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Prescribing exercise in primary care: Ten practical steps on how to do it

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Secondly, agreement is needed on how to cost and value the immediate and longer term health benefits of mitigating climate change. The multiple health benefits of reducing carbon emissions and their effect on the economy are yet to be systematically captured and valued. The importance of doing this was recognised in the Stern review.¹²

Designing and agreeing systematic measures of the health benefits of taking action requires interdisciplinary collaboration between health professionals, economists, and climate change scientists. It also involves interagency collaboration between the Department of Energy and Climate Change; the Department for Environment, Food and Rural Affairs; the Department of Health; and the National Institute for Health and Clinical Excellence to ensure that this is done in rigorous ways that benefit patients, the public, and future generations. These methods need to quantify the multiple benefits in ways that stimulate action from all parts of the global health system, from local nurses and doctors to global drug companies.

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Prescribing exercise in primary care

Ten practical steps on how to do it

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Legacy of the Olympics—will more people take up exercise? <http://bit.ly/nrVfBU>

Chronic diseases—the leading causes of morbidity and mortality—are strongly linked to unhealthy lifestyles. The World Health Organization recently published a report on global health risks.¹ Leading causes of global mortality are high blood pressure (13% of total deaths), tobacco use (9%), high blood glucose (6%), physical inactivity (6%), and obesity (5%). Physical inactivity is fourth on this list, but it influences most of the other causes. The importance of physical activity in preventing and treating many diseases and conditions is indisputable, as documented by the authoritative, accessible, and practical guide of the Swedish Professional Associations for Physical Activity.² Reports from the United States,³ Canada, and the United Kingdom concur.⁴

Physical activity is a complex behaviour, and modern physical and social environments discourage it. Countering these influences will require a coordinated approach involving multiple societal, institutional, and departmental collaborations.⁵ Clinicians need to contribute. Healthcare is one of eight sectors listed in the US national physical activity plan that aims to influence activity (www.physicalactivity-plan.org/theplan.php).⁶ Advice on physical activity in primary care is a pillar of WHO's global physical activity plan (2010).⁷ Physical activity counselling in clinical settings provides "exceptional value for money."⁴

Based on the recommendation of the Swedish physical activity book,² key principles of the US physical activity plan, and the UK's Department of Health's *Let's Get Moving*,⁸ the following steps can help general practitioners encourage patients to initiate and maintain a physically active lifestyle (box).

As with any clinical consultation, diagnosis is key. Physical inactivity is a modifiable vital sign. Thus, GPs should begin by administering the UK's general practice physical activity questionnaire (GPPAQ)⁹ or asking the exercise vital sign (EVS) questions.¹⁰ The GPPAQ takes 30 seconds

to administer plus two to three minutes to categorise patients into one of four levels of activity. The "exercise is medicine" initiative (www.exerciseismedicine.org) recommends asking two EVS questions,¹⁰ so that each patient's weekly activity can be compared with the recommended guideline. The results should be incorporated into the electronic medical record.¹⁰ From this diagnosis, management begins.

General practitioners should use their counselling method of choice and apply it to physical activity. Most general practitioners are familiar with the "6As" to guide counselling—assess, advise, agree, assist, arrange, and assess again. This approach is discussed using a case study in the Swedish book. Motivational interviewing is an increasingly popular method for GPs to counsel patients about their lifestyles.² This, and other behavioural therapy techniques, are valuable skills and provide a worthy CME (continuing medical education) activity.

Practical steps for immediate exercise prescription in general practice

- Ask about physical activity at every consultation; consider it a vital sign
- Apply the "6As" to guide counselling—assess, advise, agree, assist, arrange, and assess again
- A written ("green") prescription is crucial—it takes just 30 seconds
- Display a poster with the physical activity guidelines prominently in the waiting room
- Consider categorising patients into frailty levels. There is no need to medicalise physical activity for most people
- Refer on—consider appropriate physicians, physiotherapists, clinical exercise physiologists, and certified fitness instructors
- Know your local resources for activity—the people and the places
- Remember that walking is free; find tips at: www.everybodywalk.org
- Follow up the patient to chart progress, set goals, solve problems, and identify and use social support
- Lobby to make low cost, evidence based, cognitive and behavioural interventions widely available for referral by healthcare providers



The written “green” prescription (which comprises exercise and lifestyle goals) is a crucial element to signal that exercise is medicine. As outlined in chapter 3 of the Swedish book, the written prescription may vary from simple advice on activity, including written information on health benefits and national guidelines, to highlighting local physical activity opportunities. The national physical activity guidelines should be prominent in the waiting room.

As one prescription does not fit all, a useful tip in the Swedish book is to categorise the prescription according to four levels of patient frailty.² The frailest are referred to appropriate health professionals (such as physiotherapists). For patients with stable conditions, general practitioners can provide customised “exercise on prescription,” (outlined by condition in the book). Healthier patients are encouraged to join community support groups and to manage their own physical activity programme.

Whether a doctor should manage a patient alone or refer the patient depends on local skills, experience, services, and patient care pathways. Doctors not skilled and trained in exercise prescription, probably a majority in most countries, should feel confident to refer on. In many countries including the UK, referral might be to a sports and exercise medicine specialist, in others such as the US, referral may be to a primary care sports medicine physician.

Referral will generally reach beyond health professionals alone. It is useful to link patients with appropriate community based resources. Only a few people have the resources to hire a health professional or a fitness instructor to design and supervise a workout. Communities, however, often have low cost public facilities. Walking is free and now being promoted on a very practical, user friendly, and unbranded website (www.everybodywalk.org).

Follow-up is crucial to signal the clinician's conviction, determine the patient's progress, solve problems, help identify social support, fine tune the dose, and reset goals. The exercise vital sign should be obtained at every follow-up visit.⁹⁻¹⁰ Doctors do not prescribe an antihypertensive drug at one dose and then ignore the patient for ever.

At the medical society level, general practitioner organisations should take time to vote on whether they support exercise as medicine and are prepared to commit resources to appropriate political action. If they do, it would be logical

to lobby to make low cost, evidence based, cognitive and behavioural interventions widely available for referral by healthcare providers. There is also evidence for high tech patient support applications, such as email and text message reminders, website support, and smart phone apps.¹¹ Such innovations align with the current UK government's approach to “nudge” people towards healthier behaviour by subtly changing environments.

In addition to these steps, medical education curriculums need to include the promotion of physical activity. A new generation of doctors must avoid the knee jerk reaction of prescribing “preventive” drugs as a first response to diseases of inactivity. There is strong economic evidence that to manage lifestyle diseases, doctors should first encourage patients to adopt a healthy lifestyle and then help them to maintain it.⁸ This is particularly relevant given the budget based debates on health system reform in the NHS and in the US right now.

It is obvious that clinicians must be active role models. As well as improving their own health, 22 minutes of physical activity daily provides credibility when prescribing and highlights the problems faced by patients.³

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The future of the primary medical workforce

Is in jeopardy unless GPs have a more central role in healthcare and develop special skills in areas of unmet need

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Yet another study has reported increasing difficulty in recruiting medical students to careers in general internal medicine. This study from the United States showed that although 24% of 1177 students who graduated in 2007 planned careers in internal medicine, they perceived this specialty to be associated with a higher workload and more stress than other specialties and were less interested in a career in general internal medicine than students in a similar study in 1990.¹ The trends in these data are not

dissimilar to those reported in relation to general practice and family medicine in Australia,² New Zealand and Canada,³ and the United Kingdom.⁴

Recruitment to general practice has improved a little in Australia in recent years since the creation of rural clinical schools that provide undergraduates with at least half of their clinical training in rural environments. But the fact remains that around the world primary medical care is not a favoured career choice for specialty training and practice.