risk factors for common chronic diseases
- age and sex distribution
- distribution of Aboriginal and Torres Strait Islander peoples and those from other cultural backgrounds
- consumer/patient expressed needs.

Frequently, the population profile in the local region will differ substantially from that of the state/territory. It is therefore worthwhile asking your division of general practice about information available for your particular region and to develop a regional profile. This information may already be collected and can be used for planning at the practice level (eg. municipal public health plans, primary care partnership plans, state government regional plans all contain this type of information).

Socioeconomic status information can be difficult to collect discreetly. Using a postcode may be inaccurate and information on income and education status is not usually collected. Markers for disadvantage may be used, such as occupation or employment status, or the presence of a significant mental illness. This data may best be collected at division level or from surveys such as those done by the Australian Bureau of Statistics.

Regional level information suggests what your practice population could look like and is a useful starting point. Your patient survey information can help you develop a clearer picture of who comes to your practice, helping to identify which particular groups are over- or under-represented. Ask your division about auditing the clinical information in your medical software.

Resources

- The Australian Government health priorities at www.health.gov.au/internet/wcms/publishing.nsf/content/health%20priorities-1
- State or territory epidemiology units, registers, surveys and local researchers may provide information of use
- National Institute of Clinical Studies at www.nicsl.com.au/

3.14 Iterative cycles

Part of the cycle of the improvement process is to see whether the various implementation strategies are improving the delivery and uptake of a prevention activity. Some form of measurement is required to provide an accurate indication of progress.¹⁷⁶ Periodically review how well your practice as a whole is addressing prevention. Examine if it is cost effective and reasonable from a GP's point of view. Do other practice staff feel the changes have been worthwhile and are there benefits to patients? Use team meetings to discuss how to build quality systems for review of the prevention activity.

EXAMPLE Intra-practice communication

A key part of our practice's philosophy is that every patient interaction is significant and the 'reception is the pulse of the practice, our role is to monitor it'. Building on this client centred approach, our practice uses an impressive array of communication mechanisms, encouraging feedback from all staff through email, at lunch times, in monthly reception meetings, workshops, doctors seeking second opinions within the practice during consultations, weekly partner meetings, regular medical meetings, and an 'incident log'.

The incident log had a very low threshold; any incident that staff felt could have been handled better was reported. Eighteen incidents were reported in 1 year. Disadvantages of using this approach were not noticed, in fact, staff found the experience to be rewarding self development, assisted with accreditation, contributed to risk management for the practice, and staff learnt they had nothing to fear. Staff were encouraged to identify things they felt could be improved and showed commitment to improvement'.

Marie Karamesinis, Ti Tree Family Doctors, Mt Eliza, Victoria

3.15 Collaboration

Building an effective partnership with patients is the responsibility of the practice as a whole. As the first point of contact, practice staff play a vital part in establishing the overall relationship with the patient. Just as important is the provision of information to patients and the resultant feedback.

- Ensure your practice is friendly and culturally sensitive
- Provide quality prevention information
- Ask patients about their prevention interests and needs.

Front desk contact and the practice environment are the beginning of partnerships with patients. Practice staff that are friendly and helpful and who can respond appropriately to cultural differences, language barriers, and literacy problems, make a significant impression on patients. Make patients feel comfortable in reception and waiting areas.

EXAMPLE Knitting while you wait

How about knitting while you wait? The staff at one practice have started 'waiting room knitting' with wool donated from local shops for patients to knit while waiting. The patients knit simple squares that are then joined together by volunteers to give to residential aged care facilities, hospitals and to raffle off for charity.

Jo Heslin, Denis Medical Centre, Yarrawonga, Victoria

EXAMPLE Men's health promotion in a rural setting

In a rural practice, men usually only present if they are very sick, so the 'Belts and bearings check for men', was created. The division offered support by designing posters for the practice to place around town and by arranging a media release in local newspapers and in school newsletters. The practice's waiting room was adjusted to appeal more to men. Male patients made 45 minute appointments (of which 20 minutes was with the PN and 25 minutes with the GP). The 'Dad's day' campaign questionnaire from Andrology Australia was used as the basis for the consultation; but men were free to ask any questions about their health. The community health centre advertised this as well, referring people to the practice and offering support (by providing healthy snacks and posters relevant to men in the waiting area). The clinic operated later than usual to cater for men who were employed. The clinic was rapidly booked up, so a second clinic was arranged. The timing of the clinic had to suit patients by avoiding busy times (eg. harvest or cropping, and most importantly, football training nights!). The clinics proved an overwhelming success, with many men seeing a GP for the first time in years. The atmosphere was social and relaxed, which was great advertising for future attendances.

Wendy Brand, West Victorian Division of General Practice, Victoria www.westvicdiv.asn.au

3.16 Effectiveness

There is a growing literature on what implementation strategies are effective. Nevertheless there are a number of continuing paradoxes that relate to the clinician's understanding about implementation.

Strategies most preferred by clinicians often have the least impact. Most traditional continuing professional development evenings that include a visiting specialist speaker over a dinner meeting have minimal impact on clinician performance.¹⁷⁷⁻¹⁷⁹ Nevertheless, they are popular as they rarely require additional work or effort on the part of the clinician. On the other hand, organisational strategies usually have a large and consistent impact.

The corollary of this is that interventions offered to clinicians where their self reported performance is poor, often have a bigger impact than interventions aimed at improving their performance when it is well above average.

According to Grimshaw,¹⁸⁰ passive dissemination is generally ineffective. More active approaches such as reminders and educational outreach are more likely to be effective but are also more costly. Interventions based on an assessment of potential barriers to change are most likely to be effective. And multifaceted interventions targeting different barriers are likely to be more effective than single interventions.^{181,182}

Consequently, it is important to undertake a systematic planning process to identify barriers and enhancers of preventive activity in your practice before launching into a program of activity (Table 6).

Strategy	Effectiveness	Comments
Organisational strategies (eg. clarification of roles, delegation of tasks, practice policy/standing orders, protocols, incentives)	Highly effective	Contributes to implementation of preventive interventions and helps sustain them Impact varies with area, capacity and acceptability
Reminders for the GP	Very effective Computerised	Computerised reminders have a similar impact to manual reminders. Needs to be targeted
Reminders for patients	Very effective	Needs to be targeted
Other interventions and reminders for patients	Very effective	For example, telephone, patient education, support strategies
Practice nurse interventions	Effective	Provides a clear outline of the role of the PN and gives adequate training and support
Practice co-ordinator	Effective	May be someone within the practice or external
Health summary sheet	Effective	Practice accreditation standards require a minimum number to be completed
Case note audit	Effective	Impacts particularly on prescribing and test ordering
Continuous quality improvement	Effective	Needs active GP involvement and feedback, and a supportive practice infrastructure
Clinics	Effective	More effective for conditions involving a team of health professionals and where large numbers of patients need to be seen
Feedback	Effective in some situations	Needs to be pre-negotiated and tailored. Peer comparison is useful if confidential
Practice registers	Effective in some situations	Require a computer to be most effective
Local opinion leaders	Effective in some situations	Assist in spreading information and examples
Lectures	Not effective	
Traditional CME evenings	Not effective	

Table 6. The effectiveness of implementation strategies in improving prevention

Grimshaw and colleagues, in a recent systematic review of interventions aimed at changing clinician behaviour and/or performance, found there was no significant effect in size (improvement in performance) with increasing the number of interventions to facilitate implementation (*Figure 8*). More is not necessarily better. More importantly, it is the strategic combination of implementation strategies that is the key to improving performance and not just the use of multiple approaches.

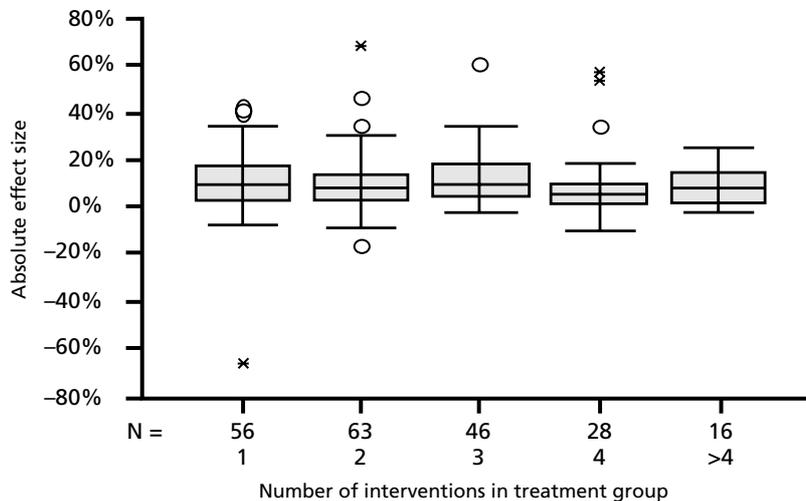


Figure 8. Effect sizes of multifaceted interventions by number of interventions

Reprinted with permission: Grimshaw J, et al. Effectiveness and efficiency of guideline dissemination and implementation strategies. *Healt Technol Assess* 2004;8:1–72

We often assume that the effort to implement an activity is the same regardless of the level of initial performance. As seen earlier with the brief advice for smoking cessation, the impact of GP advice falls off sharply after 3–5 minutes, even though it continues to improve. Specifically, the return on effort is not linear. This is further demonstrated in *Figure 9*. It is useful to think about three performance ranges:

1. No or very low level of performance

Considerable effort is usually needed to improve low levels of performance or overcome inertia. Similarly low levels of performance should prompt the GP to think about the various constraints impeding performance. For example, the GP's time is often the constraint in achieving very high levels of prevention coverage. Given the heavy GP workload, adding additional prevention tasks are not attractive, unless than can be performed by someone else.

A similar approach of identifying constraints can be adopted in the assessment of the patient's motivation or confidence. Low scores on both should prompt the GP to ask what would need to happen to improve this score from, say 2, to 8 or 9? When performance is low, there is likely little infrastructure or an absence of critical mass to support it. Think carefully about what is constraining performance.

2. Mid-range performance (~20–70%)

Improvement in this range is easier up to a point but may not be linear, as described above.

3. High level of performance (70–100%)

Achieving very high levels of performance is influenced by two further principles:

- the law of diminishing returns: even higher efforts are required to increase the effect by a given percentage, resulting in a reduced efficiency
- the Pareto principle: 20% of your patients will require 80% of your effort.

In practical terms, this means that if your current performance is very high, say around 80–85%, then a lot of effort will be required to reach 95–100%. Similarly, if your performance is extremely low, then there are likely to be a large number of constraints holding back your performance. These principles provide further support for being strategic in your approach to implementation. Practices vary significantly in terms of resources, infrastructure and patient population profiles and this has a significant influence on preventive interventions.

Consider the following:

- Is the prevention activity important? (burden of illness)?
- Am I likely to be effective? (role, impact)?
- What combination of implementation strategies is likely to be effective?
- Can I identify the various barriers and constraints to better performance?
- Can I make the impact and outcome visible?
- What will assist getting a quick return?
- Is it desirable?
- Is it do-able?
- Can we make it a routine part of the practice?
- What is the capacity of the practice to provide the intervention? How will implementation strategies work in my practice?

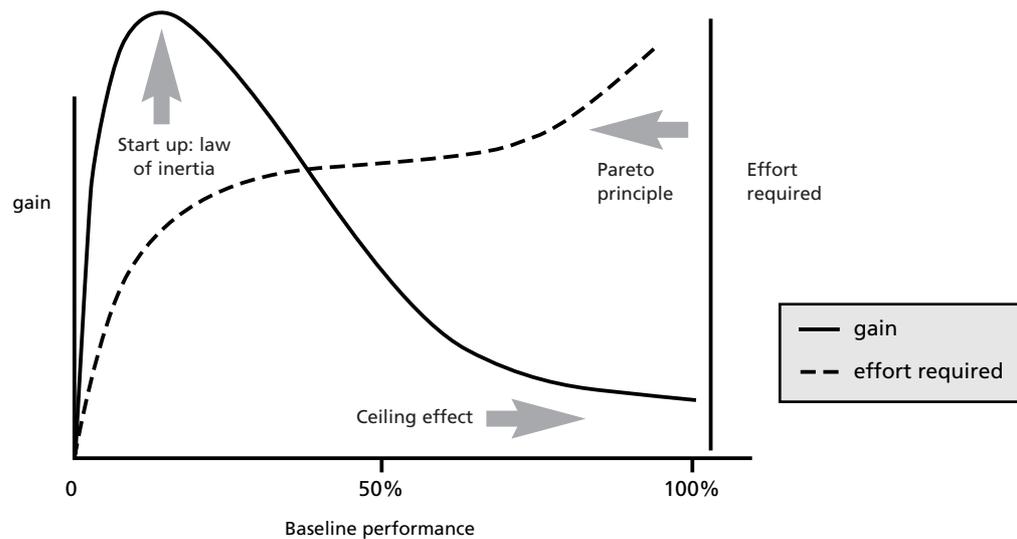


Figure 9. Effect-performance paradox

EXAMPLE Return on effort – pneumococcal polysaccharide vaccine

Less than a third of the elderly receive the pneumococcal polysaccharide vaccine (PPV). What approach will result in the best return on effort?:

- Offer the PPV to all elderly patients attending the practice for flu injection. Only a small improvement would be seen if GPs offered the PPV to all patients who came for a flu injection. Many of this group have already had the PPV in the past 5 years
- Provide PPV free to the elderly and make it available to GPs in their surgeries. This had a noticeable impact when the same strategy was adopted for the flu injection several years ago. It removes any financial barrier and facilitates opportunistic provision of PPV. The majority (>90%) visit a GP at least once in the pre-influenza period so in theory, nearly all could be offered the PPV. The NIPS survey showed that coverage could improve by about 10% using this strategy
- Flag the case notes of all the elderly patients and ensure that the PPV is recommended to elderly patients when they attend the surgery. The practice staff could inform the PN that an elderly patient attends the surgery and needs the PPV. Alternatively, they could remind the GP. The PPV is provided to patients and receipt of the PPV is recorded on the electronic record so the prompt disappears.

As the influenza season approaches, there will be fewer prompts on the screen or uncompleted vaccine status on the case notes to remind the practice staff or GP. In May, practice staff could generate a list of all elderly patients and whether they had had the PPV. A decision could then be made whether to phone this group and discuss the PPV or wait until they attend the practice. PPV coverage of around 80% could be achieved using this approach. The significant improvement in impact is due to the strategic approach that is used to tackle some of the key constraints to improving PPV coverage. These include: difficulty identifying the target group, systematic approach to increasing coverage, provision of a reminder to the GP and practice staff, and a recognition that a GP recommendation to get the PPV overcomes most of the concerns and misperceptions about the PPV.¹⁸³

John Litt, Flinders University, South Australia

Key messages

- Focus on what GPs and the practice are interested, competent, prepared and able to do
- Build teamwork within your practice and enhance collaboration with other community services. This will greatly enhance your prevention activities and benefit to patients
- Referring to relevant community services and programs reduces work pressure on the GP
- Seek like-minded partner organisations to work on preventive strategies
- Work with and through your local division of general practice

3C. The community and the health system

To facilitate the delivery of prevention activities it is crucial to consider the problem, the target group, the setting of care as barriers and enhancers of that activity. At the community level, macro factors that influence prevention include financial arrangements, legislation, regulations and policies.

Divisions of general practice, and regional, state and national health organisations can provide support for health activities at the local level through various programs. Linking with those programs can provide the general practice with publications, publicity and other supports. Working collaboratively with local organisations can add value for patients, particularly those who are disadvantaged or have complex care needs. To work effectively with organisations it is important to have a systematic method of referral when sharing patient care, and a realistic understanding of what the practice can do when working on activities such as health promotion events.

Community involvement needs careful consideration as it is naive to assume that shared care is less time consuming than individual patient management. Careful planning is essential for successful outcomes. Part 1 outlines the planning process that will systematically allow you to consider all the options.

3.17 Principles

The principles of being patient centred, adopting a population approach, and addressing health inequalities and disadvantage are considered to be very important by most state, national (and many international) health services, organisations and agencies. Other pertinent principles include:

- focusing on what GPs are interested, competent, prepared and able to do
- acknowledging the GP as one of the key players in an effective primary health care system¹⁸⁴
- the importance of partnerships and collaboration.

3.18 Receptivity

Reflect on your own approach and attitudes, and encourage your staff to reflect on theirs.

The attitude of health workers influences how clinical care is provided.^{185,186} Evidence suggests that assuming people of lower socioeconomic status are less interested in health information or changing health behaviours is incorrect. Apparent nonadherence can become a cycle of 'victim blaming' unless the underlying reasons are explored.

Consider building community partnerships based around community campaigns and practice based skills, knowledge and competencies, and the known needs of patients.

3.19 Ability

Not all practice staff will be equally comfortable networking with other agencies and groups in the community, and not all staff will need to be engaged in such activities. When staff do need to be involved, it is important they understand the purpose of the approach and how it could benefit patients, GPs and the practice. It will take time to identify and explore barriers to extending networks and partnerships and how these can be overcome. Establishing a good team

environment in your practice will provide a sound basis for building broader partnerships in the community. Adequate knowledge, awareness, skills, time and incentives are also important. Many divisions of general practice provide support, opportunities and/or skills training for participating in community and national campaigns.

Resource

- General Practice Divisions Victoria has a number of resources available on practice teamwork and capacity building available at www.gpdv.com.au/gpdv/

3.20 Coordination

3.20.1 Improving access to services

Evidence suggests that socioeconomically disadvantaged patients can make effective use of preventive services if barriers to their participation are addressed.¹⁸⁷ Consideration should be given to issues such as transport to and from services, carer responsibilities of participants, financial barriers, and language and cultural barriers. It may be easier to reach disadvantaged populations by working with community groups, a regional community or an indigenous health service that has already established effective communication and service. You could ask your division of general practice if they are already involved in such partnerships, or ask them to facilitate this development. You could review the flexibility of your appointment or billing systems. Does it allow for someone arriving late, being accommodated at the last minute or for an unplanned bulk-billed consultation?

EXAMPLE Team Health Care II

Team Health Care II is a 3 year coordinated care trial investigating different ways of managing the health needs of people over 50 years of age, and over 30 years of age for indigenous people, with chronic and complex conditions. Focusing on intervention and prevention, the trial aims to improve the health and wellbeing for patients with chronic and complex conditions, improve communication and information exchange between general practice, hospitals and health service providers, reduce duplication of service provision, and prevent hospital admissions where appropriate.

Brisbane North Division of General Practice, Queensland www.bndgp.com.au

There are specific groups other than the socioeconomically disadvantaged that may experience barriers to accessing general practice services. It is well documented that youths between 15–24 years of age do not access services as often as other groups. People with physical, intellectual and mental disabilities also face barriers to accessing preventive services. Transport may not be easily accessible. People with communication difficulties may need longer to communicate their needs. GPs may have difficulties performing physical examinations and procedures with patients with certain disabilities.

Aboriginal and Torres Strait Islander peoples are a specific group whose morbidity and risk is significantly above the national average for certain diseases (see the *National guide to a preventive health assessment in Aboriginal and Torres Strait Islander peoples*).

EXAMPLE Improving access and service delivery to disadvantaged groups

A 'street doctor' program

In December 2003, a division of general practice commenced a mobile, street based health service. The service is provided for people at risk such as young people, indigenous people, homeless people, people with diagnosed and undiagnosed mental illness, and injecting drug users. The mobile medical service aims to increase access to health care to meet the physical, mental and social needs of people in the area. The service operates in a local park and its success may be attributed to overwhelming public support, sponsorships, donations, and divisional commitment to the project. The mobile medical service is a free, visible, easily accessible, culturally appropriate and nonjudgmental mobile service for members of street based populations in the area. The mobile medical service provides flexible and local service at predetermined sites. Where possible, people are referred to certain GPs and other providers rather than being offered long term management of health issues. At last analysis, a total of 663 people had accessed the service and of those, 251 have gone on to consult a GP. A number of media outlets have printed newspaper and journal articles about the service, and the division is greatly appreciative of the widespread support it receives from the community.

Fremantle Regional GP Network, Western Australia www.frdgp.com.au

3.2.0.2 Addressing the needs of the disadvantaged

There are a number of ways in which your practice can specifically address the needs of the socioeconomically disadvantaged in your community:

- Identify and collect data on socioeconomic status: this should be done in a sensitive manner to avoid stigmatising the patient. One approach is the computerised linkage of patients who require welfare services. Clinical audits may incorporate data on socioeconomic status for comparison between care and outcomes in different groups. This information can then be fed back into clinical care provision
- Offer flexibility of services: payments may be a barrier and time may have a different meaning to some people who may respond better to drop-in appointments on designated days
- Understand your practice's population groups: utilise knowledge of your patients to understand health from their perspective. For example, many Aboriginal communities have different concepts of confidentiality, and including a support person may be very important to their ability to keep appointments
- 'Sensitise' your recall and reminder systems: take into account risks for specific groups (eg. decreased age of Aboriginal and Torres Strait Islander peoples for certain conditions)
- Advocate for your patients: ensure help for different groups in accessing health services. When appropriate, communicate the barriers to their care to others involved.

Resources**Youth**

- National Divisions Youth Alliance at ndya.adgp.com.au

Aboriginal and Torres Strait Islander peoples

- The *National guide to a preventive health assessment in Aboriginal and Torres Strait Islander peoples* at www.racgp.org.au/aboriginalhealthunit/nationalguide
- RACGP provides free access for GPs and others working in Aboriginal and Torres Strait Islander health to library services and a comprehensive collection of resources relevant to the health needs of Aboriginal and Torres Strait Islander peoples at www.racgp.org.au/library/aboriginalservices
- *Guidelines for preventive activities in general practice* ('red book') www.racgp.org.au/redbook

People with disabilities

- The California Department of Developmental Disabilities at www.ddhealthinfo.org/default.asp
- The Centre for Developmental Disability Studies at www.cdds.med.usyd.edu.au
- Management guidelines: *People with developmental and intellectual disabilities*. Lennox N, Diggins J, editors. Melbourne: Therapeutic Guidelines, 1999. ISBN 0-9586198-0-8
- Australian Family Physician 2004; vol 33 No.8 August – ‘Developmental disability’

Language and speech

- Australian Government Translating and Interpreting Service at www.immi.gov.au/tis
- Deafness Forum of Australia – sign language interpreters at www.deafnessforum.org.au
- Australian Communication Exchange at www.aceinfo.net.au
- National Auslan Interpreter Booking and Payment Service free to patients visiting their GP available 8 am – 8 pm freecall 1800 246 945 or at www.nabs.org.au

3.21 Targeting

3.21.1 Health priority areas

Identifying partners who have a shared interest in finding ways to improve health outcomes are to be encouraged. There are eight Australian Government Health Priority Areas:

1. Asthma
2. Diabetes
3. Cardiovascular health
4. Cancer
5. Mental health including depression
6. Injury prevention and
7. Arthritis and musculoskeletal conditions
8. Dementia.

There are a range of national public health programs such as cervical and breast screening, and immunisation that are very effective. Other national initiatives include the ‘SNAP’ priority risk behaviours of smoking, nutrition, alcohol and physical activity.

Health gains have not been shared equally across all sections of the population. Inequality in health care is more common among Indigenous Australians, people of lower socioeconomic status, people living in rural and remote areas, people with disabilities, and refugees and asylum seekers.

While the causes of health inequalities are complex, the cost of health care can have a major impact through reduced access to health services, preventive health care and adherence with treatment.

Divisions of general practice, community organisations and local groups may have identified particular target population groups, and be willing to work with GPs to improve the health needs of these groups. It is likely that your target groups will match some of theirs.

EXAMPLE Domestic violence

A mother of three initially presents to the practice with uncontrollable migraines. Over the next 12 months it becomes apparent that there is a very difficult situation at home with her husband (an excessive drinker) and ongoing physical, emotional and financial abuse. How could the GP and the practice respond to this situation?

- See the victim individually for safety and allow the victim a safe place to talk
- Support the victim to understand what is happening and that she is not to blame for the violence
- Be aware that domestic violence will have an effect on the children and aim to minimise this
- Planning how to manage contact with the husband if he presents for medical care
- Maintain absolute confidentiality about the content of the consultations
- Provide regular contact and empathic nonjudgmental support for the victim
- Involve all staff in training in domestic violence
- Display posters and pamphlets in the patient waiting area
- Involve community services where appropriate

Elizabeth Hindmarsh, Sydney, New South Wales

Resources

- Public Health Association of Australia at www.phaa.net.au
- Joint Advisory Group on General Practice and Population Health at www.health.gov.au/internet/wcms/publishing.nsf/Content/Joint+Advisory+Group+on+General+Practice+and+Population+Health-1
- RACGP Policy on health inequalities at www.racgp.org.au/issues/healthinequalities
- Your local services directory or the Commonwealth Carelink Centre at www.commcarelink.health.gov.au/index.htm
- RACGP Women and violence manual at www.racgp.org.au/guidelines/womenandviolence
- Domestic violence in Australia – an overview of the issues at www.aph.gov.au/library/intguide/SP/Dom_violence.htm#links

3.22 Iterative cycles

Quality improvement approaches often involve cycles of problem identification, research, implementation and review. In 2004, a structured approach to quality improvement was initiated through the Australian Primary Care Collaboratives Program. The approach provides a considered and systematic approach for general practices and divisions of general practice to work together.

The approach is based on the PDSA cycle that has been used extensively in the UK National Primary Care Collaborative. This now involves general practices from every primary care trust in the UK and is one of the largest health quality improvement program in the world.

The purpose of the Australian Primary Care Collaboratives Program is to develop ways to enable participating general practices to create sustainable improvements in the quality of care for their patients. It entails practices linking into a process for gathering existing best practice and trialing new methods. A series of workshops share successful and less successful strategies and repeating the PDSA cycle.

The collaboratives program offers practices and GPs the opportunity of improving patient care, continuous professional development, improvement in practices strengths and minimising weaknesses, the learning of useful general skills, better organisation of work time, and increased professional satisfaction.

EXAMPLE Networking nights for GPs

A rural division of general practice facilitates 'networking nights'. These involve locally based health care providers including the hospital, community health services and other service groups, GPs, PNs, practice managers and private providers. The group usually works through a hypothetical scenario and deals with issues around specific chronic disease management.

Richard Bills, Central Highlands Division of General Practice, Victoria, www.chdgp.com.au

Resources

- National Primary Care Collaboratives at www.npcc.com.au
- GP Obstetric Shared Care Program and Regional Diabetes Pathway. South Australian Divisions of General Practice Inc. at www.sadi.org.au/activities

3.23 Collaboration

Studies have identified a number of conditions that affect collaborative action with external organisations.^{188,189} These are:

- necessity to work together
- opportunities to gain support from the wider community or to build on existing policy initiatives
- capacity of those involved to take action (commitment, knowledge, skills)
- strong relationships between participants
- well planned action
- provide for sustained outcomes.

The advantage of collaborations is that each partner may contribute what they do best to deliver a better result, with less effort, for a particular group of patients. Factors important in the development of collaboration include:

- adequate expertise, motivation, support and resources
- sharing of planning and responsibility with clear roles and tasks
- decision making, problem solving and goal setting
- open communication, cooperation and coordination
- recognition and acceptance of separate and combined areas of activity.

It is vital to be specific about what your practice can contribute, bearing in mind that the role may vary with different patients. How all the relevant partners work together is crucial in successful collaborations. Once you have identified the issue and the target group have identified likely partners, consider the following:

- Are these potential partners interested in collaborating?
- What are the likely benefits in building links with these partners?
- Are there any existing relevant activities or interventions you could build on?

You might wish to discuss this with the practice team before the first meeting with potential partners.

3.23.1 Partnerships with other health service providers

Other service providers within the health system are natural partners for general practice, as it is difficult for individual practices to provide a full range of health services. In certain cases, for example, where patients have significant comorbidities or a complex drug regimen, it may be beneficial to collaborate formally with appropriate specialists to ensure that overlap is minimised and errors decreased.

Involving partners in patient care

A patient held record that is carried with the patient, in which all health providers incorporate information, may be very effective for patients with complex pathologies (eg. antenatal care record multiple chronic diseases).

Community events

Use opportunities of community events such as a fair or sporting event to set up a tent or stall with a health theme. Alternatively, it may be the launch of a prevention program or campaign. The community event or program launch provides a venue for disseminating information about prevention services, networking and informing communities about forthcoming programs.

Workplace programs

A range of workplace programs have improved the uptake of prevention activities and health outcomes, including multifactorial health promotion programs, smoking cessation, hazardous drinking, prevention of back pain, and improving nutrition.

Divisions of general practice

A central role and function of divisions of general practice is to support general practice to provide quality care within the community. Divisions often act as a point of liaison between GPs, government and other health providers. Many divisions provide opportunities for practices to participate in community, state and national health initiatives.

Youth health clinics and services

The overall aim of youth health clinics is to improve the accessibility of local doctors to young people, particularly those who are marginalised. Barriers may be overcome by providing a clinic located in a service that young people already attend. General practitioners have usually been trained in 'youth friendly practice' before providing the clinics, which are on a sessional basis and often in rotation with GPs from other divisions of general practice. In these projects, sessions are either bulk billed, or GPs are paid sessionally. Young people are often willing to consult a GP because they already know the centre staff.

Community organisations

Community organisations usually have a high awareness of issues involving their community and may bring a wealth of resources. Networking with local groups can also be a means of introducing your practice and the services you offer, expanding your patient base. It may be useful to have a system of service coordination for patients referred from your practice to community based programs. A staff member could be allocated to set up a system to monitor referrals.

Health departments

Developing communication with your local health department, either directly or through your division of general practice, has significant advantages. For example, both the practice and health department are committed to the management and the prevention of a communicable disease. Practices and divisions can gain access to significant expertise in public health and prevention resources by connecting with state and territory public health or health promotion units.

ACTIVITY

Before you embark on a partnership or collaboration, consider:

- Discussing the proposal with your practice team
- Talk to another general practice or a division of general practice that has engaged in similar activities about their experience, the problems that occurred and how they measured their success
- Develop your own set of measures of success
- Ensure there is time to regularly review progress
- Identify what is working well, where there are difficulties and how the difficulties could be addressed
- Make adjustments where needed
- Take advantage of any quality assurance activities that will provide points for involvement and/or performance

Resource

- The Australian Government Coordinated Care Trials at www.mya.com.au/public/issues/177-09-041102/est+10526+fm.html

3.24 Effectiveness

Most successful ventures work best when there is partnership between funding bodies and community players with a fair degree of flexibility. Your practice's ability to be efficient with prevention will be enhanced substantially by establishing effective referral mechanisms and links to regional, state or national health promotion publicity programs.

Resources

- A compendium of case studies from the Better Outcomes in Mental Health Initiative at www.adgp.com.au/site/index.cfm?display=2550
- Commonwealth Carelink Centres Referral resource directory at www.commcarelink.health.gov.au

3.24.1 How to refer

Research shows that there are major barriers to GPs engaging with other agencies to provide prevention, primary health and community support services.¹⁹⁰ These include:

- GPs traditionally refer to an individual specialist who is known to them, rather than a service type
- feedback on new referrals may take longer
- increased time taken to identify new referral sources
- the lack of up-to-date information on referral sources.

For patients, the concerns are:

- referral to inappropriate or poor quality services
- referral to services they find difficult to reach or to afford
- poor communication with the patient
- poor exchange of information between their GP and the service they are referred to.

Strategies that have worked for some divisions of general practice in addressing the above concerns include:

- Creating a referral resource directory of quality services and supports that is easy to update
- Identifying a set of central referral numbers (eg. The Cancer Council Australia) where the agency will identify the patient's needs and refer on appropriately
- Establishing or advocating for access to a range of health support services for your region on behalf of vulnerable groups of patients. A critical success factor is marketing the referral service so that GPs are aware of their availability.

EXAMPLE**Vietnamese Primary Health Care Network – the key to the future of primary health service delivery**

The aim is to develop and implement a primary health care networking model that effectively links health and other services for Vietnamese people in a local government area. It was born out of a need to provide comprehensive and accessible primary health care to a large culturally and linguistically diverse group with complex socioeconomic and health issues, and a need to link service providers and clients to provide more effective and efficient health care.

Twenty Vietnamese GPs and six primary health care services are connected as part of the network, including speech pathology, hearing clinic, community counselling, community nursing, ambulatory care and dietetic/nutrition services. There are a range of partners in the network including GPs, the local health service, divisions of general practice, occupational therapists, pharmacists, multicultural health organisations, Vietnamese NGOs and associations, and community groups. Implementation strategies include case conferencing, care planning, establishing a referral system and communication strategy. Support for health service providers included:

- an education plan targeting GPs and other service providers
- a single contact point to advise/support in relation to direct client care and information flow
- a core primary health care team to work with GPs
- appropriate strategies to support Vietnamese GPs

Strategies to improve client access to health services included:

- identifying access issues for Vietnamese clients and developing strategies to address them
- single point of entry to the health service
- timely referral to appropriate services
- liaison and follow up for referrals with the health service
- identifying key contacts among the partners to facilitate more timely access to information and services
- increased use of care planning and case conferencing in recognition of the complex needs.

Hien Le, Vietnamese Primary Health Care Network, New South Wales www.medlife.faithweb.com

3.24.2 Health promotion campaigns

Practices can take advantage of various health promotion activities and publicity campaigns being run by other groups. National programs (eg. cervical and breast screening, and immunisation) are ongoing national programs integrated with general practice to achieve prevention outcomes. International calendar days are set by the World Health Organisation to promote certain medical conditions. 'Awareness weeks' are more often local, state or territory initiatives (eg. Arthritis Week, Children's Week, Coeliac Awareness Week, Healthy Bones Week, Heart Week, National Diabetes Week, National Skin Cancer Action Week and Sun Smart Week).

Some state or territory health departments publish 'events calendars' that can be a helpful guide (see *Appendix 6*).

Resources

- The Integrated Health Promotion Resource Kit at www.health.vic.gov.au/healthpromotion
- Contenance Foundation of Australia at www.contfound.org.au
- Alzheimer's Australia at www.alzheimers.org.au
- National Asthma Council of Australia at www.nationalasthma.org.au
- Community resources at www.commcarelink.health.gov.au
- The Cancer Council of Australia at www.cancer.org.au
- Diabetes Australia at www.diabetesaustralia.com.au
- National Heart Foundation of Australia at www.heartfoundation.com.au
- SANE Australia at www.sane.org
- National Depression Initiative at www.beyondblue.org.au

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Practice prevention inventory (and plan)

The practice prevention inventory and plan (PPIP) is a useful tool to assist in planning improvements. The tool can assist you to identify what implementation strategies are currently in place and identify areas for further improvement.

How to use the PPIP

The acronym PRACTICE has been used to summarise a practice prevention approach. With your practice team, you should complete the PPIP to explore prevention activities. The tool comprises seven aspects:

- Key points for consideration in improving prevention services within the practice
- Determine whether you agree or disagree with the statement in relation to your practice
- Rate how well you perform this function, activity or task within your practice. Use a scale of 1–10 to rate performance, with 1 being poor and 10 being excellent
- Rate how important this function, activity or task is for your practice. Use a scale of 1–10 to rate the importance of the function, activity or task with 1 being poor and 10 being excellent
- Identify current or possible barriers and difficulties that your practice will encounter in implementing the function, activity or task
- Identify what actions will be taken and by whom to implement or improve the function, activity or task
- Identify the resources and supports that your practice will need to implement the function, activity or task.

Issue	Agreement (Yes, No, Unsure)	Performance 0–10	Importance 0–10	Barriers and difficulties	Action taken by whom	Resources and supports
PRINCIPLES: THE SUM IS GREATER THAN THE PARTS, HAVE A PLAN						
Does the practice actively use a patient centred approach through:						
• Actively involving patients in the consultation, including decision making?						
• Encouraging autonomy?						
• Supporting patient self management?						
• Having strategies that address health inequalities and disadvantage?						
Does the practice systematically:						
• Adopt a whole of practice approach to prevention?						
• Use tools such as surveys, needs assessment?						
• Focus on what the practice and GPs are competent, interested and able to do?						
RECEPTIVITY: IDENTIFYING THE BENEFITS AND FACTORS THAT INFLUENCE PREVENTIVE CARE						
Is providing systematic and a practice population approach to preventive care:						
• Important and worthwhile?						
• Feasible and realistic?						
• Likely to be adequately supported?						
• Sustainable (can it be made a routine part of your practice)?						

Issue	Agreement (Yes, No, Unsure)	Performance 0–10	Importance 0–10	Barriers and difficulties	Action taken by whom	Resources and supports
Are the implementation strategies that the practice uses or plans to use to deliver prevention care:						
• Transparent (all staff know what needs to be done)?						
• Respectful of staff abilities, skills and workload?						
• Consistent with professional and practice goals						
• Been discussed and agreed by all key players (eg. GPs, PN, PM)?						
If you work with community based agencies to provide preventive care:						
• Do you understand the role and expectations of your partner organisations?						
• Could you participate in joint training with community based workers?						
ABILITY (CAPACITY): ENSURING THE PRACTICE HAS THE NECESSARY KNOWLEDGE, SKILLS AND RESOURCES						
Do GPs and/or practice staff have adequate:						
• Time for preventive activities?						
• Knowledge about prevention activity and how to implement prevention systematically?						
• Motivational interviewing skills and techniques?						
• Behavioural skills and techniques?						
• Team building skills?						

Issue	Agreement (Yes, No, Unsure)	Performance 0–10	Importance 0–10	Barriers and difficulties	Action taken by whom	Resources and supports
Is there support within the practice to undertake prevention tasks?						
• All GPs in the practice support the activity						
• The practice nurse/s support the activity						
• The practice manager supports the activity						
Does the practice have sufficient organisational infrastructure to support the prevention tasks?						
• Practice register						
• Reminder systems						
• Information management system						
• Policies and protocols						
• Patient education and decision aids						
• Involvement of your local division of general practice						
COORDINATION: WORK IN PARTNERSHIP WITH PATIENTS AND AS A TEAM IN THE PRACTICE						
Prevention activities need to be planned at the practice level:						
• Do staff and patients agree that the prevention activity is important?						
• Is there a designated coordinator of the prevention activities?						
• Do you have effective communication processes (eg. do all staff know what they need to do)?						

Issue	Agreement (Yes, No, Unsure)	Performance 0–10	Importance 0–10	Barriers and difficulties	Action taken by whom	Resources and supports
• Do you operate as a team?						
• Are staff roles defined?						
TARGETING: TARGET AT RISK AND/OR ELIGIBLE PATIENT GROUPS						
Has the practice identified:						
• Why a particular activity or group have been targeted?						
• The level of need for a particular prevention activity?						
• A particular population group for a prevention activity?						
• How to apply the 'less is more' approach?						
• Community based organisations or programs that could support the practice approach?						
ITERATIVE CYCLES: HAVE A CYCLICAL PLANNING PROCESS THAT MEASURES PROGRESS						
For individual patients, does the practice have:						
• Agreed review appointments for those with complex conditions?						
• Flow sheets and other resources that monitor patient progress?						
Can you measure the activity and/or the outcome of preventive care:						
• Through feedback?						
• Surveying patients?						

Issue	Agreement (Yes, No, Unsure)	Performance 0–10	Importance 0–10	Barriers and difficulties	Action taken by whom	Resources and supports
<ul style="list-style-type: none"> Mechanisms/strategies that help to make the outcomes of your activities visible? 						
<ul style="list-style-type: none"> Other 						
As a practice entity, do you:						
<ul style="list-style-type: none"> Have information on local health needs and priorities? 						
<ul style="list-style-type: none"> Use a 'PDSA' cycle to implement and review processes? 						
<ul style="list-style-type: none"> Discuss prevention at practice staff meetings? 						
<ul style="list-style-type: none"> Measure and celebrate success as you achieve your prevention target/s? 						
COLLABORATION: WORK IN PARTNERSHIP WITH COMMUNITY AND NATIONAL PROGRAMS						
Does the practice coordinate with other groups and organisations involved in prevention?						
<ul style="list-style-type: none"> Divisions of general practice 						
<ul style="list-style-type: none"> Community health agencies and staff 						
<ul style="list-style-type: none"> State health departments, health promotion and public health programs 						
<ul style="list-style-type: none"> National health promotion and public health programs 						
EFFECTIVENESS AND EFFICIENCY: MAKE THE BEST USE OF THE EVIDENCE AND LIMITED RESOURCES						
Is the practice able to:						
<ul style="list-style-type: none"> Prioritise prevention activities? 						

Issue	Agreement (Yes, No, Unsure)	Performance 0–10	Importance 0–10	Barriers and difficulties	Action taken by whom	Resources and supports
• Delegate tasks based on competency with and outside the practice?						
• Embed prevention activity within the practice routine?						
• Maximise use of other health professionals (eg. QUIT line)?						
• Identify the most appropriate intervention for the patient?						
• Undertake a cost benefit analysis of the activity?						
• Maximise your information management systems?						
• Refer?						
• Use protocols?						
• Use guidelines?						
• Use incentives?						
• Use standing orders?						
• Use prompts and reminders?						
• Use health summaries?						
• Use at risk registers and disease registers?						
• Undertake case note audits?						

A quick guide to putting prevention into PRACTICE

Framework	Consultation	Practice	The community and the health system	Key strategies
<p>Principles</p> <p>Implementing prevention activities within a structured framework has greater impact than individual activities</p> <p>Implementation strategies are evidenced based and outcomes focused</p> <p>Strategies address sustainability and maintain a commitment to a quality culture</p>	<p>Adopt a patient centred approach</p> <p>Be systematic</p>	<p>Be systematic and use a whole of practice (ie. a population health) approach</p> <p>Incorporate strategies to identify and address health inequality that are evidence based, feasible, sustainable, adaptable and congruent with the practice philosophy</p>	<p>Focus on what GPs and the practice are interested, competent, and prepared to do</p> <p>Address health inequalities</p>	<p>Designated coordinator for prevention</p> <p>Division of general practice representation on community based partnership groups planning health promotion and disease prevention programs</p>
<p>Receptivity</p> <p>Implementation is enhanced when GPs, staff and patients believe prevention is important, they can do it, understand the benefits, and have the skills, time and resources</p>	<p>Consider benefit from the patient and the GP perspective</p> <p>Negotiate strategies</p>	<p>Ensure implementation strategies are transparent, respectful and congruent with practice goals and staff views</p> <p>Ensure you have adequate resources</p> <p>Measure and celebrate successes</p>	<p>Build community partnerships based on an assessment of what is achievable</p> <p>Clarify your understanding of the role, expectations and responsibilities of the general practice and other health professionals and agencies</p> <p>Provide opportunities for joint activities and/or training where there is an overlap of roles and tasks</p>	<p>The practice nurse has a key role in prevention</p> <p>Work as a team</p> <p>IM/IT system</p>

Framework	Consultation	Practice	The community and the health system	Key strategies
<p>Ability (capacity)</p> <p>Implementation is enhanced when GPs have knowledge, skills, beliefs, attitudes, time and the organisational infrastructure</p>	<p>Use motivational interviewing techniques</p> <p>Assess your capacities</p> <p>Ask about and facilitate patient's abilities and capacities. Address any shortfalls or difficulties</p>	<p>Be consistent</p> <p>Ensure staff have the knowledge, skills and abilities to undertake prevention</p> <p>Have policies and guidelines</p> <p>Use information management systems including registers and reminders</p> <p>Use health promotion information</p> <p>Consider alternate delivery mechanisms</p>	<p>Build community partnerships based on practice team strengths and practice goals</p> <p>Be involved in your local division of general practice</p>	<p>Ready access to prevention guidelines and prevention material</p> <p>Automated patient register(s)</p> <p>Recall and reminder systems</p>
<p>Coordination</p> <p>Implementation strategies should be planned and structured within the practice</p>	<p>Assess complexity of patient health concerns and the benefits of sharing care</p>	<p>Have a plan</p> <p>Clarify roles, tasks and responsibilities</p> <p>Encourage good communication among all team members</p> <p>Discuss prevention at team meetings and planning sessions</p>	<p>Link prevention activities across the practice and the wider community</p> <p>Incorporate strategies to reduce disadvantage</p>	<p>Identify patient prevention needs and interests</p> <p>Use and manage prevention materials effectively</p>
<p>Targeting</p> <p>At risk, priority and/or eligible populations</p>	<p>Decide where best to direct time and resources to achieve outcomes</p> <p>Consider patient preferences and understanding, national campaigns</p> <p>Consider using the Patient Prevention Survey</p> <p>Use the 'less is more' approach</p>	<p>Assess patient and practice prevention needs, and set agreed prevention targets for priority populations and groups based on need</p>	<p>Identify partner organisations that share an interest in specific target populations</p> <p>Consider access for patients</p> <p>Consider (or enhance) contribution to local health policy development, programs and planning</p>	

Framework	Consultation	Practice	The community and the health system	Key strategies
<p>Iterative process</p> <p>Have a cyclical planning process that measures progress and ensures adaptation</p>	<p>Set review appointments for patients with complex care needs</p> <p>Use flow sheets, patient held records and other tools to monitor progress</p>	<p>Ensure the practice has a plan, implement (do) and review process</p> <p>Provide adequate time for reflection and team meetings</p> <p>Use feedback to improve implementation</p> <p>Reflect on strategies, challenges and achievements</p> <p>Review progress at practice management and/or team meetings</p> <p>Develop strategies to overcome barriers</p>	<p>Use PDSA cycles</p> <p>Identify existing information on local health needs and priorities</p> <p>Participate in national quality improvement initiatives</p> <p>Changes are measured</p> <p>The practice celebrates successes</p>	
<p>Collaboration</p> <p>Work with local, regional and national programs and organisations to improve preventive care within the general practice</p>	<p>Prioritise prevention activities with the patient</p> <p>Use opportunities as they arise in the consultation</p>	<p>Delegate tasks based on competency within and outside the practice</p> <p>Use the 'less is more' approach</p>	<p>Maximise use of other health professionals and agencies (eg. Quit line)</p>	
<p>Effectiveness</p> <p>Use evidence base implementation processes and strategies</p> <p>Make the best use of limited resources</p>	<p>Be strategic in assessing and prioritising the most appropriate intervention for the patient</p> <p>Make best possible use of referral options</p> <p>Use evidence based strategies</p>	<p>Use evidence based strategies</p> <p>Embed prevention activities within practice routine</p>	<p>Link practice programs with regional, state and national health promotion activities</p> <p>Reflect on best use of the practice's time/contribution in community programs and service delivery</p>	

Assessing the benefit of treatment/intervention: number needed to treat (NNT)

While expressing the benefits of treatment as a relative risk reduction is useful as a measure of the clinical impact of treatment, it can be deceptive, especially when the outcome of interest is very uncommon. A more productive way of expressing the benefit of an intervention is to calculate the number needed to treat (NNT).^{1,2}

The NNT is a measure of the number of people who need to be treated (often for a specified time period) in order to prevent one event or achieve the treatment target. For example, brief advice (3–5 minutes) by a GP that incorporates assessment of interest in quitting, provision of pharmacotherapy and arranging follow up has an NNT of 14. If the GP provided this advice to 14 smokers then one would quit for at least 12 months, as shown in the table below.

Estimated NNT for a range of lifestyle interventions

Target area	GP time	intervention	NNT	outcome
Smoking ³	3–5 minutes (up to 1 minute)	Brief behavioural counselling using the 5As*	1 in 14 (1 in 20)	Quit for at least 12 months
Hazardous drinking ^{4,5}	3–5 minutes	Brief behavioural counselling using the 5As*	1 in 10	25–30% reduction in alcohol consumption
Exercise ^{6–9}	3–5 minutes	Brief behavioural counselling using the 5As*	1 in 10	Engage in at least 30 minutes exercise for 30 minutes three times a week

* 5As: Ask, Assess, Advise, Assist, Arrange

The return on effort for providing effective interventions to assist patients with stopping smoking, cutting down on their drinking, or taking up exercise is good. NNT is also helpful to the patient. It provides an estimate of the benefit they may gain by adhering to a screening program, changing their health related behaviour or following a recommended treatment. The second table highlights the absolute reduction in clinical illness and disease associated with various prevention or clinical activities. Taking smoking cessation again as the example, the relative risk reduction in cancer risk is 30–50% after 10 years of abstinence.¹⁰ In absolute terms, there is one less smoking related death per year for every 100 smokers who quit. From the table above, GPs spending 3–5 minutes per smoker will have one smoker quit per 17 men counselled. Hence the NNT to reduce smoking related deaths per year is one in 1700.

Estimated NNT for a range of common screening and clinical activities

Target area	GP time	intervention	NNT	outcome
Falls prevention in the elderly ¹¹	10–15 minutes	Medication review, correct sensory deficits, balance and strengthening exercises, attention to home environment	1 in 8	Prevention of one significant fall
Smoking ¹²	3–5 minutes	Brief behavioural counselling using the 5As	1 in 1000	Prevention of one death per year from smoking related causes
Screening for colorectal cancer ¹³	3–6 minutes	Haem occult, appropriate Rx and follow up	1 in 1374	Prevention of one colorectal cancer over 5 years of the intervention
Mammography in women aged 50–59 years ¹⁴	3–5 minutes	Mammogram and appropriate treatment and follow up	1 in 2451	Prevention of one breast cancer over 5 years of the intervention
Middle aged men with hyperlipidaemia and multiple CVD risk factors ¹⁴	6–10 minutes	Lipid lowering agent for 5 years	1 in 53 1 in 190	Prevention of one nonfatal myocardial infarction Prevention of one all cause death
Mild hypertension in the elderly ¹⁵	6–10 minutes	Prescription of an antihypertensive for 5 years	1 in 83	Prevention of one cardiovascular event

As it can be difficult to estimate accurately the baseline level of risk, the following table provides the GP with a range of estimates of the NNT depending upon the reported relative risk reduction and the level of baseline risk. From a population perspective, policy makers would like to compare each of the various interventions to determine the value of each and to assist them in decision making about the provision of appropriate resources.

NNT example

Assume: 40 year old male who stops smoking

- 1% risk MI in next 5 years
- 50% reduction in risk of MI in 5 years

Risk difference: 10 MI per 1000 in continuing smoker

5 MI per 1000 in man who quits

Absolute risk difference = 5 MI per 1000 men who quit for 5 (benefit) years

NNT = 1/absolute risk difference

$$\frac{1}{5/1000}$$

= 200

For every 200 men that quit there will be one less MI every 5 years

If you know the (approximate) probability of an event (1% in the above example) and the risk reduction achieved by an intervention, then you can calculate the NNT using the table below.

The effect of different baseline risks and relative risk reductions on the number needed to treat¹⁶

Baseline risk (with no treatment)	Relative risk reduction on treatment						
	50%	40%	30%	25%	20%	15%	10%
0.9	2	3	4	4	6	7	11
0.6	3	4	6	7	8	11	17
0.3	7	8	11	13	17	22	33
0.2	10	13	17	20	25	33	50
0.1	20	25	33	40	50	67	100
0.05	40	50	67	80	100	133	200
0.01	200	250	333	400	500	667	1000
0.005	400	500	667	800	1000	1333	2000
0.001	2000	2500	3333	4000	5000	6667	10 000

Clinical benefit doesn't take into account the costs of providing the interventions, programs and follow up. The most valid comparison, putting the various interventions on a reasonably equivalent footing would be to include an additional column that reports the cost per quality adjusted life year saved (QALY).¹⁶ This comparison is beyond the scope of this monograph.

For more information about NNT, see reference 2 and 16.

Patient Practice Prevention Survey – Adult

Name	Ethnicity	Date	Time
Please answer all the questions. If you don't know the month and year you think it happened, put a question mark next to your estimate.			
<p>1. Family history</p> <p>Do you have a family history of any of the following? (Tick all that apply)</p> <p>(1) <input type="checkbox"/> Alcohol problems</p> <p>(2) Bowel cancer <input type="checkbox"/> none <input type="checkbox"/> 1 family member <input type="checkbox"/> 2 or more family members</p> <p>(3) Breast cancer <input type="checkbox"/> none <input type="checkbox"/> 1 family member <input type="checkbox"/> 2 family members</p> <p>(4) <input type="checkbox"/> Diabetes</p> <p>(5) <input type="checkbox"/> Heart disease</p> <p>(6) <input type="checkbox"/> Other disease, please specify _____</p>		<p>4. Exercise (in the past 7 days)</p> <p>(1) How many times did you walk briskly for at least a total of 30 minutes, eg. for recreation, exercise or to get to and from places? <input type="checkbox"/> None <input type="checkbox"/> 1–2 x <input type="checkbox"/> 3–4 x <input type="checkbox"/> 5–7 x</p> <p>(2) How many times were you moderately active in other ways (just as active as walking briskly) for at least a total of 30 minutes, eg. digging in the garden, golf, dancing, or tennis? <input type="checkbox"/> None <input type="checkbox"/> 1–2 x <input type="checkbox"/> 3–4 x <input type="checkbox"/> 5–7 x</p> <p>(3) How often were you vigorously active for at least a total of 30 minutes, eg. jogging or running, tennis, swimming, bike riding, aerobics or fitness exercises? <input type="checkbox"/> None <input type="checkbox"/> Once <input type="checkbox"/> Twice <input type="checkbox"/> 3 or more times</p>	
<p>2. Cardiovascular</p> <p>(1) When was your blood pressure last taken? MM/YYYY _____ / _____ <input type="checkbox"/> Unsure <input type="checkbox"/> Never</p> <p>(2) When were your cholesterol and triglycerides (fats in the blood) last tested? _____ / _____ <input type="checkbox"/> Unsure <input type="checkbox"/> Never</p>		<p>5. Nutrition</p> <p>(1) How many portions of fruit and vegetables do you usually eat each day? <input type="checkbox"/> None <input type="checkbox"/> 1–2 <input type="checkbox"/> 3–4 <input type="checkbox"/> 5–6 <input type="checkbox"/> 7 or more</p> <p>Examples of a single portion</p> <p>Fruit</p> <ul style="list-style-type: none"> – 1 medium size apple, banana, orange or quarter rockmelon – half a cup of fruit juice – 4 dried apricots or 1½ tablespoons of sultanas – 1 cup of canned or fresh fruit salad <p>Vegetables</p> <ul style="list-style-type: none"> – half a cup of cooked vegetables (75 g) – 1 medium potato – 1 cup of salad vegetables 	
<p>3. Cigarette smoking</p> <p>(1) How many cigarettes do you smoke a day? <input type="checkbox"/> None go to Q4) <input type="checkbox"/> 1–10 <input type="checkbox"/> 11–15 <input type="checkbox"/> 16–20 <input type="checkbox"/> more than 20</p> <p>(2) Are you interested in quitting smoking? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unsure</p>			

(2) What is your weight? kg

_____ / _____

(3) What is your height? cm

_____ / _____

6. Alcohol

(1) How often do you drink alcohol?

Never **Go to Q7**

Monthly

2–3 times 2–4 times

4–6 times Every day

(2) On a day you drink alcohol, how many drinks do you usually have?

1–2 3 or 4

5 or 6 7–9

10 or more

(3) How often do you have six or more drinks on one occasion?

Never Monthly or less

Weekly Daily or almost daily

In the past 12 months have you had any concerns about your drinking?

Yes No

Unsure

7. Mental health

(1) During the past month have you often been bothered by feeling down, depressed or hopeless?

Yes No

Unsure

(2) Do you feel that you have someone to talk to or support you if you need to?

Yes No

Unsure

8. Immunisation

(1) When was your last tetanus booster?

MM/YYYY

_____ / _____

Unsure Never

(2) Have you had 3 doses of polio vaccine (drops or injection)?

Yes No

Unsure

Women only

(3) Have you ever had rubella (german measles) or the rubella vaccine?

Yes No

Unsure

9. Cancer

(1) Do you protect yourself from the sun when outdoors?

wear protective clothing

always often

sometimes rarely

never

use sunscreen creams

always often

sometimes rarely

never

Women only

(2) Have you had a Pap test in the past 2 years?

Yes No

Unsure

10. Medications

(1) Do you regularly use any nonprescription drugs (eg. over-the-counter)?

Yes which ones? Please list

* _____

No

(2) Do you regularly use any herbal or other natural medicines?

Yes which ones? Please list

* _____

No

(3) Do you use any recreational drugs, eg. marijuana, speed, ecstasy?

Yes which ones? Please list

* _____

No

Those age less than 50 years go to Q13

11. For those 50 years and older

(1) In the past 2 years have you used a special kit (bowel cancer testing kit) to test your stool (poo) for blood?

Yes No

Unsure

(2) In the past 12 months, have you had a fasting blood sugar level taken to test for diabetes?

- Yes No
 Unsure

Women only

(2) Have you had a mammogram (breast X-ray) in the past 2 years?

- Yes No
 Unsure

12. For those 65 years and over

Those age 50–64 years go to Q13

(1) When was the last time you were immunised against influenza?

MM/YYYY

_____ / _____

- Unsure Never

(2) When was the last time you were immunised against pneumococcal pneumonia?

MM/YYYY

_____ / _____

- Unsure Never

(3) Have you had a fall in the past year?

- Yes Did you injure yourself?

- No

(4) Have you had your vision checked in the past year?

- Yes No
 Unsure

(5) Have you had your hearing checked in the past year?

- Yes No
 Unsure

(6) Do you ever have trouble with your bladder?

- Yes No
 Unsure

Do you ever lose your urine or get wet?

- Yes No

13. What health topics would you like more information about?

PLEASE RETURN THIS COMPLETED QUESTIONNAIRE TO THE PRACTICE STAFF

LET THE DOCTOR KNOW IF YOU WOULD LIKE TO REVIEW THIS INFORMATION

ANOTHER APPOINTMENT MAY BE REQUIRED IF THERE IS A LOT TO COVER/DISCUSS

Checklist for assessing the quality of patient education materials

Issue	Response	Comment(s)
Audience		
Who is the material aimed at?		
Does it reflect the diversity of the audience?		
Will your practice population understand and accept the information?		
Consider literacy levels, language, cultural practices		
Content		
Is it informative?		
Is the meaning clear and concise?		
Does it reflect the most important prevention areas identified?		
Does it discuss common misconceptions?		
Does it discuss areas of uncertainty?		
Does it provide a balanced view?		
Does it address all meaningful outcomes, including quality of life?		
Is it about a sensitive topic that needs care in its use?		
Is an action or a response asked for? (If so, this may need to be followed up)		
Source		
Is the source of the information clear?		
Is the information valid, unbiased and evidence based?		
Is it topical?		
Is the material up-to-date? Check the latest edition date and suggested review date		
Does it provide details of additional sources of support and information?		
Clarity		
Is it easy to read?		
Is sufficient detail provided?		
Are the aims clear?		
Style		
Is it positive/encouraging?		
Does it promote shared decision making?		
Is the physical presentation simple and engaging?		
Is the print of adequate size for the elderly or sight impaired?		

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