



Motivating patients to move

BACKGROUND Numerous studies have demonstrated the benefits of regular physical activity (30 minutes of moderate activity 5 days per week) for a range of chronic diseases including the prevention and management of cardiovascular disease. The challenge remains for general practitioners to incorporate this advice effectively into their routine clinical practice.

OBJECTIVE This article outlines the current physical activity targets for optimal heart health, and approaches GPs can take to facilitate positive behaviour change for their patients in their role as agents of change and leaders of the primary health team.

DISCUSSION Current best practice for GPs incorporates the '5As' approach: Ask (identify those who can benefit), Assess (current activity level), Advise (individualised), Assist (provide a written 'script' for action and support material) and Arrange (appropriate referral and follow up). Incorporating motivational interviewing techniques, adopting a whole practice approach (including the judicious use of practice nurses) and establishing linkages with community agencies, are additional ways in which GPs can be more effective in this area.

The evidence documenting the health benefits of regular moderate intensity physical activity has been accumulating over 5 decades, much of it focussed on the benefits related to cardiovascular health and reduced risk of all cause mortality. In the latest Australian review of the evidence,¹ it is clear that the association with cardiovascular health is dose dependent, with the maximal risk reduction observed among the inactive who adopt regular moderate intensity activity levels. Benefits now include an overall decreased risk of hypertension, diabetes, cardiovascular disease, colon cancer, breast cancer, osteoporosis, and premature mortality, as well as an improvement in mental health, weight loss or maintenance, arthritis, functional capacity, and quality of life.^{2,3}

How much is enough?

The *National physical activity guidelines for Australian adults*⁴ recommends 30 minutes of moderate intensity activity (ie. activity that causes a slight, but noticeable increase in breathing and heart rate, and may cause light sweating) on most (5) days of the week, that can be accumulated in bouts of 10 minutes throughout the day. Types of moderate activity include brisk walking, swimming, cycling, dancing, or doubles tennis. Guidelines for children have just been released, recommending 60 minutes of moderate to vigorous activity every day, as well as limiting time spent in front of an electronic screen (television, computers, internet) to no more than 2 hours per day.^{5,6}

Physical activity targets specific for cardiovascular health indicate that aerobic activity, with an accumulated energy expenditure of about 800 kcal per week, is required for cardiac protection (which equates to about 150 minutes of moderate intensity activity per week, spread over 5 sessions, for an average 70 kg person). Increasing intensity and more sustained activity may confer a greater reduction in the risk of coronary events.¹



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Documented risk benefits include improvements in lipid profiles, blood pressure and weight control among adults; however, overall cardioprotective benefits are independent of these risk factors (Table 1).

Burden of inactivity

Despite the weight of the evidence, 44% of the Australian population are not active enough for health benefits,⁷ and this increases to 65% within the general practice population.⁸ An estimated 8000 deaths are attributable to physical inactivity, at a cost of \$400 million in direct health care costs every year.⁹ Consecutive surveys indicate Australians are becoming less active with a significant increase of the inactive population from 38% in 1997 to 44% in 2000. Physical activity ranks a close second to tobacco in disease burden for the Australian community and ranks number one for women. Groups identified to be less likely to be active are women, middle aged men and women (40–50 years of age), people from culturally and linguistically diverse backgrounds and indigenous Australians.

Can GPs be effective?

The simple answer to this is yes – if GPs can incorporate a brief intervention for physical advice into their routine practice, targeting those patients who

can benefit from such advice. Research¹⁰ concludes that brief advice by GPs can be effective in changing behaviour in 10–20% of their patients in the short term (up to 6 months). Longer term changes can be maintained by appropriate support and referral to activity opportunities in the community. The Bettering the Evaluation and Care of Health (BEACH) study in general practice indicates that current GP advice in this area is suboptimal, with only 2.1% of current GP consultations including advice about exercise.¹¹

Motivating patients – the basics

At the clinical level, a useful model for integrating lifestyle advice into routine practice is the '5As' approach (Figure 1). In 2003, the Victorian Council on Physical Activity and General Health (VICFIT) and the National Heart Foundation of Australia launched the first electronic lifestyle assessment and intervention tool to assist GPs to do this (Figure 2). Paper based versions of these tools are available in Victoria (Active Script program) and New South Wales (General Practice/Physical Activity program). These tools will be incorporated into the Lifescripts Resource Kit being developed for GPs across Australia in 2005. Contact your local division of general practice for more information on Lifescripts resources.

Ask and Assess

'Ask and Assess' are the first two steps in identifying and assessing patients who can benefit from an activity script using a variety of prompts, checklists or tools in the surgery or waiting room. This ensures that the GP's time will be spent on those who are insufficiently active and contemplating change.

The assessment of current activity levels can be facilitated through the use of a simple, three question tool (Figure 2). It is important to reinforce the benefits for those who are already sufficiently active. Contraindications to exercise need to be excluded before further advice is provided for those who are not active enough (Table 2).

Advise and Assist

The next step is 'Advise', whereby tailored advice (feedback about the current activity level and some discussion of the individual's benefits and barriers to increased activity) provides a background for the GP and patient to negotiate a set of realistic goals. From here, GPs can 'Assist' by providing a 'script' to record individual details and reinforce the verbal advice (Figure 3). Recording the advice (including type, how much and

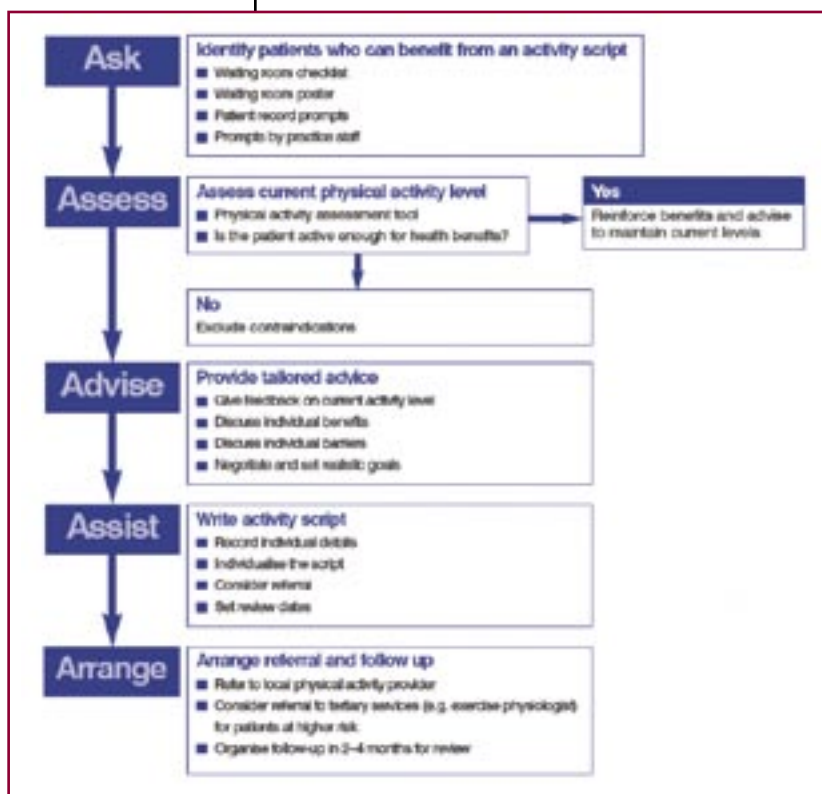


Figure 1. '5As' approach to promoting physical activity

Table 1. Physical activity and CVD**Why promote physical activity?**

Physical activity can:

- reduce the incidence and mortality rate from cardiovascular disease by up to 50% if continued life long
- reduce blood pressure (systolic and diastolic)
- improve lipid profiles
- decrease the risk of ischaemic stroke for older adults
- reduce the chance of dying from another heart attack by 25% in those who have established heart disease

Physical activity:

- works quickly – there is increasing evidence that the benefits occur soon after the adoption of an active lifestyle and are likely to occur at whatever age physical activity is commenced
- provides lasting health benefits, even after maintaining it for only 2 years, in both men and women, regardless of age
- lowers cardiovascular risk, even at 30 minutes of moderate activity per day

How does it relate to heart disease?

For prevention of cardiovascular disease:

- Aerobic activity is beneficial for people with one or more existing risk factors such as family history of heart disease, raised cholesterol, high blood pressure, overweight, previous cardiac event, diabetes, and irregular heart rhythms

With existing cardiovascular disease:

- Physical activity can assist people participating in cardiac rehabilitation programs following myocardial infarction, cardiac procedures or surgery to prevent further events
- Exercise training improved quality of life and exercise capacity in the short term for people with cardiac failure with some reduction in mortality

Adapted from: VICFIT factsheet, 2003

how often in a written format allows patients to display it in a prominent place as a reminder.

Arrange

The final step 'Arrange' relates to a referral and/or provision of further written information to support patients in changing their behaviour. This can include using a local directory of appropriate activity providers in the community, or qualified exercise specialists to provide supervised programs for those at higher risk such as people with multiple risk factors, pre-existing disease such as diabetes, long standing disabilities, or the frail elderly. 'Arrange' also refers to follow up. Subsequent review of patients at 2–4 month intervals will assist in maintaining their positive behaviour change and can be built into the written script.

Recording the advice provided in a patient's medical history can be an additional prompt for the GP to review. Even small increases in activity levels can confer health benefits, and should be praised at the follow up visit with any barriers or issues related to their adoption of an active lifestyle addressed.

Table 2. Contraindications to exercise

- Unstable angina
- Chest discomfort or shortness of breath on low intensity activity
- Uncontrolled heart failure
- Severe aortic stenosis
- Uncontrolled hypertension
- Acute infection or fever
- Resting tachycardia (>100 beats per minute)
- Recent complicated acute myocardial infarction (<3 months)
- Uncontrolled diabetes

Note: People with multiple risk factors, pre-existing disease, long standing disabilities and the frail elderly may require referral for supervision or other tertiary services to ensure their activity is safe and provides maximal benefit

Motivating patients – the extras

A range of other strategies can be used to support and facilitate the basic process of change in the general practice setting, depending on the context and motivation of GPs and practice staff.

PHYSICAL ACTIVITY **Physical activity assessment**

Information for patients:
Your doctor would like to assess how active you are.
The aim is to find out how many times per week you normally do moderate-intensity physical activity for 30 minutes, or vigorous physical activity for 20 minutes.
• One hour of continuous physical activity counts as two sessions of 30 minutes.
• Three 10-minute sessions (or two 15-minute sessions) count as one 30-minute session.

Please circle one option for each question.

1. How many times a week do you usually do 20 minutes or more of vigorous-intensity physical activity that makes you sweat or puff and pant? (e.g. heavy lifting, digging, jogging, aerobics or fast bicycling)

0 1 2 3 4 5 6 7+ Score

2. How many times a week do you usually do 30 minutes or more of walking? (e.g. walking from place to place for exercise or recreation)

0 1 2 3 4 5 6 7+ Score

3. How many times a week do you usually do 30 minutes or more of other moderate-intensity physical activity that increases your heart rate or makes you breathe harder than normal? (e.g. carrying light loads, bicycling at a regular pace or double tennis)

0 1 2 3 4 5 6 7+ Score

Total

Lifescripts
Advice for Healthy Living

Figure 2. Physical activity assessment tool

PHYSICAL ACTIVITY **Your prescription for an active lifestyle**

Date: _____ Date of birth: _____
Patient's name: _____

Your Activity Assessment:
 Low – your activity level is not high enough to promote health
 Nearly there – your activity level is not quite high enough to maximise health benefits

Regular activity improves energy and vitality.
For your **health and well-being**, I recommend:
 Walking (briskly enough to notice a moderate increase in breathing or pulse) and/or

Swimming Strength training
 Gentle exercise classes Tennis
 Dancing Tai chi
 Gardening Other: _____

How much:
 10 minutes 30 minutes or more
 15-30 minutes Other: _____

How often:
 1-2 times per week 5 or more times per week
 3-4 times per week

This activity will be especially beneficial because of you:
 weight concerns stress
 heart disease diabetes
 depression/anxiety arthritis
 high blood pressure other: _____
 high cholesterol

To assist you to be more active, I also refer you to:

I would like you to return for review in ____ weeks. Doctor's signature: _____

Figure 3. Script for physical activity

Motivational interviewing

Incorporating motivational interview techniques into the consultation can enhance the GP's effectiveness in initiating change. The goal is to explore the patient's ambivalence associated with being more active and to assist in tipping the decision balance in favour of change. The underlying principles for this technique are to validate the patient's behaviour as their choice, and allow them to articulate how inactivity may be a problem in their life. General practitioners should adopt a nonjudgmental approach and avoid argumentation or confrontation. The GP's role is to encourage discrepancy in the patient's own view, so that their inactive lifestyle is seen to conflict with their personal goals of health, wellbeing or capacity to enjoy life (see *Case study*).

Whole practice approach

Using a whole practice approach involves a commitment to re-orientating practice systems and staff roles to pro-actively identify and counsel those at risk from lifestyle factors. This may include adopting suggested strategies from The Royal Australian College of General Practitioners' *Putting prevention into practice*¹² and promoting the roles of practice nurses or other staff in the assessment, counselling or follow up of patients wishing to adopt a more active lifestyle.

Divisions of general practice

Developing links with local division projects or relevant community providers can establish important support networks for patients – potentially a 'one stop' referral point. This can assist change through the provision of further information on how to get started, exercise safety, or where to go to find providers of activities.

Conclusion

Motivating patients to move more is achievable, even within the time limitation of general practice. General practitioners can provide an effective intervention to positively influence 10–20% of their inactive population in the short term by simply adopting the 5As approach within the consultation. Greater benefits may result from additional strategies such as using motivational interviewing techniques, and integrating practice systems and staff in a whole practice approach, or establishing referral and support networks with division project and community providers of activity.

Case study – Mr Z

Mr Z, 52 years of age, presents for review of recent blood tests which show fasting blood glucose of 8.2 mmol/L and persistent cholesterol of 5.8 mmol/L. Blood pressure of 140/90 mmHg and body mass index (BMI) of 28. A glucose tolerance test is ordered and discussion commenced regarding the significance of these risk factors.

Mr Z works as a driver/courier. In discussions, the following is elicited: Mr Z has been feeling less energetic and states that he is not as active as he used to be. He would like to do more and wants to get back to playing golf. He walks with his wife on a Sunday morning for about an hour. He recognises slow deterioration of his general health over 20 years and is now surprised to have these risk factors identified, and believes they are related to his lifestyle.

Using motivational interviewing approach to increase Mr Z's activity level

Provide personalised feedback	Current activity not enough for health benefit
Identify barriers to change	Identify costs and benefits of change
Set some realistic goals	Time and opportunity, resistance, ambivalence
Provide practical tips	Identify specific and individual goals for Mr Z
Make exercise a priority	30 minutes most days of the week
Anticipate slip ups	Ensure activity is enjoyable
Follow up (and referral)	Exercise with a family member or friend
	How to deal with barriers
	How to deal with negative emotions
	Monitor progress, reward change, referral for further support if available

Conflict of interest: none declared.

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