

Exercise Referral Systems:

A National Quality
Assurance Framework

Contributors

This National Quality Assurance Framework for Exercise Referral Systems was jointly commissioned by the Department of Health from two expert bodies: the British Association of Sports and Exercise Sciences (BASES) and Exercise England (see Appendix 1). Exercise England was the National Governing Body (NGB) for exercise and fitness from 1994 until the end of January 2000 but is no longer in existence.

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The document could not have been completed, however, without the assistance of many people. Invited delegates who shaped the early development are listed in Appendix 2; those people who responded during the consultation phase are listed in Appendix 3; a special group who were consulted with respect to medical issues are listed in Appendix 4.

Specific organisations who have also contributed to the production of the document are listed in the Acknowledgements. We also acknowledge the contribution of those who kindly allowed us to use some of the forms within the respective Appendices.

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Foreword by the Secretary of State for Health

Physical activity has a key part to play in improving health and well-being. It helps to prevent coronary heart disease, stroke and some forms of cancer – our country's leading killers. It can also reduce the risk of developing hypertension, diabetes, overweight and obesity.

The **NHS Plan** sets out the Government's ten-year strategy for health, and a commitment to local action to increase levels of physical activity. The **National Service Framework for Coronary Heart Disease** sets out a comprehensive plan to tackle the disease – from prevention to diagnosis, treatment and rehabilitation.

The health service has a key role to play in giving people not only advice, but also the support they need in making changes to improve their health. Experts recommend that thirty minutes of moderate intensity physical activity on at least five days a week can have significant health benefits. Primary care can play a vital role in helping people to achieve this.

This document, a National Quality Assurance Framework for exercise referral systems, is intended to raise standards and improve the quality of local schemes. Six out of ten men and seven in ten women are not active enough to benefit their health. Referral schemes will form an important element in the delivery of local action plans to increase activity levels, reduce obesity and help tackle chronic disease. Together with services to reduce smoking and improve diet, these will make an important contribution to improving the nation's health.

Alan Milburn Secretary of State for Health

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Management summary

Purpose of this document

This National Quality Assurance Framework provides guidelines for exercise referral systems, with the aim of improving standards among existing exercise referral schemes, and helping the development of new ones.

The Framework focuses primarily on the most common model of exercise referral system, where the GP or practice nurse refers patients to facilities such as leisure centres or gyms for supervised exercise programmes. Guidance covers issues including patient selection, evaluation and long-term follow up.

Background

There is strong causal evidence for the impact of physical inactivity on an ever-broadening variety of health problems, including:

- Coronary heart disease.
- Associated risk factors including obesity, hypertension, diabetes.
- Cancer of the colon.
- Falls and accidents, particularly among elderly people.
- Mental health problems, including depression, anxiety, negative mood, low self-esteem.
- Musculo-skeletal problems such as chronic low-back pain.

There has been a rapid growth in the skill base of exercise and fitness professionals. Exercise referral schemes give opportunities for these professionals to play important roles in disease prevention and health promotion, in partnership with medical practitioners and allied health professionals. The new Professional Register for Exercise and Fitness will ensure standards of good practice and appropriate professional indemnity.

Within the new NHS, and through Health Improvement Programmes, new opportunities have emerged for collaborative services and initiatives for promoting physical activity and sport at community level. Exercise referral schemes fit well in the new agenda for health improvement, and provide an excellent opportunity to address inequalities in health care, disease prevention, and enhancement of quality of life.

This Framework is written to guide appropriate practice to ensure best value for the health service commissioner. Exercise referral schemes typically require a partnership between health and leisure/exercise providers. This Framework provides the guidelines for that partnership to work to the benefit of the patient. It is based on evidence and experience from hundreds of schemes across the UK, together with results of reviews of scheme effectiveness and good practice.

The Framework has evolved in consultation with respected individuals, professional, regulatory and medico-legal bodies, and relevant agencies. It has been steered by scientists accredited by the British Association of Sport and Exercise Sciences together with medical practitioners and health professionals, and leaders from the Exercise and Fitness Industry.

Scope of exercise referral schemes

Exercise referral is not seen as the only approach to promoting exercise and other forms of physical activity. Where appropriate, those working within the health services should always recommend or advise patients to increase levels of physical activity for prevention and treatment of health problems. This should be given equal priority to offering dietary advice or smoking cessation clinics.

The National Quality Assurance Framework for exercise referral schemes involves more than advicegiving, recommending exercise, or offering patients vouchers to attend exercise facilities. Exercise referral involves a systematic individualised process. The Framework makes it necessary to:

- Establish a formally agreed process for the selection, screening and referral of specific patients.
- Conduct appropriate assessment of patients prior to the exercise programme.
- Provide a specific range of appropriate and agreed physical activities for a defined period of time, which maximise the likelihood of long-term participation in physical activity.
- Ensure any assessments and the exercise programme are delivered by professionals with appropriate competencies and training which match the needs of the patient being referred.
- Incorporate a mechanism for the evaluation of such a referral process.
- Facilitate long-term support for patients to maintain increases in physical activity.
- Ensure the patient is consulted and involved throughout the referral process and is encouraged to take responsibility for their health and physical activity participation.
- Ensure confidentiality of patient information through secure and appropriate storage of records.

Many patients entering a referral scheme will not find leisure facilities such as gyms desirable or convenient for maintaining an increased level of physical activity. It is therefore imperative that exercise referral schemes are individualised to provide an educational experience that motivates patients for long-term change. Walking and cycling in the community may well be the most popular options, particularly if they are convenient, safe, affordable and can be sociable. Long-term adherence will remain a challenge, as it is with any behaviour change.

Scope of the National Quality Assurance Framework

This Framework offers guidance and recommended quality standards, but does not propose a national or regional process for the approval, registration and monitoring of schemes. Quality control is left to individual schemes or groups of schemes.

Performance indicators have been suggested, which should be used to measure progress and demonstrate good practice. Professionals involved in a scheme will be expected to practise within the standards and codes of practice of their respective professional regulatory body to ensure patient well-being.

Professional competencies

The Framework has implications for a variety of people. A scheme is more likely to demonstrate best practice and best value if all those involved understand their respective roles and commit to the process and there is partnership working with an identified lead from either primary care or leisure services. The exercise practitioner's training and competencies need to be matched specifically to the needs of the patient. To this end The Professional Register for Exercise and Fitness held by the Fitness Alliance (the Fitness Industry Association and SPRITO) will become a useful source of exercise practitioners.

Evaluation

Previous reviews have identified the lack of systematic evaluation of exercise referral schemes. In order to ensure that schemes are sustainable it is recommended that there is agreement on appropriate expected outcomes from the scheme and appropriate assessments are made at the beginning and end of a referral programme with accompanying data collection. All those involved in a scheme should be encouraged to engage in an on-going reflection of their professional practice which may impact on the scheme's effectiveness. Evaluation will guide regular reviews of the referral process and appropriateness of patient selection, and exercise programmes. Resources should be committed to evaluation which are appropriate to the level of evidence required by the service commissioner. This may include long-term follow-up of patients after the exercise programme has ended.

Section A - Introduction

This document will provide guidelines for exercise referral systems, with the aim of improving standards among existing schemes, and helping the development of new ones.

In the last ten years, there has been a significant and sustained growth in exercise referral schemes, based on many different models. These have led to many requests for models of practice or guidelines. This document aims to satisfy that demand by drawing on existing models of practice across the country and setting out key quality standards. The guidance will focus primarily on the most common model of exercise referral system—referral to facilities such as leisure centres or gyms for supervised exercise programmes — and how this can be used to promote long-term adherence to a physically active lifestyle. Guidance will cover issues including patient selection, evaluation and long-term follow up. It aims to give clear performance indicators, state the professional competencies required by those working on schemes, and point the way to education and training needs.

The health case for physical activity

There is now compelling evidence that physical activity is important for health and has great potential for health gain. Physical inactivity is strongly linked with a range of physical and mental health problems (DoH, 1995; HEA 1994; USA-DHHS, 1996; WHO/Federation of Sports Medicine 1996; Biddle, Fox & Boutcher, 2000; Abenhaim et al., 2000; van Tulder et al., 1997).

Physical activity has been shown to have the following benefits:

- Regular physical activity decreases the risk of cardiovascular disease mortality in general
 and of CHD mortality in particular. Physically inactive people have about double the risk
 of CHD.
- Regular physical activity prevents or delays the development of high blood pressure, and reduces blood pressure in people with hypertension.
- Physical activity is also important in helping people to control their body weight, and in controlling diabetes.
- Specific forms of physical activity can help to reduce the risk of falls and accidents, by improving bone health and maintaining strength, co-ordination, cognitive functioning and balance.
- Physical activity reduces the risk of colon cancer, and evidence is growing to support links with other forms of cancer. Moderate intensity physical activity enhances the immune system.
- Physical activity reduces the risk of depression, and has positive benefits for mental health including reducing anxiety, and enhancing mood and self-esteem.
- Physical activity can play a valuable role in the prevention and treatment of non-specific chronic low back pain.

For adults, experts recommend that people aim to take part in physical activity of at least moderate intensity, on five or more days of the week. This includes activities such as brisk walking or cycling as well as sports or planned exercise.

The potential for health gain through physical activity is particularly high due to the large numbers of people currently inactive. The Health Survey for England (1998) (Department of Health 1999) found that around six out of ten men and seven out of ten women were not reaching recommended levels of physical activity. It has been estimated that 37% of CHD deaths could be attributed to inactivity. (British Heart Foundation 2000).

Promoting exercise – the role of primary care

There are many ways to stimulate increased participation in exercise, including interventions at population, community and individual level. The National Service Framework for Coronary Heart Disease (Department of Health 2000) has set out the requirement that all NHS bodies should have agreed upon and be contributing to the delivery of local programmes of effective policies on increasing physical activity by April 2001. By April 2002 every local health community will have quantitative data no more than 12 months old about the implementation of policies to promote physical activity. The most effective programmes are likely to include action at a variety of levels and in partnership with key local agencies (Health Development Agency 2000).

GPs and the wider primary health care team have the potential to be an important part of these local programmes. Around 95% of the population will see a medical practitioner within any three-year period, yet only around one in four of these people is likely to be physically active on a regular basis. There is therefore an ideal opportunity for the health professional to encourage people to increase their level of physical activity. This may be done in a variety of ways, from issuing routine advice to all patients on being more active; offering specific counselling services; recommending facilities or services such as local walking programmes; or referring into a specific 'exercise referral system'.

However, the amount of time and expertise available within primary care for all of these options is limited, and the expertise in exercise programming for health gain may not be available (Taylor, 1999). As a result, there has been a rapid and largely GP-driven creation of patient referral schemes for supervised exercise sessions, which take place mainly in public leisure facilities (Biddle, Fox & Edmunds, 1994). Exercise referral is also taking place within other settings.

Local strategies to promote physical activity

Exercise referral schemes should be seen as only one type of intervention that can be used to promote physical activity for health gain. Local strategies may include programmes in a variety of settings (such as schools, workplaces, or the community) or with a variety of partners (such as transport planners, environmental groups, or fitness professionals).

The Health Development Agency's guidance on implementing the preventive aspects of the National Service Framework for coronary heart disease (Health Development Agency 2000) set out a number of types of interventions that agencies might consider when constructing their local physical activity strategy. Those relevant to the primary healthcare team are summarised below:

Table 1. Interventions to promote physical activity, which may involve Primary Care.

Intervention	Characteristics	Partners for PHC team
Primary Care		
Individual patient risk assessment and advice	Identification of activity levels; interventions based on predicted risk	
Counselling for behaviour change	Not usually facility-based. Encourages patients to identify their own strategies for becoming more active.	Counsellors; physiotherapists; leisure professionals
Exercise Referral	Referring patient into a recognised system, with appropriately qualified staff.	Based on partnerships between health and local authorities, especially leisure professionals.
Leisure activities		
Promoting use of facilities	General information and encouragement of use of local facilities including leisure and community sports centres, or local natural environment.	Leisure services; professionals/ community leaders; community groups; healthy living centres.
Community-based		
Health walks and other non- facility based physical activity (including the national 'Walking the Way to Health' Initiative).	Encourages regular leisure walking through local walking for health schemes. Includes led walks, self-help information and links to local PHC teams.	British Heart Foundation/ Countryside Agency. Local Walk leaders. Environment planning and transport professionals; Leisure services, LA21.

Source: adapted from Health Development Agency.

This document directly addresses exercise referral systems and only indirectly relates to other types of interventions. Other types of physical activity intervention such as 'Health Walks' or sports development in schools are equally important. Indeed some sedentary patients may find community-based systems more accessible or appealing than formal programmes.

The distinction between recommending and referring for exercise is clarified on page 11.

Liability

Because liability issues may be a perceived concern to referring general practitioners in particular, advice was sought from the Medical Protection Society in March 2000. The excerpt quoted below from the response received from the MPS supports the approach to exercise referral taken in this framework document.

"The MPS endorses the provision of supervised exercise sessions for patients and appreciates that general practitioners have an important role in facilitating the use of exercise programmes. In order to encourage GPs to become involved in referring patients for exercise it is important that the guidelines are simple and GPs do not feel that they are being asked to take on responsibilities for which they are ill-equipped. It would be helpful for there to be either national or local guidelines which set out specific conditions for which referral for a structured exercise programme is appropriate.

The introduction of the exercise professional who will be registered with a national body and have an indemnity in respect of his work is welcomed. We see no difficulty in GPs providing the exercise professional with details of the patient's past medical history with the consent of the patient and it will then be for the exercise professional to assess the suitability of the patient for a planned programme of exercise, the content of which would be his responsibility. It would be expected that the exercise professional would feed back to the GP any problems that are encountered and the progress that is made through the programme.

With this framework we would see the GP's involvement as forming part of his responsibilities as a general practitioner and provided he was paying the appropriate subscription then he could look to the Society for advice and an indemnity in respect of this part of his practice."

Medical Protection Society

29 March 2000

Further information on legal issues is found on page 10.

Characteristics of exercise referral systems

The two reviews (Biddle et al., 1994; Riddoch et al., 1998) found that exercise referral schemes in primary care can result in sustainable improvements in physical activity and indicators of health; that they can play a part in wider physical activity promotion and can contribute to tackling social exclusion. There is, however, a lack of consistent and rigorous evidence and no consistent model of health behaviour change is used. Schemes have been shown to be very popular with primary care professionals, service commissioners and leisure centre managers but there is increasing concern about their effectiveness and 'best value' at national and local levels. Internal evaluation of local schemes has been limited by insufficient resources, although partnerships with universities and colleges for training and evaluation of effectiveness are increasing.

The need for a national quality assurance framework

The framework will:

- promote good practice nationally.
- provide a liberal and robust approach tailored to local needs and capacities.
- focus existing efforts on safe and effective practice.
- assist with identifying training needs.
- guide planning and implementation of new projects such as Healthy Living Centres.
- facilitate and coordinate evaluation at all levels, and disseminate research findings and examples of practice.
- underpin an approval system for exercise referral at county and borough level on which service commissioners, particularly Primary Care Groups/Trusts, can rely.
- enable health care providers to comply with guidance and meet milestones contained in National Service Frameworks, most particularly that for Coronary Heart Disease.
- complement other local sports and exercise strategies.

Who is the quality assurance framework for?

- Local policy makers, service commissioners and operational managers in health and local authorities and the voluntary sector, particularly when these organisations are linked together in Primary Care Groups/Trusts working to implement Health Improvement Programmes (HImPs).
- Managers and health practitioners in primary and secondary care, leisure services management, operators and staff in the public and private exercise and fitness sectors.
- Those undertaking approvals, audit, evaluation and 'best value' studies.
- Providers of training programmes for health, leisure and exercise professional groups.
- Exercise professionals who are responsible for the design and delivery of supervised healthrelated exercise interventions.
- The public and advocacy groups, so they will know what to expect of a well-run scheme and be more informed participants.

Links with national health and social policy

The framework:

- supports *The NHS Plan* (DoH, 2000) by adding to the range of services available to the NHS and partner agencies designed to help people adopt and sustain healthier lifestyles and combat the underlying causes of ill health.
- supports the *National Service Framework for Coronary Heart Disease* (DoH, 2000) action plans, particularly the achievement of Milestones 2 and 3 (see box below). It provides the NHS and partner agencies with a practical tool to use in the development and implementation of a comprehensive local programme of effective policies and practice for physical activity to reduce sedentary lifestyles and accompanying overweight and obesity.
- complements the Health Development Agency's guidance to the NHS on implementing Standards 1, 3, 4 and 12 (see box below) of the NSF for CHD, Coronary Heart Disease: Guidance for implementing the preventive aspects of the National Service Framework (HDA, 2000).
- supports national priorities guidance on how to deal with coronary heart disease by developing and implementing local prevention policies on CHD and stroke by March 2001 (*Modernising Health and Social Services: National Priorities Guidance 2000/01–2002/03*).
- contributes to the Cancer Plan, and to the forthcoming National Service Frameworks on Older People and Diabetes.
- draws on the acknowledgement that physical activity promotion and participation is relevant to all four target areas (*Saving Lives: Our Healthier Nation*. DoH, 1999):
 - CHD and stroke primary and secondary prevention and rehabilitation
 - cancer primary and secondary prevention and rehabilitation.
 - mental health combating depression, anxiety and social exclusion
 - accident reduction falls leading to death or disability in elderly people
- assists implementation and evaluation of physical activity objectives in local Health Improvement Programmes (HImPs).
- complements initiatives within the strategy for sport (A Sporting Future for All, DCMS 2000).
- supports the creation of Healthy Living Centres which may provide safe and effective physical activity programmes, and assists bidding for New Opportunities Fund resources to support Healthy Living Centres and other projects including physical activity promotion.
- recognises that physical activity promotion and participation is important in combating social exclusion and building individual and community capacity for inclusion (*Independent Inquiry into Inequalities in Health.* DoH, 1998).
- gives practical effect to the recommendation that exercise referral schemes should be more widely available to the public (*Shared Contributions, Shared Benefits: report of the working group on public health and primary care.* DoH, 1998).
- as a new quality assurance tool, supports the mission of the National Institute for Clinical Excellence (*A First Class Service: Quality in the new NHS.* DoH, 1998).

- emphasises partnership, quality, performance in health and social services (The New NHS: Modern and Dependable, 1998; Modern Local Government: In Touch with the People).
- contributes to the 'best value' approach for public authority leisure services (Modernising Local Government: Improving local services through best value. DETR, 1998).
- contributes to sustainable transport policy by promoting walking and cycling.
- encompasses safe and effective practice based on evaluation of existing primary care referral schemes, blending academic and applied expertise (Riddoch et al., 1998).

Exercise and physical activity: Preventive aspects of the National Service Framework for Coronary Heart Disease

Reducing heart disease in the population

Standard 1

The NHS and partner agencies should develop, implement and monitor policies that reduce the prevalence of coronary risk factors in the population, and reduce inequalities in risks of developing heart disease.

Prevention of coronary heart disease in high risk patients in primary care

Standard 3

GPs and primary care teams should identify all people with established cardiovascular disease and offer them comprehensive advice and appropriate treatment to reduce their risks.

Standard 4

GPs and primary care teams should identify all people at significant risk of cardiovascular disease but who have not yet developed symptoms and offer them appropriate advice and treatment to reduce their risks.

Cardiac rehabilitation

Standard 12

NHS trusts should put in place agreed protocols/systems of care so that, prior to leaving hospital, people admitted to hospital suffering from coronary heart disease have been invited to participate in a multidisciplinary programme of secondary prevention and cardiac rehabilitation. The aim of the programme will be to reduce their risk of subsequent cardiac problems and to promote their return to a full and normal life.

Selected milestones from the National Service Framework for Coronary Heart Disease

Milestone 2

By April 2001 all NHS bodies, working closely with LAs, will:

- have agreed and be contributing to the delivery of the local programme
 of effective policies on: a) reducing smoking; b) promoting healthy eating;
 c) increasing physical activity; and d) reducing overweight and obesity
- have a mechanism for ensuring all new policies and all existing policies subject to review can be screened for health impacts
- as an employer, have implemented a policy on smoking
- be able to refer clients/service users to specialist smoking cessation services, including clinics
- have produced an equity profile and set local equity targets.

Milestone 3

By April 2002 every local health community will:

- have quantitative data no more than 12 months old about the implementation of the policies on:
 - reducing the prevalence of smoking
 - promoting healthy eating
 - promoting physical activity
 - reducing overweight and obesity
- as employers, have developed 'green' transport plans and taken steps to implement employee-friendly policies.

What are the boundaries of the framework?

The framework is not designed as:

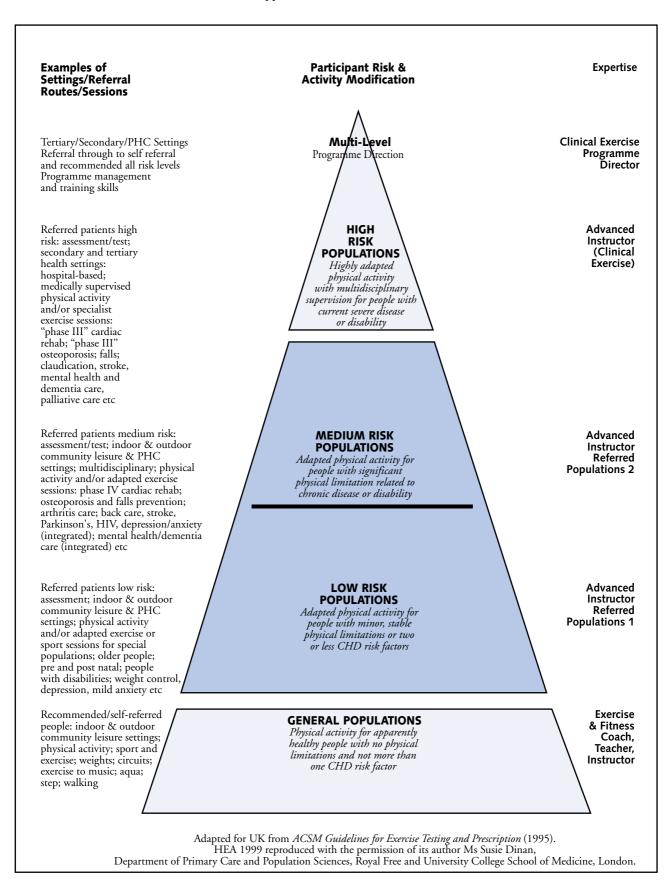
- a stand-alone blueprint, "prescription" or business plan for how exercise referral schemes must be commissioned, structured or managed. It is guidance for best practice based on principles that can be applied flexibly to meet local needs. It provides a structure to support local initiatives that can be evaluated and quality-assured.
- a review of the evidence of the effectiveness of referral schemes, though it is written taking this evidence into account.
- a training syllabus, though it should inform training needs assessment, delivery of professional education and lifelong learning.
- a mechanism for protocol development for general recommendations to increase physical activity. It is specific to referrals for exercise, as described in the following section.

The document is aimed primarily at exercise referral systems involving primary health care and community-based exercise facilities, including the primary care setting. There are obviously opportunities for exercise referral involving secondary and tertiary health care. The levels of exercise programming are identified in the following pyramid diagram as a way of contextualising the present document, and providing a basis for future documents to build upon.

Finally, nothing in this quality assurance framework absolves local providers of exercise services from their duty to map their existing or proposed provision against developing medico-legal views and case precedents, health and social policy and emerging scientific evidence.

Figure 1. A contextual diagram for matching participant characteristics with exercise professional expertise within the UK National Occupational Standards (NOS)

Note: the expertise in this diagram can be determined for an individual instructor by matching with the Professional Register for Exercise and Fitness (England) described in Section C7 of this document, whose structure is illustrated in Appendix 11.



Medico-legal considerations

A detailed description of the exercise referral process is set out in Section B.

"Clinician" is used to indicate whether a doctor, nurse or therapist is meant.

The following section was written following specific consultation with medical practitioners listed in Appendix 4 and with reference to and consultation with the Department of Health.

Any consideration of the medico-legal aspects of the exercise referral process must address some key questions:

- Is the clinician simply recommending more physical activity, or referring the patient for a specific course of action?
- Who would be responsible if a patient suffered any loss or came to harm as a consequence of participation following the clinician's advice?

The recommendation - Referral continuum

Recommending that a particular patient try to be more habitually active in order to gain health benefits

compared to

specifically directing a patient through the **referral process** to personnel and facilities where a tailored exercise programme can be devised and delivered to him or her

are two distinct but related approaches within the overall context of physical activity.

The medical, nursing or therapy practitioner's adoption of one or other of these approaches depends on what objectives the practitioner and the patient wish to achieve.

Recommendations to be habitually more active are appropriate if the following are both true:

- The person is receptive to and capable of carrying the recommendation into action independently (i.e. they are in the appropriate frame of mind to change their activity levels and to find means to do this which are safe and effective).
- The person's condition (health risk factors) and needs (which may be social and/or emotional and/or medical) do not require tailored programming.

Recommendations to be habitually more active:

- May come from any source, formal or informal, including those outside of healthcare.
- Tend to be made as part of general lifestyle advice, for example people are commonly advised to "walk more" or "try to be more active". Even though this may take account of their stage of health behaviour change, the advice is usually general in nature and not part of a programme specifically tailored to the patient's medical needs, functional capacity, readiness to participate in exercise, interests and means.

- Are not usually tailored or linked to risk assessment.
- Are often non-specific interventions, for example, "try to be more active".
- Do not generally involve any support structure.
- May be all that is required if the patient/client is in the right stage of health behaviour change and has reasonable resources to safely increase their habitual level of physical activity.

Referrals for exercise are appropriate if the following is true:

 The person is likely to need help with motivation, programming, supervision, monitoring, and/or the choice of duration, frequency, intensity and type of physical activity, directed at specific health outcomes.

Referrals for exercise:

- Are an intentional direction by a health care professional, usually but not exclusively in primary care, to a patient or client.
- Allow for initial structured and supervised exercise, following pre-exercise assessment, with the
 objective of achieving self-sustaining activity levels in the longer term.
- are often delivered within a dedicated facility, for example, leisure centre, health club, community facility, or a Healthy Living Centre, but there is no reason why the exercise professional should not conduct the exercise intervention in the patient's own home, including a nursing or residential care home, or out of doors around the patient's neighbourhood.
- May be judged necessary in order to increase the likelihood of a safer, more effective and enjoyable experience.
- May be judged necessary in order to influence exercise adherence by easing the changes which sustain habitual higher activity levels.
- May incur initial higher resource costs, but may be more cost-effective in the longer term
 if higher risk patients can reduce morbidity and mortality.

Clinical and Legal Responsibilities

When increased habitual physical activity is simply *recommended*, as described above, responsibility remains with the health professional, though of course the patient or client also has responsibility for his/her own actions when and if they put the recommendation into practice.

The more specific nature of exercise *referral* together with the multidisciplinary nature of the intervention, denote the need for greater clarity in relating the roles, responsibilities and relationships between clinicians and others involved in the referral process.

The most recent review of effectiveness of exercise referral in primary care confirms that this activity is already widespread (Riddoch et al, 1998). What is needed, therefore, is not a theoretical approach but one which reflects everyday practicalities of medical practice in terms of norms for safety, effectiveness and accountability.

All parties concerned in an exercise referral (health care professionals, exercise professionals, facility managers, service commissioners and the patients themselves) need to be clear about medico-legal aspects of referrals for exercise. Professionals must regularly update their knowledge in this area.

When the individual is specifically referred for exercise by the health practitioner, responsibility for safe and effective management, design and delivery of the exercise programme passes to the exercise and leisure professionals. Exercise professionals should be members of the Professional Register for Exercise and Fitness (England) which requires the possession of appropriate professional indemnity insurance.

An integrated care pathway

Health care professionals do not literally "prescribe" exercise. Their role is to make a referral into a system which is quality assured and to retain overall clinical responsibility for the individual patient. By making a referral to an appropriate person or dedicated facility where qualified exercise staff are available, the medical, nursing or therapy practitioner is not assuming responsibility for the administration or delivery of the exercise programme.

There must be meaningful transfer of relevant information to the person who will be conducting the exercise intervention. The responsibility to ensure that this happens rests with the referrer, who must make a professional judgment as to what information must be disclosed to the exercise professionals to enable them to tailor a safe and effective exercise programme that will meet the needs of the patient or client. Examples of referral forms are found in appendix 5A and 5B. Once this information has been received, the exercise intervention programme will be the responsibility of qualified staff with the competencies to design, deliver, monitor and manage an appropriate programme. These related standards are described in Section C of this *National Quality Assurance Framework*.

Responsibility for the pre-exercise assessment and the consequent reference back to the referring clinician rests with the exercise professionals. This gives the clinician the opportunity to consider whether the proposed programme aligns with their intention and the initial advice given to the patient and the exercise professional. Responsibility for consenting to take part in the exercise programme and observing the programme design and guidance rests with the participant, who must give informed consent within the limit of their competence to do so, whatever that limit may be. If the participant's competence to give informed consent is limited, then this must be obtained from a carer or another appropriate person.

Referrals and non-referrals

The decision to refer is for the individual medical, nursing or therapy practitioner when faced with the individual patient. Referrals should be made on the basis of an agreed set of criteria and procedures. A health practitioner is under no obligation to make a referral.

In a situation where a patient is very keen to undertake exercise, but the practitioner feels he or she could not in all honesty refer the patient for exercise, the individual practitioner should inform the patient that any activity he or she might undertake is on his or her own behalf and will not carry the weight of medical advice. In these circumstances, a referral cannot take place.

The exercise professional must not accept a person through a referral system where the patient's medical practitioner, or other health professional undertaking delegated responsibility for referrals, has declined to make a referral.

Clinical governance

Clinical governance in the exercise referral context establishes the need to focus on the activities involved in the delivery of high quality care to patients. This means the creation of a systematic set of mechanisms that will support staff and their organisations – in particular general practice – in delivering a quality and effective approach (NHS Executive, 1999).

Ways this can be achieved effectively by using a quality assured exercise referral system are described in this document and can be used to support clinical governance at local service level.

Duty of care

All professionals involved in exercise referral have a duty of care. Where the medical practitioner is concerned, the law would expect reasonable care and skill to be shown in undertaking an assessment of the risk and benefits to the patient of exercising. The assessment should take account of past and present medical history, family history and medication. The referrer's opinion about these issues must be addressed when devising an activity plan suitable for the participant.

It is always open to the referring practitioner to seek the advice of another clinician experienced in exercise implications if they are unclear about the appropriateness of the referral or concerned about potential contra-indications.

To comply with duty of care there must be meaningful transfer of relevant information from the referrer to the exercise professional who will be conducting the exercise intervention. For both recommendation and referral, the participant should also be fully informed. A full discussion with the patient about the health risks of inactivity is just as important as discussing the benefits of activity and identifying potential contra-indications to particular types of unaccustomed physical activity.

All of this should be undertaken in the light of the patient's specific health needs and expectations, as well as their state of readiness to change (Prochaska et al, 1992; Buxton et al, 1996). Young and Dinan (1999) discuss how to identify the issues to be addressed when devising an individualised activity plan for older people, compatible with an individual's pathologies and medication. The role of the medical, nursing or therapy practitioner, therefore, is one of enabling exercise participation where at all possible, as opposed to acting as the gatekeeper to participation.

Where the exercise professional and the manager of the facility are concerned, the law would expect reasonable care and skill to be shown in minimising any potential risks involved in participation in the exercise programme. This specifically includes the integration of the referring clinician's intention and advice in the exercise programme within a confidential and sustained review and evaluation process. The methods to achieve this are outlined in more detail in this *National Quality Assurance Framework* document.

Transferring information

Once a clinician has decided to make an exercise referral, information about the referred patient must be transferred in an appropriate way to the exercise professional. Any advice given to the patient should also be recorded. The patient's permission should be obtained for this information to be transferred.

Information concerning any change in the patient's health status, such as new symptoms or a deterioration of an existing condition, must also be transferred to the exercise professional. The patient's exercise programme should then be modified if necessary and the changes should be communicated to exercise personnel involved with the patient.

The referral letter should include the reason for referral and a succinct health history including any medication and the possible effects of diagnoses and medication on the particular patient's everyday functions. If any possible effects on the patient's ability to undertake activity are known, for example, drowsiness, co-ordination, suppression of heart rate or pain, this information must also be included. Measurement of blood pressure and heart rate are the basic appropriate measures prior to making a referral and this information is helpful to the exercise professional in their initial assessment of the patient.

Referral letters or forms (see examples in Appendices 5a and 5b) without this information or containing only blanket phrases such as "I know of no reason why Mrs X should not engage in exercise" are not acceptable as part of a quality referral system. Exercise professionals are advised not to accept responsibility for a referred patient until this clinical information is available.

The referral process should also indicate how information about the patient's progress, or lack of it, is to be fed back to the referring clinician by the exercise professional. This is an integral part of the clinician's ability to maintain clinical responsibility for the patient.

Confidentiality

It is essential that the personnel delivering exercise to referred patients on an exercise referral scheme are bound by confidentiality. The Coaching, Teaching and Instructing Value Statements (value statement 10) within the National Occupational Standards and Exercise and Fitness Code of Ethics forms the basis of practice for exercise professionals on the Professional Register for Exercise and Fitness (England) and will be incorporated into local requirements. If this Code of Ethics is breached, patients can make a complaint and action can be taken against the registered exercise professional.

Exercise professionals and managers of facilities in which exercise is delivered to referred patients have a responsibility to ensure that confidential information is securely held and only available to authorised personnel. In addition, exercise professionals engaged on exercise referral schemes should have an undertaking incorporating the policy on confidentiality included in their contract of employment.

Appropriate environments for referral

Many exercise referrals are likely to be to a fitness facility or other venue with appropriate staff and equipment, whose personnel (managers and exercise professionals) have been involved in devising the operational procedures of the local referral system.

Local Authority-owned leisure centres as well as private health clubs and fitness facilities are commonly used, and primary care settings are increasingly utilised particularly for special populations such as older people.

Healthy Living Centres and facilities used by community health groups are also likely to be venues for these activities. A community centre that meets health, safety and insurance requirements for the delivery of structured and supervised exercise can also be utilised.

Health centres in the community may also be used and there is potential for exercise outreach services in nursing homes and residential care settings.

Home exercising to a plan agreed with the patient and involving structured supervision and follow-up has been shown to be effective for older people. This may include both indoor and outdoor activities. These may be a valuable supplement to sustain an exercise experience or an alternative where a facility-based or group programme is not appropriate or available (e.g., see Campbell et al., 1998).

Irrespective of the environment used, it must be demonstrated that risk assessment has been carried out to show the following: the environment is fit for the purpose of delivering supervised, tailored exercise programmes: all health and safety legislation is complied with and appropriate insurance is in place.

Sources of advice

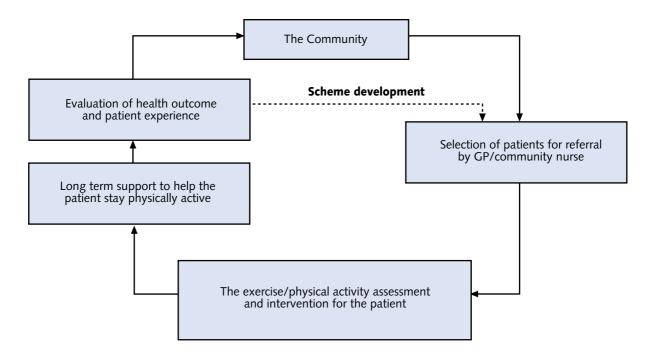
The responsibility for aligning exercise referral schemes with this framework rests with those agencies currently providing schemes or planning to do so. In addition to the expertise that resides within existing schemes, the following support structure may prove helpful:

- Enquiries regarding the Professional Register of Exercise and Fitness (England), the National
 Occupational Standards it incorporates, National Vocational Qualifications in Exercise and
 Fitness and the other hallmarks of the registration system for exercise and fitness professionals
 in England should be directed to the National Training Organisation for Sport, Recreation
 and Allied Occupations (SPRITO) via their website (www.sprito.org.uk) or by email
 (the.nto@sprito.org.uk).
- Some Sport and Exercise Science Departments in Higher Education can provide assistance with training, research and evaluation and access to accredited Sport and Exercise Scientists and laboratories. For information contact BASES on 0113–289–1020.
- For general advice and assistance on physical activity promotion, contact the BHF National Centre for Physical Activity and Health on 01509 223259.

Section B – A patient-centred model

The diagram below illustrates the exercise referral process with which this National Quality Assurance Framework (NQAF) document is concerned. Each of its component parts will be examined within this section. For a scheme to meet the requirements of this NQAF document, they must meet the criteria across the component parts of this model. The numbering of guidelines is intended to help the reader rather than imply any ordering of importance. Readers should refer to Section C for discussion of the competencies required by the multi-professional team that deliver these services.

Figure 2. The Exercise Referral Process



Selection of patients and initiation of the process

It is essential that each primary care based referral scheme establishes its own selection criteria for patients. Selection criteria should be tailored to the characteristics of the local patient population, the range of exercise services and facilities available, and the competencies of local professionals. This process must be medically led within the Primary Care Group/Trust, inclusive of all local interests and effectively disseminated to all those who will be contributors to the scheme.

The referral route will be determined by the referring practitioner and will depend on factors such as severity of risk and other health needs.

Exercise referral can also occur in secondary or tertiary level care. Following a consultant referral, patients in the highest risk categories (for example, Phase III hospital-based cardiac rehabilitation, the acute phase of osteoporosis, falls, claudication, severe depression) need to be supervised when they are exercising. This supervision is usually undertaken by a physiotherapist or, as appropriate, by an appropriately qualified exercise professional working within the therapies as part of a multi-disciplinary team.

Although some of these patients are cared for within primary care, their higher risk status requires specialised programmes which are most often available within the secondary care setting. They will not normally be appropriate, at least initially, for the majority of exercise interventions available within primary care based referral schemes. It is essential, therefore, that effective links are established between the secondary and primary care settings where supervised exercise sessions are delivered. This is needed in order to facilitate the transition of patients between these settings, as and when appropriate to their health needs, progress and ongoing care. This will help ensure continuity of care. In Appendix 10 there is a simple algorithm showing the progress of a referred patient through a well-constructed exercise referral system.

The following guidelines and proposed indicators relate to the process which should be followed to select patients for referral to exercise and physical activity interventions in primary care settings:

Guideline 1

Schemes should provide for adults (16+) and should address issues of the individual's health need as well as the health needs of the local community. They should also address equity and social exclusion. In exceptional and individual circumstances, the referrer may wish to include a young person under the age of 16.

Note: UK occupational standards for adapting exercise for children with health problems do not exist. Therefore, an individually tailored approach would be required between the referring clinician and exercise professionals if it was decided to refer an individual under the age of 16 and the advice of SPRITO would need to be sought regarding professional practice implications.

Indicator: Audit should demonstrate that the scheme relates to the social and health needs of individuals and the local community which will be reflected in the Health Improvement Programme (HImP) defined by the Primary Care Group/Primary Care Trust.

Guideline 2

Schemes should establish medically-led selection criteria that relate to individual and community health needs and reflect the Health Improvement Programme of the Primary Care Group/Trust.

Indicator: Audit should demonstrate that the scheme is underpinned by these criteria which have been effectively disseminated to all who will make contributions to the scheme.

Guideline 3

Schemes should employ an accepted model of behaviour change in interactions with potential patients participating in the referral process.

Indicator: Successful completion of training in, and demonstration of, an ability to use motivational communication skills to enhance delivery of behavioural change objectives.

Guideline 4

Research shows that the greatest health gain will be from increasing activity among those who are least active or are sedentary, rather than encouraging those already active to do more. Schemes should prioritise patients who can be classed as sedentary – usually defined as people doing less than 30 minutes in total of moderate intensity physical activity per week.

Indicator: Schemes will be able to demonstrate how they assess patients' physical activity level using a validated and recognised measure.

Guideline 5

When schemes target patients with specific medical conditions for referral, such as those with CHD or mental health problems, they should have appropriate measures available to select those individuals.

Indicator: Schemes targeting specific health conditions should be able to demonstrate how patients with these conditions are identified as being suitable for referral.

Guideline 6

Some patients may meet the normal criteria for referral but may be reluctant to enter an exercise referral scheme for a number of socio-economic reasons. Additional strategies should be devised to encourage uptake of a referral (for example, reduced costs for unemployed, transport or extra support for elderly and isolated groups).

Indicator: Schemes should have published guidelines on how those who may normally be least likely to initiate and maintain an exercise programme, due to socio-economic reasons, will be encouraged.

Guideline 7

Schemes should ensure that patients who have conditions which may place them in the high risk category in an exercise environment are only referred to programmes with appropriately qualified and experienced staff. The use of a screening instrument such as the PAR-Q may be of value (Shephard 1988; Thomas, Reading & Shephard, 1992).

Indicator: Referral agreements will make specific reference to and identify categories of "high risk patients" who will either be excluded or for whom special provision will be established. (See the competencies in Section C7 – Advanced Exercise Instructors.)

The exercise/physical activity assessment and intervention

The aim of this section is to make the case for exercise/physical activity assessment as a positive patient-centred process. It will help to clarify the roles and responsibilities of the health and exercise professionals and patients involved in the referral process. Throughout the section an underlying philosophy should be applied: the assessment and intervention should be for the purposes of helping the patient towards an independent, physically active lifestyle.

Some form of pre-exercise assessment is essential for all patients. Exercise assessment involves the selection of appropriate protocols to determine fitness and/or assess measures of physical and psychological function and well-being, and/or the amount of physical activity.

However, lack of uniformity in guidelines and policies for pre-exercise assessment and clinical exercise testing prior to participation has led to much discussion and concern among exercise and health professionals. Issues of primary concern include who should be clinically tested, whether maximal or sub-maximal tests should be used, whether medical supervision is necessary, and finally how to classify individuals into groups before and after testing (see AHA/ACSM guidelines, 1998). See Note 1 below.

Note 1

If a **maximal exercise test** is to be performed, then there should be medical (physician) supervision during the test, for healthy older (over 45 yr old male, over 55 yr old female) patients, and/or those with 2 or more CHD risk factors (ACSM, 1995), and/or those with known cardiac, pulmonary, or metabolic disease.

(adapted from the American Heart Association and American College of Sports Medicine recommendations, ACSM, 1995, and the AHA/ACSM Joint Statement, 1998).

Even if it were desirable for many referral patients to be clinically tested, in the primary care setting, limited resources render such recommendations not feasible. Such testing may also be counterproductive for increasing long-term physical activity.

In certain groups, for example, frail older patients with a history of falls or people with disabilities, functional measures are more valid and appropriate than clinical testing.

Consensus from UK health and exercise professionals suggests that pre-exercise assessment is useful as a:

- Means of establishing the need for an individually tailored exercise programme, to achieve physical and psychological health gain.
- Motivational baseline from which people can improve and evaluate progress.
- Means of raising awareness of more holistic lifestyle issues (for example, dietary patterns, smoking).
- Basis to match the intervention to the patient's social and economic need.
- Means to identify motivational processes (current and past) and select appropriate counselling styles and motivational strategies that may be linked to an individual's stage of readiness to change (Prochaska, et al 1992).

- Supervised exercise experience that allows a baseline assessment of knowledge about exercise
 and health issues, including exercise technique and use of exercise equipment, following which
 selective information may be given.
- Means to ensure full understanding of the referral process and respective roles and responsibilities of the personnel involved. A patient contract may also be produced.

The purpose of the assessment should be perfectly clear and discussed with the patient. Assessment should be neither solely for the purposes of monitoring and evaluation, nor for demonstrating practitioner competence to the patient. Assessment must be patient-centred and motivational.

Guideline 1

The exercise professional should ensure there is a written referral for each patient, specifying the aim of the referral, related health and medical factors (including medication and dosage), the implications of these for everyday activity and, if known, for exercise (see Appendix 5).

Indicator: Evidence of written referral for each client received, checked for relevant information under each heading and filed as appropriate. This applies to all individuals, irrespective of whether the exercise takes place on an individual or group basis.

Guideline 2

The exercise professional should ensure that consent is obtained from the patient prior to undertaking the pre-exercise assessment and commencing the Activity Plan (see Appendix 6).

Indicator: Evidence of written consent for both the pre-exercise assessment and Activity Plan is filed.

Guideline 3

The content of a pre-exercise assessment should be based on the patient's needs and characteristics (e.g., risk stratification), the exercise professional competencies, and/or availability of the supervising medical practitioner (see Appendix 9). Local policies, circumstances and resources will also play a part.

Indicator: There will be clearly established protocols for selecting the content of a pre-exercise assessment (possibly with the aid of a flow diagram), which match assessment content to patient characteristics, exercise professional competencies and other resources or circumstances.

Guideline 4 Individuals

The exercise professional should conduct an appropriate pre-exercise assessment (checking details on the Exercise Referral Form – Appendix 5) and design an Activity Plan (see Appendix 6) in accordance with this assessment. The pre-exercise assessment could include a variety of social, psychological and functional measures. Normally maximal exercise testing will not be conducted. **See Note 2 below**

Groups

Where exercise sessions take place in groups, the aims of the exercise programme must match the patient's individual needs and capabilities in the same way that they do when individual exercise programming takes place. For this to happen, pre-exercise assessment must be carried out for each individual, though this can occur in a group. Assessment should be used for baseline motivational purposes that will inevitably require one-to-one counselling.

Indicator: A copy of the proposed Activity Plan will be sent to the patient's GP or designated primary care person (and/or consultant) and the referrer (if different from these) and filed with the patient's notes. A securely filed copy of the assessment results will be held at the main exercise facility and also given to the patient.

Note 2

If a programme involves vigorous exercise (i.e., >60% VO $_2$ max or exercise which represents a substantial cardiovascular challenge or results in fatigue within 20 minutes, or exceeds a Rating of Perceived Exertion of 12 on the Borg 6–20 scale; Borg, 1998) then there should be a thorough medical examination and a maximal exercise test prior to the programme, for healthy older patients, and/or those with 2 or more CHD risk factors (see Table 2–2, ACSM, 1995), and/or those with known cardiac, pulmonary, or metabolic disease. For further discussion of VO $_2$ max, heart rate max. and heart rate reserve, see ACSM, 1995.

(adapted from the American Heart Association and American College of Sports Medicine recommendations – ACSM, 1995, and Table 4 & 5 the AHA/ACSM Joint Statement, 1998).

Guideline 5

The exercise professional should ensure that the patient is aware of the main roles and responsibilities of each person within the exercise referral system (referrer, exercise professional, patient) and how the whole process works, from entry to exit.

Indicator: The process of referral and pathway through the scheme will be explained to the patient during the pre-assessment, perhaps with the aid of a flow chart.

Guideline 6

The exercise professional should ensure that the GP Referral Form (examples are given in Appendix 5a and 5b), Consent Form, and the Activity Plan (example given in Appendix 6) are securely filed and available for audit.

Indicator: All three forms are securely filed.

Guideline 7

The tailored exercise programme should be based on the patient characteristics (matched with risk stratification), the exercise professional competencies, and/or availability of the supervising medical practitioner. Local policies, circumstances and resources will also play a part. Normally high intensity exercise will not be performed. **See Note 2 above.**

Indicator: There are clearly established protocols for selecting the tailored exercise programme which match the exercise programme to patient characteristics, exercise professional competencies and other circumstances.

Guideline 8

The exercise professional should ensure that the patient is fully involved in the process of developing and maintaining an exercise programme, through such methods as the use of a patient-maintained activity log book or set of records, and a goal-setting diary.

Indicator: The records are securely filed in the exercise setting or the patients could make a personal log book available if willing.

Guideline 9

If a patient does not attend the exercise programme for an unknown reason for 2 weeks, for example, the exercise professional should phone the patient to investigate, monitor and resolve non-attendance. If no contact has been made within a further week, the patient should be contacted by letter. If the patient terminates the exercise referral programme, the GP (and referrer if different) will be notified in writing.

Indicator: Records of any communications with the patient are securely filed in the exercise setting. A copy of any notification of termination letter to the GP (and other referrer if different) will be securely filed in the exercise setting.

Guideline 10 Individuals

Appropriate assessment should be conducted at the mid-point of the exercise programme (often about 5 or 6 weeks), in order to monitor progress in terms of the process of change to a more active lifestyle, and indicators of health and fitness. New goals and motivational strategies should also be discussed with patients. A follow-up contact and/or the opportunity to return for a follow-up consultation should be offered in consultation with the patient.

Groups

Assessment may take place in groups provided that confidentiality and accuracy are not compromised, but one-to-one counselling should also take place in response to the assessment.

Indicator: Details from the mid-point assessment should be securely filed in the exercise setting.

Guideline 11

Appropriate assessment should be conducted at the end-point of the exercise programme (often about 10–12 weeks), for monitoring progress in terms of the process of change to a more active lifestyle, and indicators of health and fitness. New goals and motivational strategies should also be discussed with patients. Warning of a follow-up contact and/or the opportunity to return for a follow-up consultation should be given.

Indicator: Details from the assessment should be securely filed in the exercise setting, and summary of progress returned to the GP (and referrer if different).

Guideline 12

Any decision to extend the exercise programme will be made in consultation with the referrer and the patient. Normally, exercise programmes should enable patients to maintain health enhancing physical activity, without dependence on exercise professionals in the longer term.

Indicator: A new Referral Form, Activity Plan and consent form should be securely filed at the exercise facility. A copy of the Activity Plan will be returned to the GP (and referrer if different) and filed with the patient's notes.

Long-term physical activity and support

The Riddoch (1998) review showed that an exercise referral scheme from Primary Health Care into a leisure facility will not necessarily result in long-term increases in physical activity. However, there is evidence from other countries that moderate long-term changes in physical activity levels can be achieved through carefully implemented strategies (Hillsdon & Thorogood, 1996). It would appear that some exercise referral programmes lack any systematic approach to facilitating long-term adherence to more active lifestyles among their patients. Schemes may have focused primarily on the exercise programme (and adherence) rather than long-term changes.

The following guidelines are recommended to maximise the likelihood of long-term increases in physical activity.

Guideline 1

There is a wide variety of facility and non-facility based opportunities for physical activity, some of which will be more likely to appeal to some patients than others. Therefore, exercise professionals and referring personnel should be aware of local physical activity opportunities and support groups, for example, walking groups and discuss these with patients when considering individualised exit routes. Specific exercise approaches should be identified as suitable to meet patient needs.

Indicator: Exercise professionals and referring personnel should maintain a regularly updated file of local physical activity opportunities and support groups.

Guideline 2

Exercise referral schemes should be seen as an opportunity to enhance both knowledge about the benefits of appropriate exercise and also the psychological and behavioural skills of patients to enable them to maintain a health-enhancing physically active lifestyle. Participants should be given the opportunity to enter a social support network to facilitate the maintenance of an active lifestyle.

Indicator: Exercise professionals and patients will select the most appropriate motivational strategy to encourage structured and unstructured physical activity outside the exercise programme. Exercise professionals should enable patients to become more autonomous in their physical activity choices, in a safe and effective way.

Guideline 3

In order to monitor individual progress and provide patients with a motivational source, at the end of the exercise programme, exercise professionals should arrange follow-up (in person, by letter or by phone) with each patient at times agreed by the patient and specified in the service contract, say three and six months after the programme. If no follow-up is stated in the service contract then this responsibility should be placed with the referring professional or designate.

Indicator: Details from this follow-up will be included in any auditing system, and also reported back to the referrer.

Section C – Professional competencies

Introduction

The operation of successful and effective exercise referral schemes requires specific and complementary knowledge and skills. These may be additional to the range of competencies associated with professional roles in health care, operational services management in public and private leisure settings, and exercise and fitness coaching and instructing.

It is important to consider exercise referral systems as holistic: that is, there are a variety of professional groups working together for the benefit of the patient, from identifying an appropriate patient to subsequent motivational follow-up phone calls. The effectiveness of the system depends on the high quality performance of all professionals delivering its parts. Within this inter-professional environment, it is essential that each knows their own responsibilities and with whom they interact.

In the following section we will suggest guidelines for referral-specific competencies for the professionals likely to be involved in exercise referral systems, and propose indicators which would demonstrate that these competencies are being achieved. We will focus on:

- General medical practitioners.
- Registered nurses.
- Therapists.
- Operational managers.
- Commissioning managers.
- Exercise referral scheme managers/coordinators.
- Exercise professionals (advanced exercise instructors).

The guidelines and indicators may be used to identify initial training needs prior to establishing a referral scheme or joining an existing one. The competencies also highlight continuing professional development needs. The guidelines are not in any order of priority. **The indicators are not exhaustive.**

As the National Service Frameworks emerge, there will need to be effective local integration between services, for instance in the transition from Phase III to Phase IV cardiac rehabilitation. This framework should provide a means for creating these interfaces.

General medical practitioners

The GP is responsible for the overall management of each patient's care programme. The essential elements of this role are to:

- Decide which patients should be referred into an exercise referral system using criteria which
 conform to the national guidelines (see Section B1 on Selecting Patients), or to delegate this role
 to a nursing or therapy colleague and support and evaluate their performance.
- Obtain consent from the patient to the transfer to the exercise professional of all the relevant clinical information relating to the patient's health and the implications of this for activities of daily living and, if known, for exercise.
- Inform the patient about symptoms that might indicate that the exercise programme was in some way unsuitable for them and their chronic pathologies.
- Refer the patient to the most appropriate facility or service within the programme, for example, leisure centre or home-based programmes.
- When appropriate, offer exercise as an element in an integrated holistic approach to care particularly where non-pharmacological management of a condition may be indicated.
- Provide support and encouragement to the client to act upon the referral and adhere to the programme.
- See the patient at the end of the programme (or as required in case of adverse response to the exercise programme) and discuss progress.
- Pass on any information about any relevant changes in the health of the patient to the exercise professional.
- Reinforce the benefits of long-term adherence and use other appropriate motivational strategies to encourage an active lifestyle.
- Maintain a profile with the other members of the referral system: practice nurses, referral scheme co-ordinators and exercise professionals, to discuss issues, promote the programme and give information as needed.
- Where possible, provide a role model. Clinicians who are themselves habitually physically active have been shown to be more effective in motivating and sustaining long-term behaviour change in their patients (McKenna, Naylor and McDowell, 1998).

Guideline 1

The involvement of GPs in referral schemes must be formalised in a service level agreement.

Indicator: A service level agreement in line with these national guidelines should be in place.

Guideline 2

When GPs share their referral responsibilities with nurses this should be covered by a formal protocol.

Indicator: GPs should have a written copy of the protocol document.

Guideline 3

GPs have a responsibility of care to understand and explain both the risks and benefits of exercise and put exercise into the context of the patient's integrated care plan.

Indicator 1: The referring clinician has entered the reasons for referral and the advice given to the patient in the referral documentation.

Indicator 2: The patient is able to demonstrate that they understand why they are being referred for exercise when they meet the exercise professional.

Guideline 4

The GP also has responsibility to determine the patient's stage of health behaviour change and to obtain the patient's agreement to be referred. It is an option to have the individual patient's written agreement as part of the records.

Indicator: The patient record and the referral documentation indicates that these have taken place.

Guideline 5

All initiators of referrals should be trained in skills and strategies that support best practice for facilitating behaviour change with potential candidates for the referral scheme.

Indicator: Successful completion of training in motivational communication skills appropriate for facilitating exercise behaviour change, such as 'brief negotiation' or 'exercise consultation'.

Guideline 6

All initiators of referrals should understand and be able to explain the efficacy and possible risks of physical activity in relation to specific medical conditions and medications and the place of exercise in an integrated care plan for the patient.

Indicator: Successful completion of training in the principles underpinning referral criteria, the possible implications of referred conditions and medication on the exercise response and any special considerations relating to the comfort and safety of the referred patient.

The referral documentation to the exercise professional must state clearly the relevant information about the patient's health status. This must include:

- Relevant current and past health problems.
- Details of any medications being taken and their known impact on everyday functional ability.
- Standard measures such as BP, heart rate, BMI and lifestyle factors, for example, smoker.
- The possible effects of diagnoses and medications on activities of daily living and, if known, on physical activity.
- Any special considerations or advice given to the patient, for example, the patient with osteoarthritic knees should be advised to recognise and respect an increase in pain, stiffness or swelling.
- Information about any exercises already being undertaken or for which the patient or the referrer has expressed a preference should also be included (See Appendix 5a & b).

Indicator 1: Referral documentation must be clear and cover all required areas and be understandable to the designated exercise professional.

Indicator 2: Each practice will have evidence of a system that meets the requirements of the local referral system. If this is delegated, it should be within the practice protocol (See Guideline 2).

Guideline 8

GPs have a duty of care to respond in an appropriate and timely manner to enquiries about the patient from the exercise professional.

Indicator: All enquiries should be dealt with within a locally agreed period. A date stamping system should be in place for all contacts.

Registered nurses

As primary care professionals, nurses, where possible, can provide a role model. Clinicians who are themselves habitually physically active have been shown to be more effective in motivating and sustaining long-term behaviour change in their patients (McKenna, Naylor and McDowell, 1998).

Guideline 1

They should understand the clinician's role in initiating the referral process in terms of patient need and expectations. In those settings where nurses take delegated authority to initiate referrals, they will undertake this role.

Indicator: A practice protocol, agreed by the PCG/PCT and Health Authorities, is in place for community nurses to take delegated authority in initiating exercise referrals. This will include information about specific benefits of exercise relating to the referred individual, the procedures and activities at exercise facilities, and the feedback/evaluation mechanisms and exit routes within the referral process.

Guideline 2

As with all initiators of referrals, they should be trained in skills and strategies that support best practice for facilitating behaviour change with potential candidates for the referral scheme and understand and be able to apply a proven model of behaviour change in interactions with potential candidates for the referral scheme.

Indicator: Successful completion of training in, and demonstration of, the ability to use motivational communication skills appropriate for facilitating exercise behaviour change, such as 'brief negotiation' or 'exercise consultation'.

Guideline 3

As with all initiators of referrals, they should understand and be able to explain the efficacy and possible risks of physical activity in relation to specific medical conditions.

Indicator: Successful completion of training in the principles underpinning referral criteria, the possible implications of referred conditions and medication on the exercise response and any special considerations relating to the comfort and safety of the referred patient.

Guideline 4

Participate in review processes (see Section E on Evaluation Issues).

Indicator: Evidence of reflective practice as part of continuing professional development.

Therapists

As healthcare professionals, therapists, where possible, can provide a role model. Clinicians who are themselves habitually physically active have been shown to be more effective in motivating and sustaining long-term behaviour change in their patients (McKenna, Naylor and McDowell, 1998).

Guideline 1

All initiators of referrals should be trained in skills and strategies that support best practice for facilitating behaviour change with potential candidates for the referral scheme and understand and be able to apply a proven model of behaviour change in interactions with potential candidates for the referral scheme.

Indicator: Successful completion of training in, and demonstration of, the ability to use motivational communication skills appropriate for facilitating exercise behaviour change, such as 'brief negotiation' or 'exercise consultation'.

Guideline 2

They should understand the clinician's role in initiating the referral process in terms of patient need and expectations. In those settings where therapists take delegated authority to initiate referrals, they will undertake this role.

Indicator: The organisers of the scheme will have issued guidance outlining how therapists may access the scheme and therapists will have established contacts with local practices and be familiar with local referral criteria and systems.

Guideline 3

They should understand the GP's role in enabling the referral process.

Indicator: A practice protocol, agreed by the PCG/PCT and Health Authorities, is in place for therapists initiating exercise referrals. This will include information about informing the patient's GP regarding the intended referral as well as the specific benefits of exercise relating to the referred individual, the procedures and activities at exercise facilities, and the feedback/evaluation mechanisms and exit routes within the exercise referral process.

Guideline 4

All initiators of referrals should understand and be able to explain the efficacy and possible risks of physical activity in relation to specific medical conditions.

Indicator: Successful completion of training in the principles underpinning referral criteria, the possible implications of referred conditions and medication on the exercise response and any special considerations relating to the comfort and safety of the referred patient.

Guideline 5

Participate in review processes (see Section E on Evaluation Issues).

Indicator: Evidence of reflective practice as part of continuing professional development.

Operational managers of exercise facilities

The competencies described by the National Occupational Standards for Sport, Recreation and Allied Occupations – Operations and Development at Level 3 are assumed for managers of exercise facilities. These cover areas such as efficient use of resources, effective working relationships, planning and organisation of services to meet expectations and requirements, promoting health and safety, problem solving on behalf of customers, and information management.

Where venues other than exercise facilities are utilised, the commissioning authorities must ensure either that there are on-site operational managers or that the exercise referral scheme coordinator/manager has such competencies. Reference should be made to the National Training Organisation for Sport, Recreation and Allied Occupations (SPRITO) regarding competencies of managers of facilities where exercise services are delivered.

Guideline 1

Managers of facilities where exercise delivery takes place are professional stakeholders in devising, being accountable for and evaluating the local referral system.

Indicator 1: The manager will be involved with the commissioners and healthcare and exercise professionals in devising operational procedures and guidance for the scheme.

Indicator 2: The manager will also have received training relating to the referrer's role in enabling the referral process, confidentiality of personal data, meeting the comfort and safety needs of the referred patient, and recording and analysing activity data; management systems will be in place for this.

Guideline 2

Ensure exercise and fitness staff selection, appointment and practice in the workplace match the guidelines listed below for exercise professionals, with reference to the local referral scheme's specified criteria for patient referral. This must include the Code of Ethics and value statements for exercise professionals which is part of the Professional Register for Exercise and Fitness (England) and all the guidelines listed in this section.

Indicator: The manager will have incorporated National Occupational Standards for Coaching, Teaching and Instructing Exercise and Fitness Level 3 (see Section C7 on Advanced Exercise Instructors) in selection procedures and continuing professional development, and established registration with the Professional Register for Exercise and Fitness (England) as an employment standard.

Guideline 3

Ensure that health and safety requirements at facilities are appropriate for receiving referred patients.

Indicator: Based on referral criteria and physical needs of patients, additional equipment, such as ramps or other improved environmental features (lighting, ventilation, acoustics) are in place.

Clear financial management arrangements should exist as part of the service agreement between health and other agencies.

Indicator: The manager will have been involved with commissioners and other professionals in devising the financial arrangements for the scheme and will have ensured that practitioners and participants are fully informed.

Guideline 5

Client management systems should exist.

Indicator: The manager will have been involved in developing a system – such as a client-held 'exercise passport' – to assist practitioners and participants to follow progress through the system to increase chances of longer term adherence. (See later section on long-term physical activity and support.)

Guideline 6

Long-term client adherence to a physically active lifestyle should underpin client management systems (but clients should become entirely autonomous in their choice of activity).

Indicator: The manager should ensure that a database of local physical activity opportunities is created and utilised to increase and encourage follow-on choices for participants.

Exercise referral scheme managers/co-ordinators

As there are no National Occupational Standards for this role, a set of guidelines and indicators will need to be drawn up locally for the individual co-ordinating the referral scheme. Scheme managers may come from a variety of professional backgrounds and this may reflect whether the individual is appointed within a dedicated exercise setting or within a primary healthcare setting. They may be a GP, nurse, therapist, health promotion specialist, exercise scientist, an appropriately qualified advanced exercise instructor, or a leisure manager.

The guidelines and indicators will need to be developed with reference to the specific local situation. A key function of this manager/coordinator role will be to ensure a match between the characteristics of the patients and whatever venue(s) and exercise personnel are used.

In framing local arrangements, the following notes may be helpful: -

- The position calls for an understanding of the competencies and roles of all the other professionals involved in the Scheme.
- The Manager/Co-ordinator must have a good local knowledge of both primary health care and exercise resources and facilities.
- The role calls for the ability to develop a network of people committed to Exercise Referral Schemes and to be able to develop within this network an integrated system of client care.
- The Scheme Manager will co-ordinate the joint actions of all individuals and agencies involved in the scheme to ensure compliance with these guidelines, staff training opportunities and evaluation of the Scheme.
- The role demands good verbal and written communication skills and the ability to make things happen on the ground. The Manager must be able to both manage and sustain change to meet the needs of patients.
- The role will require established organisational and personnel management skills.

Commissioning managers

Commissioning managers for exercise referral schemes may be based within Primary Care Groups or Primary Care Trusts, Health Authorities or Local Authorities.

Guideline 1

Local stakeholders, from the professional groups of health care, leisure management services, and exercise and fitness, should be involved in creating and maintaining the referral scheme and understand their role within it.

Indicator: Commissioning Managers will ensure that training in the specific requirements of the scheme has been undertaken by individuals from the professional groups involved. A mixed learning environment involving the GPs, primary care nurses and therapists mixed with other leisure and fitness representatives and service users is recommended.

Guideline 2

The scheme is founded on evidence of effectiveness (from exercise referral systems with common elements) and accepted standards of practice.

Indicator: National Occupational Standards and recommendations of competent authorities are incorporated into the referral system. An operational procedures manual incorporating these is used by all professional groups.

Guideline 3

Evaluation should take place at regular intervals, and at least annually, within the exercise referral system. (See Section E on Evaluation Issues.)

Indicator: Commissioning Managers will ensure that appropriate resources and mechanisms are in place to ensure evaluation occurs and that the findings are incorporated into future practice.

Guideline 4

There is policy and financial accountability to the commissioning authorities.

Indicator: The initiative accords with the local Health Improvement Programme; funding and payment aspects of the scheme are clearly understood by professionals and participants.

Advanced exercise instructors

The Professional Register for Exercise and Fitness (England), supported by Sport England and operated by the Fitness Industry Association (FIA) under the auspices of the National Training Organisation for Sport Recreation and Allied Occupations (SPRITO), is a system of self-regulation for all coaches, teachers and instructors involved in exercise and fitness. In this context, the register performs the same function for exercise instructors as professional registers do for other health professional groups.

Registration signifies that the exercise professional meets standards for practice, including continuing education, and insurance. Similar systems of instructor registration exist in Scotland and Wales. This quality assurance framework for exercise referral recommends registration as a pre-requisite for exercise instructors working at this advanced level. (See Appendix 8 for the framework for the regulation of exercise and fitness practice.)

Competencies within the National Occupational Standards for Coaching, Teaching and Instructing Exercise and Fitness Level 2 are assumed (NTO, 1997a). At Level 2, the exercise and fitness instructor/coach/teacher (the terms are interchangeable) works autonomously in planning, delivering, adapting, progressing and evaluating exercise for apparently healthy adults (NTO, 1997b).

However, the basis for practice within exercise referral schemes is above that required for Level 2. Work within referral schemes reflects the National Occupational Standards for Coaching, Teaching and Instructing Exercise and Fitness Level 3 (see NTO 2000 and Appendix 9) and is supported by additional training. Exercise and fitness coaches, teachers and instructors functioning at Level 3 are termed advanced instructors.

Exercise and fitness coaches, teachers and instructors working with referred patients will be working to Level 3 of the National Occupational Standards and are termed:

- advanced instructor (referred populations 1)
- advanced instructor (referred populations 2)
- advanced instructor (clinical exercise)

The competency levels associated with these titles are reflected in the Professional Register for Exercise and Fitness (England) and thus the competency of the exercise professional can be determined by their entry on the Exercise and Fitness Register (see appendix 11).

Operating at Level 3 of the National Occupational Standards, the exercise professional must demonstrate that he or she is able to adapt physical activity and develop appropriate long-term physical activity programmes. (Units B27, B28, B29, D45, D13, C35). Those instructors who choose to work to the appropriate units (D29, D24), will also be able to accommodate the physical limitations of special population groups, for example, older people, people with disabilities and chronic health problems, where the accompanying health risk is low. These competencies could be held by individuals from a range of professional backgrounds, for example, physiotherapists, sport and exercise scientists, nurses, as well as exercise professionals.

The Exercise and Fitness Coaching, Teaching and Instructing Code of Ethics emphasises confidentiality and the National Training Organisation (SPRITO) will issue more detailed guidance with regard to Vocationally Related Qualifications for training providers and for exercise instructors working in exercise referral schemes.

Where exercise is being delivered to people requiring a specific or "prescriptive" approach (for example, related to a particular chronic disease or disability, cardiac rehabilitation phase IV, falls prevention, mild-moderate depression, HIV positive health scheme) and the accompanying health risk is significant, the exercise instructor will have undertaken additional training. For example, the British Association of Cardiac Rehabilitation (BACR) Phase IV Training Module and the DH-funded Exercise for the Prevention of Falls and Injuries Module (Dinan, Skelton 1999) are the recognised standards for insuring advanced instructors working at this level (see note). Such further training will be reflected in the exercise instructor's registration with the Professional Register for Exercise and Fitness (England).

Note 1: It is recognised that a range of cardiac rehabilitation and falls prevention work exists throughout the country. There should be a reasonable conversion period for professionals delivering Phase IV cardiac rehabilitation and falls prevention exercise services to match their competencies against the BACR and the Falls and Injury Prevention modules. Other modules at this advanced level are currently in development, including Exercise and Mental Health, and Arthritis Care.

Note 2: Advanced Instructors working within the therapies as part of an on-going hospital-based Phase III programme will be expected to receive additional condition-specific inservice training, provided by the hospital, to ensure that they have the necessary knowledge base and skills required in the Phase III setting, for example Advanced Life Support, Team Life Support and Mental Health in Old Age Psychiatry.

Training programmes to prepare Advanced Instructors to work in exercise referral schemes should be developed by multidisciplinary groups, and should encompass the appropriate competencies of the Exercise and Fitness Level 3 National Occupational Standards. These training programmes should be submitted for approval by SPRITO and listed as Related Vocational Qualifications (RVQ) for Advanced Instructor, Exercise Referral.

Benchmarks and signposts to appropriate training for the personnel involved in exercise referral systems based on the UK's National Occupational Standards for Exercise and Fitness are a proposed extension of the work to be undertaken by the agencies responsible for this document once the framework has been disseminated. Development of additional training is currently being prioritised for advanced instructor working in an exercise referral context and information on training programmes will be available from the National Training Organisation, SPRITO (HEA, 1998).

Advanced exercise instructors working in exercise referral schemes

All users of this document should be aware that where the guidelines below indicate units from the National Occupational Standards. Competency in these units will be assessed in the context of adapted physical activity for inclusion on the Professional Register for Exercise and Fitness (England) at the appropriate level.

Instructors delivering supervised exercise will hold appropriate qualifications and insurance and will follow standards of practice, a code of ethics and lines of accountability, and possess a current first aid award which includes cardio-pulmonary resuscitation award.

Indicators: the exercise instructor is included on the Professional Register for Exercise and Fitness (England) at the appropriate level and is engaged in continuing professional development, part of which must relate to the competencies required to carry out their role in the referral scheme (see note).

Note: The Professional Register for Exercise and Fitness (England) maintained by the Fitness Industry Association and run under the Auspices of the National Training Organisation for Sport, Recreation and Allied Occupations, provides the check on qualifications, continuing professional development and other quality control mechanisms required of exercise instructors working in these settings. Similar exercise practice regulation systems exist in Scotland and Wales.

Guideline 2

Instructors should understand and apply a proven model of behaviour change in interactions with referred patients participating in the referral scheme.

Indicator: successful completion of training in skills and strategies that support best practice for motivational skills and strategies for facilitating exercise behaviour change and evidence of application in practice, such as 'brief negotiation' or 'exercise consultation'. Unit A34 and B13 of the National Occupational Standards. Competency indicated on the Professional Register for Exercise and Fitness (England).

Guideline 3

Instructors should understand the rationale for, and demonstrate competence in, conducting appropriate (to the health risks of the individual patient) pre-exercise assessment procedures in the context of developing and delivering a tailored activity plan. This relates to Units B27, B28 and D29 of the National Occupational Standards and will be included in Vocationally Related Qualifications for Exercise Referral. **NB:** It may not be necessary to conduct an aerobic fitness test, popular as this may have been in the past.

Indicator: Competency indicated on the Professional Register for Exercise and Fitness (England). See page 10 of this document for matching of risk stratification and exercise instructor competencies.

Instructors should understand the efficacy of physical activity in relation to likely health gain and/or the management of specific medical conditions.

Indicator: Instructors will be able to demonstrate an understanding of the possible implications of referred conditions and medications on the exercise response and physical activity capability. They will be able to demonstrate the ability to design exercise programmes with special considerations relating to the comfort and safety of the referred patient. Units D24 and D29 of the National Occupational Standards. Competency indicated on the Professional Register for Exercise and Fitness (England).

Guideline 5

Instructors should understand the social (economic and cultural) characteristics of patients referred into a scheme, and how these may impact on the effectiveness of the exercise referral scheme. They should also understand how the scheme may impact on social factors such as social networks and social support of the patients.

Indicator: The coaching, teaching and instructing value statements (value statement 4) within the National Occupational Standards incorporate guideline 5. Additional training, specific to exercise referral will be provided within the Vocationally Related Qualifications for Exercise Referral. Measures of the availability and use of social support by patients should be included in initial and subsequent assessments and used to influence social aspects of the scheme.

Guideline 6

Instructors should understand the clinician's role in initiating the referral process and the team working relationships required to achieve an effective outcome. It is implicit in this document that only a medically qualified individual, or another health professional working within a protocol with delegated authority, can initiate a referral into an exercise referral system.

Indicator: Successful completion of training in the operational principles of the referral scheme, including the need for confidentiality of personal data, and meeting the comfort and safety needs of the referred patient.

Guideline 7

A health and physical activity history should be taken by the exercise instructor and confirmed against the information from the referrer. This should involve using a validated tool such as the PAR-Q as the baseline. The exercise instructor will utilise this information as appropriate in the selection of the pre-exercise functional assessment tools and programme design (**See Section B2**).

Indicator: evidence of a completed health and physical activity history for each patient will be on file together with a date stamped note of any further contact with the referrer. Unit B27 of the National Occupational Standards. Competency indicated on the Professional Register for Exercise and Fitness (England).

Instructors should understand their role in maintaining confidentiality and supporting the autonomy of referred patients.

Indicator: The coaching, teaching and instructing value statements (value statement 10) within the National Occupational Standards and Exercise and Fitness Code of Ethics forms the basis of practice for exercise professionals on the Professional Register for Exercise and Fitness (England) and will be incorporated into local requirements.

Guideline 9

Instructors should participate in the on-going review process (see Section E on Evaluation Issues).

Indicator: Instructors will maintain a personal profile that demonstrates continuing professional development (necessary to remain on the Register). They will receive training on how the referral system is being evaluated and the respective roles of all those in the exercise referral scheme, in terms of gathering and using information about the scheme's effectiveness.

Section D – Scheme development and monitoring

The guidelines and performance indicators published in this National Quality Assurance Framework document are not mandatory requirements enforceable in law. However, they are endorsed by the Department of Health, and help to define what is currently understood to be best practice and likely to result in "best value" services. This may inform how future funding decisions are made, and how in any potential litigation, duty of care may be defined. It is therefore appropriate for the Department of Health to strongly encourage new and existing schemes to move toward the adoption of the guidelines contained in this document.

In so doing it is recognised that schemes will be starting from different positions, specifically:

- New schemes that have not yet begun, which can incorporate this framework into their planning and implementation from the beginning.
- Existing schemes that do not match the guidelines in this document and will need to make significant changes to their operation.
- Existing schemes that match closely the published guidelines and need only to make small adjustments and collect the relevant evaluation data.

It is also recognised that National Occupational Standards for Level 3 in Exercise and Fitness were only published in April 1999 and technical definitions linked to them only became available in January 2000 (NTO 2000). Therefore, schemes may become involved at some stage in the process for qualifications to be submitted for approval by the National Training Organisation (SPRITO) and the Qualifications and Curriculum Authority (see appendix 8).

Given the different starting points of schemes it would be inappropriate to specify an exact time scale for the complete implementation of the National Quality Assurance Framework. However, the majority of schemes should comply with the NQAF within three years of receipt of this document, unless they can demonstrate specific local circumstances that mitigate against this time scale.

Upon receipt of this framework, schemes should map their existing provision against the national framework.

Indicator: All exercise referral schemes will produce a document indicating how closely they match the current guidelines for consideration by all stakeholders and commissioners.

Guideline 2

Upon completion of the mapping exercise, schemes will produce an action plan to move them from their current position to alignment with the NQAF.

Indicator: All existing exercise referral schemes will produce an action plan for consideration by stakeholders and commissioners.

Guideline 3

Each scheme should produce an annual report which will be circulated to all stakeholders and commissioners within the scheme. The annual report will contain the evaluation of the scheme (see Section E) and an action plan for improvement over the next 12 months.

Indicator: All existing exercise referral schemes will produce an annual report for consideration by stakeholders and commissioners, including an action plan for the next 12 months period.

Section E – Evaluation issues

The present document partly arose out of interest by the Department of Health in the effectiveness of Exercise on Prescription. The Riddoch review (1998) identified a range of issues associated with evaluation.

There are various levels of evaluation, each of which may have different functions and impact. This section will identify these levels and then identify the implications for a National Quality Assurance Framework. For those wishing to consider evaluation with respect to Healthy Living Centres, the HEA's (1999a) Evaluation Resource may be of interest.

Level	Personnel involved	Stakeholder	Main function
Controlled study	Experienced researcher	Health service commissioners and policy makers	To inform health analysts, policy makers and managers.
Audit	Trained referrer and/or exercise professional	Health service commissioners or leisure services providers	To inform health service commissioners or leisure providers.
Reflective practice	Referrer and/or exercise professional	Referrer and/or exercise professional	To develop a reflective (critical) professional

The Riddoch review concluded that controlled studies tended to provide less positive support for the effectiveness of exercise on prescription schemes (in terms of changes in physical activity) than did feedback from those operating such schemes. However, the review also identified some important limitations of the research. This raises the inevitable question of what type of evaluation is necessary to demonstrate effectiveness.

The following points are worth highlighting with respect to CONTROLLED STUDIES:

- The gold standard randomised controlled trial (RCT) may not be feasible for an evaluation of exercise referral schemes for several reasons. For example, the least active are less likely to enter a study or complete follow-up assessments. Also, an RCT may require modification of normal referral processes, thereby raising the issue of what is being evaluated. For example, when should random assignment of patients to an exercise or control group take place: before the patient is seen by a GP or afterwards?
- There is evidence (Taylor, 1998) that small scale schemes, in which patients become familiar with the support of specific exercise professionals, may result in better adherence (albeit with smaller numbers of referred patients). Adequately powered controlled trials may not therefore demonstrate optimal levels of adherence.
- In order to conduct rigorous RCTs, there are major resource implications (e.g., researcher training, equipment/instrument reliability and validity checks, tracking patients for follow-up assessments, sophisticated data analysis procedures and interpretation, etc).
- The cost-effectiveness of exercise referral programmes has rarely been considered.

The following points are worth highlighting with respect to AUDITS:

- If increasing a person's total physical activity is the primary focus of schemes in the long-term, then it is necessary to monitor such change, with follow-up assessments.
- Accurate assessment of a person's total physical activity requires an understanding of type, frequency, intensity and duration of exercise.
- Other outcomes which could be audited include physical, behavioural, social and psychological measures. Psychological measures may be more likely to change than physical measures over a 10 week exercise programme.
- Process measures are important, such as: the perceptions of different partners within a scheme, including referring professional, patient, and other exercise facility users.
- Specific training in the use of process and outcome measures is necessary.
- Evaluation may also involve qualitative methods such as participant observation and interviews (with individual patients or focus groups). As the Riddoch review (1998) highlighted, such approaches can be very useful if conducted systematically and rigorously by trained personnel.

The following points are worth highlighting with respect to REFLECTIVE PRACTICE:

- It is expected that, during normal working practice, all those involved in a scheme engage in critical self-reflection with respect to their roles and responsibilities. The field of exercise science is continually advancing, with implications for safe and effective practice.
- Professional standards in health care are also subject to change. For example, codes of practice and ethical issues will be updated.
- In order to remain on the Professional Register for Exercise and Fitness (England), exercise professionals must demonstrate continuing professional development. This requires an element of reflective practice.
- Professional practice may not automatically change with the receipt of new information.
 The role of collaborative Action Research should be considered with cycles of peer or 'expert' observation, discussion and decision to modify practice, change in practice, and reflection of the change.

Finally it should be noted that any evaluation or trial of an exercise referral scheme must clearly define and describe the precise nature of the scheme involved. Conclusions should only be generalised to schemes that share similar characteristics. It is strongly recommended that published research clearly states if the scheme under investigation matched the guidelines in this document or not.

Guidelines for evaluation

Controlled trials

Conducting a well-controlled study requires specific expertise (in health and exercise science, health and exercise promotion, health economics and other related fields). Where evidence for effectiveness of a GP exercise referral scheme is required from a controlled trial, by a Health Authority, which is clearly linked to the Health Improvement Programme, then resources should be allocated or additional external funding be sought. Evaluation of this kind requires regional and national co-ordination. The HEA review demonstrated a wide range of evaluation tools currently being employed across a range of physical activity promotion projects. When standardised evaluative tools are adopted then consensus on the effectiveness of exercise referral schemes will become more complete.

Guideline 1

Resources are allocated to conduct rigorous, well planned, multi-centre trials with clear objectives. Research expertise (in health and exercise science, health and exercise promotion, and health economics) should be used.

Indicator: A co-ordinated research programme to examine the effectiveness of exercise referral programmes and determinants of effectiveness is established nationally, by centres with research expertise in conjunction with exercise professionals.

Auditing

Guideline 2

All exercise referral systems should have an integral auditing system, which focuses on agreed outcomes between GP and exercise professional, or service commissioner and provider. A mechanism for information exchange and collection should be clearly established.

Indicator: The measures to be included in, and mechanisms for maintaining an audit will be specified in a service agreement.

Guideline 3

Audited measures should consider the process (e.g., patient satisfaction) and may consider the following:

- Physical factors (for example, fitness, body fat and blood pressure).
- Lifestyle (for example, physical activity, smoking status and approximate dietary patterns).
- Health professional directed behaviours (for example, medication use and other treatments).
- Psychological and social outcomes (for example, physical self-perceptions, mood, anxiety, depression, social networks, individual isolation, social inclusion).

It is recommended that the primary focus should be on measuring change in physical activity, rather than fitness per se.

Indicator: The measures to be included in, and mechanisms for maintaining, an audit will be specified in a service agreement.

Guideline 4

Specific knowledge and skills are required to conduct such measures and appreciate the associated measurement errors, in order to accumulate reliable data from a number of sites, and a number of individuals. This training should be incorporated into a service agreement, to ensure support and identification of needs and continuing professional development for the practitioner.

Indicator: Exercise professionals will be trained to conduct specified measures and will understand how to maintain and report on data collected, or measurements will be conducted by those with appropriate skills.

Guideline 5

Audited measures should be patient-centred. In other words, the reasons for taking the measures should be understood by patients and used as part of a motivational strategy which includes goal setting, feedback and enhancement of patient perceived competence.

Indicator: Exercise professionals will be trained to use assessment to motivate patients.

Audited measures should be easily obtainable during normal working practice, with minimal additional expense. Auditing should also involve assessment of long-term (nine months and beyond) change in physical activity, which should be costed within the normal operation of a scheme.

Indicator: Resources will be allocated within a scheme to enable long-term assessment of health enhancing physical activity.

Guideline 7

Data collected through audit should be pooled to enable sophisticated analysis to identify specific determinants (physical, psychological, and socio-economic) of adherence to exercise programmes, and long-term behavioural change.

Indictor: Pooled data from audits will be analysed by researchers and statisticians and the findings submitted to appropriate personnel responsible for clinical effectiveness or other designated personnel (e.g., cardiovascular services manager, Primary Care Group/Primary Care Trust manager).

Reflective practice

Guideline 8

There will be a need for continuing professional development (CPD) to guide self-reflection. CPD may involve completion of accredited courses, reading and self-assessment, and evaluation by peers.

Indicator: Exercise professionals will self-monitor their CPD as a part of the process of remaining on the Professional Register for Exercise and Fitness (England).

Guideline 9

Evaluation should consider the effectiveness of personal practice, in terms of patient outcomes and operating processes (including whether codes of practice and ethical standards are being maintained). Reflection of interpersonal and communication skills may best be guided by a trained professional.

Indicator: Review meetings will be held within every referral scheme to confirm that codes of practice (including ethical standards) are maintained and updated as necessary.

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Glossary

Advanced Exercise Instructor

The term used to describe anyone who has evidenced the National Occupational Standards for Sport, Recreation and Allied Occupations in the context of Coaching, Teaching and Instructing at Level 3 and whose attainment has been recognised by the Register (see Appendices 9 and 11). Usually this person will be a vocationally qualified exercise coach, teacher or instructor who has qualified at this level, but it may also be a physiotherapist, nurse, exercise scientist or other health professional who has acquired evidence of competencies at this level in addition to their other professional skills.

Exercise England

Exercise England was the National Governing Body (NGB) for Exercise and Fitness from 1994 until the end of January 2000.

Exercise and Fitness Coach, Teacher, Instructor

The terms are used interchangeably to denote anyone delivering exercise and fitness services on a professional basis whose fitness qualifications have been recognised as vocationally appropriate by SPRITO (see diagram on page 10 and Appendix 11).

Exercise programming

Exercise programming involves matching the frequency, intensity, duration and type of exercise to meet the fitness and health needs of the patient or client by maximising health gain and minimising risk.

Fitness Industry Association

The Fitness Industry Association (FIA) is a trade body representing fitness employers and equipment manufacturers. It maintains a sector specific Code of Practice which establishes minimum performance criteria for FIA member clubs and centres. All FIA member sites are required to adhere to the Code, which lays down specific conduct guidelines covering health and safety, staff training and customer care. It is working in an alliance with the SPRITO to administer the Professional Register of Exercise and Fitness (England).

National Occupational Standards for Sport, Recreation and Allied Occupations (NOS).

Agreed by fitness industry employers and professional bodies, NOS are formally recognised by Government for all aspects of sport, recreation and allied occupations. They are the basis for National Vocational Qualifications. NOS are an essential resource for developing staff and improving organisational performance, particularly on-going professional and personal development. The reference point for all NOS in sport and recreation, including exercise and fitness, is the National Training Organisation (SPRITO), see below. All enquiries regarding NOS in Exercise and Fitness and vocationally-related qualifications and awards should be directed to the National Training Organisation for Sport, Recreation and Allied Occupations (SPRITO) via their website (www.sprito.org.uk) or by email (the.nto@sprito.org.uk).

National Training Organisation for Sport, Recreation and Allied Occupations (SPRITO)

The government-recognised industry body in the UK providing a strategic lead in standards setting in the area of qualifications, education and training. SPRITO works with the Qualifications and Curriculum Authority (QCA, see below) in England and its Scottish and Welsh counterparts to produce an integrated framework of awards and developmental opportunities for individuals working in the industry and for those training for careers in fitness.

Primary Care

Health care settings which are usually the first point of contact between individuals and health professionals such as general practitioners and practice nurses, and the wider primary care team including health visitors, district nurses, community physiotherapists, dietitians etc. Primary care may be delivered anywhere — GP surgeries, community clinics, "walk in centres". As Primary Care Groups and Trusts develop, merge with community health trusts and work in a more integrated way with local authority services, particularly social services, boundaries between primary and secondary healthcare sectors will become less significant.

Qualifications and Curriculum Authority (QCA)

The QCA's statutory functions are set out in the Education Act 1997, which include being the regulatory body in England for public examinations and publicly funded qualifications. QCA takes the lead in designing and developing a coherent national framework of qualifications which meets the needs of education, training, individuals and employers. It defines and maintains the standards of quality assurance expected of awarding bodies.

Secondary Care

Health care which is conventionally seen in terms of hospitals and other institutions providing general medical, surgical and specialist inpatient care, rehabilitation and outpatient services. Secondary care services are generally not available without a referral from a health professional. As healthcare sectors become more integrated, more secondary care may be given in primary care settings, and vice versa.

Sport England (The English Sports Council)

The English Sports Council began operating under Royal Charter in January 1997 with responsibility for the development of sport in England. Under its brand name Sport England, it is accountable to Parliament through the Secretary of State for Culture, Media and Sport. Its work is scrutinised by the House of Commons through the Department for Culture, Media and Sport (DCMS) Select Committee and the Public Accounts Committee.

The Professional Register of Exercise and Fitness (England)

A register for exercise professionals in England was established by the then National Governing Body, Exercise England, with the backing of Sport England at the beginning of 1998. Now known as The Professional Register for Exercise and Fitness (England), it is being developed and managed under the auspices of the National Training Organisation for Sport Recreation and Allied Occupations (SPRITO) and in conjunction with the Fitness Industry Association (FIA). There are similar structures in Scotland and Wales.

All enquiries regarding this Register and National Occupational Standards in Exercise and Fitness should be directed to the National Training Organisation for Sport, Recreation and Allied Occupations (SPRITO) via their website (www.sprito.org.uk) or by email (the.nto@sprito.org.uk).

Acknowledgments

Prior to and during the production of this National Quality Assurance Framework document a number of organisations have contributed in their own way, through staff release and support, general financial support and in other ways, to enable the 'Steering Group' members to gain experience and make progress in this field. We would therefore like to acknowledge the following organisations for their support:

- Balham, Tooting and Wandsworth NHS Primary Care Group
- BASES, the British Association of Sport and Exercise Sciences
- College of Ripon & York St. John
- De Montfort University
- Departments of Geriatric Medicine, Primary Care and Population Sciences and Old Age Psychiatry , Royal Free and University College School of Medicine, London
- Department of Geriatric Medicine, University of Edinburgh
- East Sussex, Brighton & Hove Health Authority
- Exercise England, the National Governing Body for Exercise and Fitness (until February 2000)
- Fitness Industry Association (FIA)
- Health Education Authority (until March 2000)
- Healthcare Productions Ltd, London
- Merton, Sutton and Wandsworth Health Authority
- National Sports Medicine Institute (NSMI)
- National Training Organisation for Sport, Recreation and Allied Occupations (SPRITO)
- North Yorkshire Specialist Health Promotion Unit
- Somerset Health Authority Physical Activity Support Group
- Sport England (The English Sports Council)
- Southwest London Team for People with Learning Disabilities, South West London Community NHS Trust
- UK Sports Council
- Sportswise Ltd
- University of Brighton
- University of Bristol
- Wealden District Council Leisure Services

Appendix 1

BASES (British Association of Sport and Exercise Sciences)

BASES is the professional body for all those with an interest in the application of science to sport and exercise.

The Association's aims are:

- To promote fundamental and applied research in the sport and exercise sciences.
- To encourage the development of evidence-based practice in the sport and exercise sciences.
- To disseminate knowledge about the sport and exercise sciences.
- To establish and maintain high professional standards for all sport and exercise scientists.
- To represent the interests of sport and exercise scientists nationally and internationally.
- To promote the relevance of sport and exercise science to society.
- To facilitate communication amongst those actively engaged in research and scientific support in the sport and exercise sciences.

BASES membership includes both academics and practitioners who have been responsible for the following in connection with exercise referral systems:

- Designing and implementing schemes.
- Delivery of exercise practitioner training programmes.
- Local and national quality assurance.
- Evaluation and systematic reviews.
- Conference/workshop co-ordinators.

For further information on BASES see the web site on: www.bases.co.uk

Or contact the main office on 0113-289-1020.

Appendix 2

List of Delegates in 2-day workshop (Dec. 17th/18th 1999)

Steering group (at Dec 1999)

Dr Andrew Craig

Chief Executive and Registrar, Exercise England Vice-Chairman, Balham Tooting and Wandsworth NHS Primary Care Group Bendon Valley House 218-220 Garratt Lane London SW18 4EA

Susie Dinan

Senior Clinical Exercise Practitioner and research fellow

Royal Free and University College School of Medicine

and Royal Free Hospital NHS Trust, Pond Street London NW3 2QG $\,$

Dr Andy Smith

Chair of BASES (1998–2000) Principal Lecturer, College of Ripon & York, St. John Lord Mayor's Walk York YO3 7EX

Dr Adrian Taylor

Chair of Exercise Science Special Committee (BASES)

Principal Lecturer, Chelsea School, University of Brighton

Gaudick Rd.

Eastbourne

East. Sussex BN20 7SP

Invited delegates

Adrian Coggins

Health Promotion Advisor Hertfordshire Health Promotion Gatehouse, Fretherne Welyn Garden City, Herts AL8 6RD

Alana Diamond

Physical Activity Project Health Education Authority Trevalyan House, 30 Great Peter St. London SW1P 2HW

Dr Ken Fox

Dept of Exercise & Sport Sciences University of Exeter, School of Post-Graduate Medicine St. Lukes Exeter EX1 2LU

Trudi Grant

Development Manager – CHD Somerset Health Authority, Wells Springs Rd. Taunton Somerset TA2 7PQ

Jaya Ganver

Discover Project Coordinator, Health Promotion Unit Accrington Victoria Hospital Whalley Rd. Accrington Lancs BB5 6AS

Dr Anthony Isaacs,

Public Health Directorate Barnet Health Authority London

Simon Lindsey

Leisure Services Portsmouth City Council Civic Offices, Guildhall Square Portsmouth PO1 2AD

Malcolm McPhail

Principal Health & Exercise Development Officer Bolton College, Centre of EXCEL Lower Bridgeman St. Bolton BL1 2EN

Dr Chris Riddoch

Dept of Exercise and Health University of Bristol 34 West Park Bristol BS8 2LU

Dr Nick Webborn

Medical Advisor, National Sports Medicine Institute and Oasis Programme, Wealden District Council West Sussex

Lynn Young

Community Health Adviser Royal College of Nursing 20 Cavendish Square London W1M 0AB

Appendix 3

List of Respondents to Consultation Phase of NQAF

- Ms Kerry Adam, Professional Officer, NVQ Process, OCR Awarding Body.
- Mr Len Almond, Loughborough University.
- Mr Kevin Archer, Community Fitness Officer, Wear Valley District Council.
- Ms Ann Marie Archer, Health Promotion Service, Portsmouth.
- Dr Andrew Brewer, GP and Exercise referral Scheme Organiser, Bournemouth.
- Prof. Stuart Biddle, Reader in Sports Psychology, Loughborough University.
- Mr Martin Bailey, Health Programme Manager, Wealden District Council.
- Ms Lisa Board/Dr Joanne Hudson, Division of Sport and Exercise Science, University of Teeside.
- Ms Terri Bryant, Exercise Practitioner, Health Promotion Specialist, Exercise England Council Member and local representative, Portsmouth.
- Ms Norah Byron, Keep Fit Association Qualifications, London.
- Dr Tom Coffey, GP and Chairman of Balham, Tooting and Wandsworth PCG, London.
- Mr Adrian Coggins, Physical Activity Liaison Officer, Hertfordshire Health Authority.
- Ms Irena Cole, Health Link Co-ordinator, West Wiltshire District Council.
- Ms Jackie Denton, Community Leisure and Health Development Manager, Stockport Metropolitan Borough Council.
- Professor Peter Fentem, University of Nottingham Medical School.
- Dr Jane Flint, Consultant Physician and Cardiologist, British Association of Cardiac Rehabilitation.
- Dr Kenneth Fox, Reader in Exercise and Public Health, University of Exeter (now University of Bristol).

- Mr Charlie Foster, British Heart Foundation Health Promotion Research Group, Oxford.
- Brigadier Robin Garnett, OBE, QHP, PhD, FRCP, Director of Defence Rehabilitation, Commander DSMRC, Defence Secondary Care Agency, Defence Services Medical Rehabilitation Centre, London.
- Ms Tanya Gabriel, Keep Fit Association Qualifications, London.
- Dr Alexandra Harvey, GP and Exercise England local representative, London.
- Health Education Authority Physical Activity Team, Health Education Authority, London.
- Ms Fiona Hayes, Summit Education Exercise Consultant, Sheffield, and Chairperson, Exercise England.
- Dr Anthony Issacs, Consultant, Public Health Directorate, Barnet Health Authority, London.
- Dr Steve Iliffe, GP and Department of Primary Care and Population Sciences, Royal Free Hospital, London.
- Mr Tim Jones, Project Manager, NHS Confederation.
- Mr Anand Kumar, Head of Health Studies, Chichester Institute of Higher Education.
- Mr M Lowe, Deputy Secretary, British Medical Association, London.
- Ms Linda Lawson, Exercise Practitioner and Exercise England local representative, East Yorkshire.
- Ms Claire Martin, East Kent Health Promotion Service.
- Ms Kate Mori, Research Manager, Sport England.
- Dr David Markland, Lecturer in Exercise Psychology, Bangor, University of Wales.
- Ms Gwyn Owen, Professional Advisor, the Chartered Society of Physiotherapists.

- Dr Claire Paisley, Senior Research Officer, in Policy for Nutrition, Physical Activity and Mental Health, Welsh Office, Cardiff.
- Ms Jacqui Parrington, Physiotherapist, Royal Hospital, Bath.
- Ms Lynne Potter, GP Referral Course Tutor, Huntingdonshire District Council.
- Dr Andy Ramwell, Manchester Metropolitan University.
- Ms Amanda Radcliffe, Loughborough University.
- Ms Anna Robbins, North Warwickshire NHS Trust.
- Dr Jeremy Shearman, Lecturer in Sports Science, University of Essex.
- Mr James Shephard, Forza Fitness Equipment Ltd., London.
- Ms Mary Sheppard, Director, Fitness Wales.
- Mr Piers Simey, Physical Activity Advisor, Merton, Sutton and Wandsworth Health Authority, London.
- Dr Dawn Skelton, Research fellow, Department of Physiology and Biomechanics, Imperial College School of Medicine at St. Mary's, London.
- Mr Patrick Squire, Senior Lecturer, Exercise and Health, University of Edinburgh.
- Dr Stuart Stokes, GP and SRB referral development officer, Bromley.

- Mr John E.R. Stevens, Chief Executive, National Coaching Foundation, Leeds.
- Ms Janeer Thompson, Keep Fit Association Qualifications, London.
- Mr Michael Ussher, Exercise Practitioner & researcher, University of Brighton, and St. George's Hospital School of Medicine, London.
- Mrs Dawn Vernon, Wiltshire Health Promotion Service.
- Mr Nigel Wallace, Adidas UK, on behalf of Fitness Industry Association.
- Professor Paul Wallace, GP and Head of Primary Care and Population Sciences, University College and Royal Free Hospital School of Medicine.
- Ms Jane Waller, Director, Fitness Professionals Ltd. and Exercise England Council Member.
- Dr Nick Webborn, M.D. Medical Director Sportswise Ltd., Eastbourne, East Sussex.
- Ms Rebecca Weissbort, Exercise Practitioner and former referral scheme manager, London.
- Dr Michael Whitelaw, Medical Director, Riverside Community Healthcare NHS Trust, London.
- Prof. Archie Young, Professor of Geriatric Medicine, Edinburgh Royal Infirmary.
- Ms Lynn Young, Community Advisor, Royal College of Nursing.

Appendix 4

Medical Advisers

• Brigadier Robin Garnett

Director of Defence Rehabilitation, Commander Defence Secondary Care Agency, Defence Services Medical Rehabilitation Centre, Epsom, Surrey.

• Dr Simon Kemp

The Practice, 81–83 Elborough Street, Southfields, London SW18.

• Dr Steve Iliffe

Dept of Primary Care and Population Sciences, University College and Royal Free Hospital School of Medicine, London.

• Dr Anthony Isaacs

Public Health Directorate, Barnet Health Authority, London.

• Prof Paul Wallace

Dept of Primary Care and Population Sciences, University College and Royal Free Hospital School of Medicine, London.

• Dr Nick Webborn

Medical Adviser, National Sports Medicine Institute, London.

• Prof Archie Young

Dept of Clinical and Surgical Sciences, Geriatric Medicine, Edinburgh University.

Appendix 5a Example of Exercise Referral Form



Patient's Name				
REFERRAL REASON	S			
Medication	Diabetes Io medication Oral medication Post-op	Weight reduction Anxiety/Stress Osteoporosis Inactive/sedentar	Asth	
BASELINE MEASUR		produce the best exerulatory information. F		
Resting heart rate is:	Heart rate regu	alar? BP Syst	olic is:	BP Diastolic is
Additional referral inf not already been indicate Hypertension			•	ons which have
not already been indicate	d? Ischaemic Heart Disc MIZINTENSITY	Please see programme and exercise intensities	Manual for d	Diabetes efinitions of activit
Hypertension INITIAL PROGRAM	Ischaemic Heart Dischaemic Heart Dischae	Please see programme and exercise intensities	Manual for d	Plabetes
Hypertension	Ischaemic Heart Dischaemic Heart Dischae	Please see programme and exercise intensities JM	Manual for dis. HIGH DO NOT wish	efinitions of activit
INITIAL PROGRAM LOW PROHIBITED ACTIV	Ischaemic Heart Dischaemic Heart Dischae	Please see programme and exercise intensities JM	Manual for d	efinitions of activit the client to take MMING

Appendix 5b

REFERRAL FOR EXERCISE

(Exercise Practitioner Service)

DETAILS OF PATIENT Surname	D	.O.B:	
Forename:	Te	el no:	
G.P. Dr	Te	el no:	Fax no:
G.P's Address:			
Referrer's signature	D	ate	
REASON FOR EXERCISE REFEI	RRAL:		
CLINICAL DIAGNOSES AND/O			
		•	
4			
MEDICATION:			
1	4.		7
2	5		8
3	6.		9
Possible effects of current med	dication and/or diagnose	s on nationt's safe/comforts	able conduct of evereice
☐ Heart rate not an indicator	of exercise intensity	s on patient's sale/connorte	
Suppression of pain			Other precautions taken on what patient has been told:
Susceptible to: Arrythmia	Dissipace falls		
Hypotension	☐ Dizziness, falls ☐ Skin irritation/rash	os/infoction	
☐ Hypoglycaemia	Asthma	es/intection	
☐ Angina			
Osteoporosis	☐ Joint pain		
☐ Abnormal muscle tone	☐ Urinary frequency		Specific exercises/approaches to
Impaired alertness	☐ Impaired cognition		be included (if known):
Stage of health behaviour char			
PRECONTEMPLATION (not considering exercise)	CONTEMPLATION (Considering)	I PREPARATION (Beginning)	
MAINTENANCE	RELAPSE	UNKNOWN	
Action:	·)		

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- (1) Royal Free Hospital NHS Trust, London(1)
- (2) Department of Primary Care and Population Sciences, Royal Free and University Medical School, London
- (3) Department of Geriatric Medicine, Royal Free and University College Medical School, London(3)
- (4) Department of Geriatric Medicine, University of Edinburgh

Appendix 6 Example of patient Activity Form

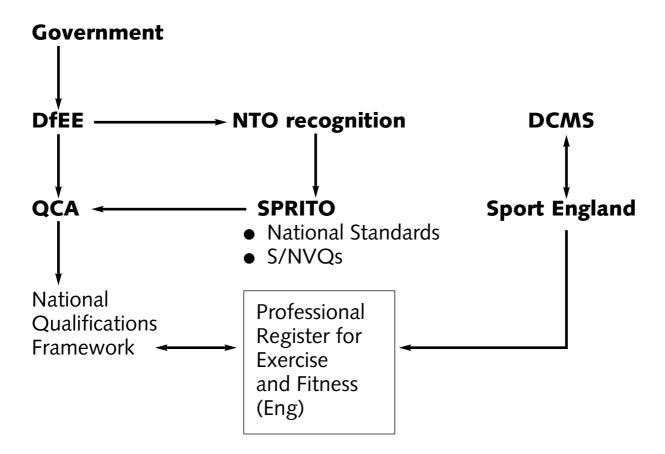
Sospital No:	Weight (kg); Exercise; Standing: Exercise	08; 3M(Exercise Proctitioner: Pre Exercise Assessment I PROPOSED START DATE PROPOSED REVIEW DAT PRECAUTIONS	
Training	Endurance	Resistance	Flexibility	Balance
Frequency	per week	per week	per week	per week
intensity	Very Light Light Somewhat Hard Hard Very Hard 1s MHR/METS	Very Light Light Sorrawwhat Hard Hard Very Hard % RM/SETS/REF	N/A PS	N/A
Time per sees.	mins	mins	mina.	mina
Types	Treadmill Bloc Rower Resounder Step Wasking Exercise to music Circuit Aquat Chest Low impact Med impact Other	Multi Gym Free weights Bands Isometric Isotronic Isotronic Isotronic Isotronic Isotronic Inchrintic Body weight: In standing In string In lying	Short Long Standing Seated Lying	Static sended standing supported unsupported Unsupported Standing standing standing supported unsupported unsupported transfer crawling
Approach	Solo 1 to 1 Group	Solo 1 to 1 Group	Solo 1 to 1 Group	Solo 1 to 1 Group
Activity Plan Ack you are satisfied or you are not satisfie	knowledgement th Puliant Activity Plan please t d please lick box below right, a	ck box below left, sign and file. Ign and return by post or lax, or	The programme will comm	
he exercise program he premises meet el C F I	me will be administred by quit I houlth and safety oriens and a Binical responsibility nests will be sponsibility for the administration lessure management instructor tesponsibility for consenting	are red assuming responsibility for lifted staff all of whom have spo- we the responsibility of the man- th the referrer. tration and delivery of the pro- reterm and/or exercise practit to take part in the exercise pri- e exercise practitioners guida	cielet training in working wi agament. gramme rests with the ioner service. ogramme, observing the i	h special populations.
	islied with this patient's Activity	Plan	I need to discuss this	selient's Activity Plan further
l am sas	sand man too because a count			

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- (1) Royal Free Hospital NHS Trust, London(1)
- (2) Department of Primary Care and Population Sciences, Royal Free and University Medical School, London
- (3) Department of Geriatric Medicine, Royal Free and University College Medical School, London(3)
- (4) Department of Geriatric Medicine, University of Edinburgh

Appendix 7:

Framework for Regulation of Exercise and Fitness Practice in England



Appendix 8:

Mandatory Units

National Occupational Standards Coaching, Teaching and Instructing Exercise and Fitness, Level 3 Unit Map

For a full NVQ level three Candidates must complete ten units in total: All 6 mandatory units + 4 optional units.

Advanced Instructors working in the context of exercise referral should complete all 6 mandatory units and hold Vocationally Related Qualifications for Advanced Instructor Exercise Referral, or Advanced Instructor Clinical Exercise. Those instructors working in this field should collect and submit to an appropriate awarding body evidence of competence for units D29 and D24 as part of their continuing professional development.

Manda	ory Units							
Analyse informa and ide goals (UNIT B	tion p ntify a (Plan a programme to uchieve goals UNIT B28)	Manag evaluat prograi to achi goals (UNIT	te a mme eve	Coach sess to enable participants to achieve seasonal go (UNIT D45	s pals	Establish and maintain relationships which support the coaching process (UNIT D13)	Deal with accidents and emergencies (UNIT C35)
Optiona	al Units (Choo	se 4)						
Support efficient resource (UNIT A	use of es (MCI)	Manage yoursel (MCI) (UNIT A31)	lf	Create effer working relationship (UNIT A32)	s (MCI)	of tean individu achieve	uals to e their ves (MCI)	Contribute to the development of teams and individuals (MCI) (UNIT A34)
	•	Manage information for action (MCI) (UNIT A41)		Promote th adoption ar maintenanc regular phy activity (UNIT B12)	nd ee of sical		te active nd healthy B13)	Plan and organise services and operations to meet expectations and requirements (UNIT B21)
Manage contribu the prog (UNIT B	utions to gramme	Support the protection of children from abuse (UNIT C36)		Solve proble on behalf o customers ((UNIT C38)	f (CSLB)	disabili	people with ties to take activities D24)	Apply rules/regulations of the sport in a competitive environment (UNIT D28)
with ph limitation part in progran	ons to take nmes of	Apply basic principles of nutrition to sport/physical activity participato enhance performance an recovery (UNIT D46)		Apply basic psychology enhance performanc (UNIT D47)	to	Apply I biomed enhand perform (UNIT	chanics to se nance	Plan, manage and evaluate a basic physical conditioning programme (UNIT D49)

Ref: National Training Organisation for Sport, Recreation and Allied Occupations (2000), *National Occupational Standards, Technical Definitions and S/NVQ Guide, Coaching, Teaching, Instructing Level Three.*London: SPRITO (CD-ROM)

Appendix 9:

Patient's Progress through an Exercise Referral System

Patient

- Specific health problems
- Specific exercise needs

General Practitioner

- Patient selection under agreed guidelines
- Past medical history
- Treatment history
- Measures HR & BP
- Referral as positive intervention

Exercise professional

- Exercise register
- Professional indemnity insurance
- Meets National Occupational Standards for exercise Programming
- Appropriate resuscitation skills
- Confidentiality undertaking

Patient

- Activity maintenance
- Reduced health needs

Key components

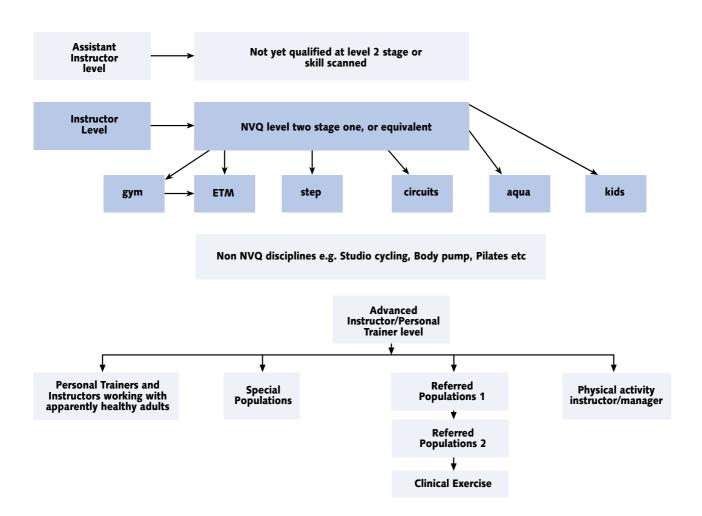
- Pre-exercise assessment
- Patient consent
- Motivation
- Exercise programming for specific health outcomes
- Supervision
- Monitoring
- Discuss maintenance of physical activity
- Report outcomes to GP

General Practitioner

- Patient review
- Encourage maintenance
- Monitor health gains

Appendix 10:

The Professional Register for Exercise and Fitness (Eng)



Advanced Instructor Personal Trainer level (NOS level 3)

Advanced Instructor Special Populations (NOS level 3 plus related vocational qualifications)

Advanced Instructor Referred Populations 1 GP referral-Low Risk populations (NOS level 3 plus

related vocational qualifications plus 1 year professional contact)

Advanced Instructor **Referred Populations 2** GP referral - medium risk populations (NOS level 3 plus related vocational qualifications plus 2

years professional

contact)

Clinical Exercise GP referral – higher risk Instructor/Manager populations (NOS level 3 plus in service clinical training plus 3 years professional contact)

Advanced Instructor

Advanced Instructor Physical Activity

- Personal Trainers and Instructors working with apparently healthy adults
- Ante and post natal
- Older adults
- Weight control
- Sports specific

(all non- referred)

- GP referral low risk populations
- Ante and post natal
- Older adults
- Physical disabilities
- Learning Disabilities
- Depression/Mild Anxiety
- Weight control
- Sports specific
- GP Referral medium risk populations
- Cardiac Rehab Phase
- Osteoporosis and Falls
- Arthritis Care • Back Care
- HIV
- Stroke
- Depression/Anxiety (integrated sessions)
- Dementia Care

- Cardiac Rehab Phase III
- Stroke
- HIV
- Claudication
- Osteoporosis
- Falls
- Arthritis Care
- Dementia Care
- Back-care
- Depression/anxiety and mental illness

- Studio manager
- PT manager
- Gym Manager