





A Toolkit for the Design, Implementation & Evaluation of Exercise Referral Schemes









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Terms of Use

The aim of this toolkit is to provide an easy-to-read, practical guide for all those professionals involved in the delivery, coordination, commissioning and evaluation of exercise referral schemes. These professionals include general practitioners, practice nurses, community nurses, allied health professionals (physiotherapists, dieticians etc), exercise professionals, health promotion/ public health specialists, commissioners and researchers.

The toolkit has been developed in consultation and collaboration with a range of professionals involved with exercise referral schemes and key national stakeholders.

It draws upon current Government policy for the design and delivery of quality assured exercise referral schemes; it is <u>NOT</u> a replacement for such national policy. Furthermore it <u>should NOT</u> be used in isolation from the National Quality Assurance Framework for exercise referral schemes (NQAF).

It is a tool to aid the design, delivery and evaluation of exercise referral schemes, but is **NOT POLICY**. It uses the evidence base and local scheme practice to support schemes in meeting the guidelines set out within the National Quality Assurance Framework and to raise standards within schemes.

Using the toolkit

It is recognised that capacity, resources and funding vary across schemes and that some schemes are struggling to implement elements of the National Quality Assurance Framework and consequently may struggle to adopt some of the recommendations set out within the toolkit.

The toolkit is not designed as a '**blueprint**' for how exercise referral schemes must be designed, implemented and evaluated; it offers some best practice principles for all those involved in the delivery, management and commissioning of exercise referral schemes. It is for individual schemes to consider whether the implementation of these principles will improve the design, delivery and effectiveness of their scheme, given the capacity and resources available.

Many schemes may already be meeting the recommendations outlined within the toolkit, in which case the toolkit can be used as a resource for professionals to take a fresh look at their scheme or as a guide for on-going reflection.

Some local health boards and primary care trusts may have developed an integrated system for the promotion of physical activity, which offers a range of physical activity opportunities for the local population, such as led-walks, green-exercise, exercise referral schemes and/or specialist condition specific whole exercise classes. This toolkit is predominantly concerned with exercise referral schemes designed for low to medium risk patients which involve the transfer of medical information from a healthcare practitioner to an appropriately qualified level 3, exercise professional.

Whilst it is recommended that, where appropriate, primary care professionals should advise patients to increase their physical activity it should be noted that recommending or sign-posting patients to local physical activity opportunities such as lay-led walking schemes is quite distinct from referring an individual to a dedicated service and transferring relevant medical information about this individual to this service.

Where schemes offer specialist condition specific whole exercise classes for patients/clients with any conditions covered by the level 4 national occupations standards these schemes should ensure they comply with the relevant governance arrangements and quality assurance guidelines.

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East of England Regional Physical Activity Alliance













Llywodraeth Cynulliad Cymru Welsh Assembly Government





Section 1: Background Technical Report





Section 1: Executive Summary

This toolkit has been developed in response to concerns expressed by exercise referral professionals and regional physical activity leads following the initial release of the NICE public health intervention guidance.¹⁴

The BHFNC have taken a bottom up approach to the development of the toolkit, its content and format have been shaped by a range of professionals who are currently responsible for, or who have experience of, delivering, coordinating, commissioning and/or evaluating exercise referral schemes.

The mapping exercise provided a snapshot of the nature and extent of exercise referral schemes in England, Northern Ireland and Scotland and allowed us to gain a more comprehensive understanding of how schemes are delivered and evaluated. The formative consultation seminars provided an opportunity to learn about the practical issues and real challenges of delivering, coordinating, commissioning and evaluating exercise referral schemes. Moreover, these seminars enabled professionals to identify what practical support and guidance they required to respond to these challenges. In addition, the views and opinions of key stakeholders were sought during the development of the toolkit.

The review of exercise referral research identified some key implications for practice, where appropriate, these have been used to develop some of the good practice guidelines and recommendations within the toolkit.

The six week consultation on the draft toolkit provided professionals and key stakeholders with a further opportunity to identify any keys issues which had been overlooked and to indicate where further clarification and/or guidance was needed.

Following the consultation phase a national working party was established to assist the BHF National Centre in finalising the toolkit. Although this process has delayed the release of the final toolkit it has resulted in a much more comprehensive resource with buy-in from key national stakeholders and relevant partners. It has also reduced duplication and allowed the maximum use of expertise and resources.

Section 1: Background Technical Report

The aim of this section is to provide the background rationale for the toolkit, specifically outlining how schemes have evolved over the last two decades. This section also provides a comprehensive outline of how the toolkit was developed and finishes with a summary of some key issues raised during the draft toolkit consultation exercise.

1.1. Rationale for the Toolkit

The benefits of a physically active lifestyle for health promotion and disease prevention are well documented.^{1,2} The Chief Medical Officer's Report: '*At least five a week*' stated that:

"Adults who are physically active have a 20-30% reduced risk of premature death and up to 50% reduced risk of developing the major chronic diseases such as coronary heart disease, stroke, diabetes and cancers."

<u>p1. CMO (2004)</u>²

However, there is a serious shortfall in the actual number of adults who engage in sufficient levels of physical activity to confer health benefits. In the United Kingdom physical activity levels are low³, data for England, Scotland, Wales and Northern Ireland show that, on average only 38% of men and 27% of women meet the current physical activity guidelines suggested by the Government.ⁱ See section appendix 1 for a breakdown of the percentage of adults, by age and sex, meeting the physical activity recommendations for England, Scotland, Wales and Northern Ireland.

There is increasing recognition, both globally and in the UK, of the need to promote healthier lifestyles and improve physical activity levels in order to reduce premature mortality and morbidity from chronic diseases.^{2,4,5} The World Health Report (2002) estimated that 3% of all disease burden in developed countries was caused by physical inactivity.⁶ In the UK, there is a considerable public health burden due to physical inactivity, in 2003-2004 researchers found that physical inactivity was responsible for 3.1% morbidity and mortality.⁷ Given the high prevalence of physical inactivity in the UK today, Professor Jerry Morris's statement of almost two decades ago still retains its potency:

"The potential health gain by increasing population physical activity levels is arguably today's best buy in public health."

Morris (1994)⁸

Primary care has been recognised as a potentially important setting for the promotion of physical activity. Primary healthcare professionals come into frequent contact with the general public. During 2007/2008ⁱⁱ it was estimated that there were 292.4 million consultations in primary care, with the average patient receiving 5.3 consultations.⁹ Overall about 85% of the population visit their GP surgery on an annual basis.¹⁰ Every

ⁱ CMO recommends that adults should do at least 30 minutes or more of moderate intensity physical activity at least 5 days a week. To download a copy of the CMO report go to: http://www.bhfnc-exercisereferral/useful links and resources

ⁱⁱ This data pertains to the NHS financial year of 2007/2008.

consultation provides an opportunity to promote behaviour change or to refer patients to relevant support services.¹¹

Lord Darzi¹² highlighted that the growth in the prevalence of many long-term conditions such as coronary heart disease, diabetes, hypertension, depression and chronic obstructive pulmonary disease, can be attributed not only to unhealthy lifestyle choices, but also to missed prevention opportunities. Many long-term conditions are commonly diagnosed, treated and monitored in primary care; however Darzi found that 54% of patients said that their GP had not provided advice on diet and exercise.¹² Furthermore, 65% of adults thought that it would be a good idea for GPs' to prescribe exercise instead of prescription drugs if the GP thought the exercise would remedy the patients condition.¹³

This emphasises the importance of primary care professionals in promoting healthrelated behaviours, such as physical activity, during routine consultations. Indeed NICE public health guidance¹⁴ recommends that:

"Primary care practitioners should take the opportunity, whenever possible, to identify inactive adults and advise them to aim for 30 minutes of moderate activity on 5 days of the week (or more)."

p.4 NICE (2006)

In the UK exercise referral schemes are one of the most popular interventions used by primary care practitioners to encourage sedentary individuals and individuals with long-term medical conditions, such as diabetes, hypertension, asthma, arthritis, obesity etc. to become more physically active.

According the National Institute for Health and Clinical Excellence (NICE)¹⁴ an exercise referral scheme is a process whereby a health professional:

"Directs someone to a service offering an assessment of need, development of a tailored physical activity programme, monitoring of progress and a follow-up. They involve participation by a number of professionals and may require the individual to go to an exercise facility such as a leisure centre."

p.5 NICE (2006)

The first exercise referral scheme was set up in the late 1980's and over the past two decades there has been a significant and sustained growth in the number of exercise referral schemes operating across the United Kingdom. The Royal College of General Practitioners credits GP Dr Derek Browne with being the first GP to promote exercise on prescription in the UK.¹⁵ Exercise referral schemes provide patients with the opportunity to engage in a structured programme of physical activity or exercise under the guidance of a suitably qualified exercise professional. The objective is to provide a positive introduction to being active which may act as a catalyst to long-term behaviour change.

Whilst there are variations in the models and standards of exercise referral schemes across the UK, schemes typically involve a member of the primary care team or allied health professional opportunistically referring a patient to a dedicated exercise professional who develops an exercise programme based on the patient's goals and preferences. Generally this exercise programme takes place within a leisure facility for between 10-16 weeks and is usually offered at a subsidised cost.

As a result of such rapid expansion of exercise referral schemes it has been suggested that there has been a consequential lack of quality assurance and a paucity of good quality evaluation.¹⁶ Indeed, previous reviews have identified a lack of systematic evaluation of exercise referral schemes.¹⁷

In 2001, in a bid to improve the quality of delivery of schemes the Department of Health produced a National Quality Assurance Framework (NQAF) for Exercise Referral Systems.¹⁸ The objective of the National Quality Assurance Framework was to provide guidelines for exercise referral systems, with the aim of improving standards among existing schemes and helping the development of new schemes. NQAF set out quality standards that exercise referral schemes should aspire to, these included measures to improve the evaluation of schemes.

In spite of the publication of the NQAF, capacity and resource constraints have largely dictated the extent to which the majority of schemes are meeting these standards. Furthermore, researchers have argued that the NQAF has failed to achieve consistency and comparability of standards, audit and evaluation mechanisms across the country.¹⁹⁻²¹

Although concerns about the quality and effectiveness of exercise referral schemes have been voiced by researchers and some policy makers for more than a decade, such concerns have been muted by Government policy, which has continued to promote the use of exercise referral schemes as a popular intervention for increasing physical activity levels.²²

Following the publication of the White Paper 'Choosing Health' questions about the evidence of the effectiveness of exercise referral schemes were being raised by senior policy makers. Consequently in 2005, the Department of Health commissioned the National Institute for Health and Clinical Excellence (NICE) to undertake a review of the effectiveness of exercise referral schemes to increase physical activity levels. The review evidence was carefully scrutinised by the NICE Public Health Interventions Advisory Committee who determined that there was <u>insufficient evidence</u> to recommend the use of exercise referral schemes to promote physical activity, other than as part of research studies where their effectiveness can be evaluated.

Subsequent NICE guidance¹⁴ recommended that:

"Practitioners, policy makers and commissioners should only endorse exercise referral schemes to promote physical activity that are part of a properly designed and controlled research study to determine effectiveness. Measures should include intermediate outcomes, such as knowledge, attitudes and skills, as well as a measure of physical activity levels. Individuals should only be referred to schemes that are part of such a study."

p6. NICE (2006)

The NICE recommendation to halt further use of exercise referral schemes other than for controlled research caused deep anxiety among exercise referral schemes.²³ The subsequent publication of the NICE implementation advice and audit criteria resulted in further concerns and confusion among practitioners, policy makers and commissioners.²⁴ On the one hand the NICE intervention guidance recommended that schemes should only be endorsed to promote physical activity if they are part of a

controlled research study, on the other hand the NICE implementation advice²⁴ acknowledged that exercise referral schemes can involve partners from a number of sectors and suggested caution before withdrawing funding or other endorsements, so that good partnership arrangements are not damaged for the future.²⁴

In the light of the NICE guidance, the future of exercise referral schemes started to look uncertain as many Primary Care Trusts began to question whether to continue funding their current schemes. In addition, many schemes which were deemed to be effective at a local level prior to the guidance were now under pressure to justify their existence and demonstrate their effectiveness. However, the cost implications of conducting a controlled research study to evaluate the effectiveness of exercise referral schemes meant this was an unrealistic objective for the majority of schemes.

The publication of the Department of Health statement on exercise referral schemes²⁵ offered a reprieve for some schemes by stating that the NICE requirement to be part of controlled study only applied to those schemes existing solely for the purpose of promoting physical activity in people with no underlying medical condition or risk factors. Exercise referral schemes which address the medical management of conditions, such as type 2 diabetes, obesity and osteoporosis or specifically designed to prevent or ameliorate individual health conditions (e.g. falls prevention) fall outside the scope of the NICE review and consequently are not affected by the NICE public health intervention guidance no 2.

"The Department of Health urges commissioners, practitioners and policy makers to continue to provide high quality exercise referral schemes for their local population where appropriate."

p1. DH (2007)²⁵

The NICE guidance clearly signalled the need to improve the evaluation of exercise referral schemes and to build a more comprehensive evidence base on the effectiveness of exercise referral schemes at a local and national level. However, for those schemes eager to respond to the NICE guidance, they found that it offered little practical direction on how to improve the delivery and/or evaluation of their scheme.

1.2. Development Process

In response to concerns expressed by exercise referral practitioners and discussions with several of the Regional Physical Activity and Health Coordinators the BHF National Centre for Physical Activity and Health (BHFNC) convened a meeting with the National Physical Activity Coordinator for Wales, the Physical Activity Lead for the Department of Health and several of the Regional Physical Activity and Health Coordinators to consider how we could best support exercise referral practitioners in implementing the NICE guidance. At this meeting it was agreed that:

- a) There was a need for coordinated and coherent approach to managing the effects of the NICE guidance.
- b) The BHF National Centre, in collaboration with the Regional Physical Activity Coordinators would lead a project to examine the feasibility of developing a toolkit for the design, delivery and evaluation of exercise referral schemes.

The West Midlands Physical Activity Network had already started to consider how they could best support professionals in the region and shortly after the publication of the NICE guidance the network led a mapping exercise to establish how many schemes were operating in the West Midlands region. The aim of the mapping exercise was to ascertain current practice, i.e. aims, objectives of schemes, target population, who refers into the schemes, types of activities available, length of schemes, criteria for evaluating and monitoring schemes etc. The East Midlands Physical Activity Network also replicated the mapping exercise in their region. The mapping work undertaken in the West and East Midlands informed the basis for the further mapping of schemes across the UK.

1.2.1. Mapping Exercise

The questionnaire developed by the East and West Midlands Physical Activity Networks (see appendix 2) was reviewed and modified in order to capture additional information about patient recruitment, transfer procedures, patient follow-up and evaluation activities. A copy of the questionnaire used for the mapping exercise led by the BHFNC can be found in appendix 3.

During 2007-2008 the BHFNC worked, on a region by region basis, with the Regional Physical Activity and Health Coordinators in the North West, North East, Yorkshire and Humber region, South East and Eastern regions to identify professionals responsible for exercise referral schemes operating across their respective regions. Where there were gaps in the regional information, the BHFNC made supplementary calls to Local Authorities and PCTs in an attempt to locate any professionals who might have been missed. A briefing paper, explaining the purpose of the mapping exercise (see appendix 4), and the questionnaire was then emailed to these professionals requesting information about their scheme. As a safeguard to ensure the questionnaire reached the relevant professionals, the email also asked professionals to inform us if they were not the key contact for the exercise referral scheme in their area. In Scotland, the questionnaire was sent out to all members of the Physical Activity Health Alliance and in the London regions the questionnaire was distributed via local networks and during several exercise referral toolkit consultation meetings. In parallel to the BHFNC mapping exercise, the Health Promotion Agency of Northern Ireland also conducted an audit of physical activity promotion in primary care which captured data on existing exercise referral schemes.

Around 89% of primary care trusts in England are estimated to have an exercise referral scheme²⁶ and similar figures are quoted for the health boards of Scotland, Wales and Northern Ireland. However, little is known about the detailed characteristics of exercise referral schemes currently running in the UK. The mapping exercise was the first stage to developing a more comprehensive evidence base on the nature and extent of exercise referral schemes in the United Kingdom. It provided an overview of how schemes operate and enabled us to highlight strengths, gaps and challenges in practice.

1.2.2. Formative Consultation Seminars

Following the initial data collection, the BHFNC in conjunction with each regional coordinator hosted a series of consultation seminars to gain professionals views about whether there was a need for an exercise referral toolkit and what the content of a toolkit might look like. In total 10 consultation seminars were held across England and

Scotland, involving approximately 180 professionals engaged in the delivery, management and commissioning of exercise referral schemes, for example, referring practitioners, scheme coordinators, exercise professionals and commissioners.

At the first seminar in the West Midlands region, formative ideas on what the toolkit might include were presented; these ideas were generated at the initial meeting held in Loughborough with the Regional Physical Activity and Health Coordinators and National Physical Activity Leads. At each subsequent regional seminar cumulative ideas were presented based on the information gathered at the preceding consultation seminar. The overriding goal of each consultation seminar was to give a voice to the exercise referral professionals and to locate the proposed exercise referral toolkit firmly within the realities of professionals' everyday experiences of exercise referral schemes. The formative consultation seminars ended when no new ideas were emerging from the successive groups.

In addition to the regional seminars meetings were held with key stakeholders e.g. Skills Active, the sector skills council, The Registrar for Register of Exercise Professionals (REPs), exercise referral training providers, professionals from the Royal College of Physicians and the Faculty of Sports Medicine. Further correspondence was exchanged with several GPs, practice nurses, physiotherapists and clinical exercise specialists.

The information gathered from the mapping exercise, exercise referral research literature, consultation seminars, meetings, email and telephone correspondence was collated and analysed. Similar issues were combined into more global themes, to form the framework of the draft toolkit; the resultant draft toolkit included:

- A summary of current practice, research and policy.
- Guidance for referring practitioners.
- Guidance for exercise professionals and exercise referral scheme coordinators.
- Guidance for commissioners.
- A guide to evaluation.

Five further seminars were held in Cambridge, London, Birmingham, Glasgow and Belfast to obtain professionals views about the proposed contents of the toolkit, and to gain feedback on the content, style, length and format of specific sections. Around 100 professionals attended these seminars and feedback was subsequently used to inform the final development of the draft toolkit.

1.2.3. Draft Toolkit Consultation Exercise

The draft toolkit and consultation questionnaire (see appendix 5 for a copy of the consultation questionnaire) were disseminated to all professionals who had responded to the mapping exercise and attended the formative consultation seminars. Electronic copies of the toolkit and questionnaire were also emailed to the Physical Activity Leads within UK Government, the Regional Physical Activity and Health Coordinators and the Coordinator of the Scottish Physical Activity and Health Alliance, the latter two were asked to cascade the documents throughout their physical activity networks. In addition electronic copies were sent to key organisations and stakeholders - Royal College of General Practitioners, SkillsActive, Fitness Industry Association's Exercise

Referral Forum, Register for Exercise Professionals, Chartered Society for Physiotherapists and the Royal College of Physician's Exercise for Life Working Party. An email alert was also sent out to all members of the BHF National Centre database informing them that the draft toolkit was available to download from the BHFNC website.

The consultation ran for six weeks during mid-February to the end of March 2009. Thirty-five responses were received from a range of individuals and organisations. It is difficult to give an accurate picture of the number of individual responses to the consultation exercise as the majority of responses (70%) were combined. For example, a combined response covering the whole of the North East region and its stakeholders was submitted. The region's PCTs and local authorities were invited to comment, views of the NE Green Exercise Forum and Regional Physical Activity Group were also sought and feedback from the North Tyneside Exercise Referral Scheme was included in a single response.

At the close of the consultation period all responses were collated and reviewed by the BHFNC toolkit project manager. The consultation responses were also discussed with a number of key individuals and several major stakeholders in order to consider how the BHFNC could best respond to the feedback. Following these discussions the BHFNC agreed to set up a working party to help take forward the exercise referral toolkit, to ensure the final version reflected the needs of all national, regional and local stakeholders involved in exercise referral schemes.

1.2.4. National Toolkit Working Party

A working party was established with a cross-section of professionals involved in the delivery, coordination and commissioning of exercise referral schemes; and representatives from key national and regional stakeholders. The working party included the Department of Health, the Welsh Assembly Government, NHS Health Scotland, Welsh Local Government Association, Skills Active, Register of Exercise Professionals, Fitness Industry Association, Natural England and several professionals with a variety of skills; knowledge and expertise in exercise referral (for further details of how these professionals were selected see appendix 6 & 7).

At the first meeting, the working party terms of reference were ratified and a project plan outlining the process for finalising the toolkit was discussed and approved. It was agreed that the starting point for the working party was to analyse the consultation responses to identify what issues this had raised.

All of the consultation responses were anonymised and collated into one large document, which was circulated to the working party. A sub-group of the working party volunteered to review the consultation document. To aid this process members of the sub-group examined the consultation responses in relation to a specific area of their expertise e.g. commissioning, scheme coordination, qualifications, evaluation etc and summarised key issues for consideration. These key issues were discussed by the wider working party and an action plan, outlining who would take responsibility for sourcing additional information, guidance and making revisions to the toolkit, was agreed. At this meeting the working party also agreed how the toolkit would be segmented and presented as a web-based resource.

Six small sub-groups were formed and each sub-group was assigned responsibility for revising a specific section of the toolkit in line with the action plan. Prior to the next meeting the amended sections of the toolkit were circulated to all working party members for review. At the final working party meeting each section of the toolkit was reviewed and any further changes/actions were approved. Following this meeting each sub-group revised their respective section and sent their final version to the chair of the working party, regional physical activity and health coordinator and the project manager. Upon receipt of the revised sections the chair, regional coordinator and project manager met to review the amendments and to sign-off the content of each section. After this meeting all sections of the toolkit were handed over to the project manager for final editing, formatting and production.

1.2.5. Working Party Response to Specific Consultation Comments

The working party have attempted to address most of the comments submitted during the consultation exercise within the different sections of the toolkit. However, it has not been possible to resolve all of the issues raised either because these fell outside the scope of the toolkit or were not within the remit or expertise of the working party. Below is a list of some of the key issues and questions raised during the consultation exercise and a summary of the working party's response.

- A few respondents expressed concerns that their schemes did not have the resources, capacity and funding to adopt some of the recommendations set out within the toolkit.
 - The working party acknowledged that capacity, resources and funding vary across schemes and that some schemes are struggling to implement elements of the National Quality Assurance Framework. The toolkit is not designed as a 'blueprint' for how exercise referral schemes must be designed, implemented and evaluated. It offers some best practice principles for all those involved in the delivery, management and commissioning of exercise referral schemes. It is for individual schemes to consider whether the implementation of these principles will improve the design, delivery and effectiveness of their scheme, given the capacity and resources available.
- A number of respondents wanted a definitive list of headline outcome indicators that all schemes should be encouraged to adopt.
 - The working party felt this requires further debate at a national policy level. Furthermore, the working party were of the opinion that to provide such a definitive list could be interpreted as national policy, which the toolkit is not. A recommendation that this should be addressed at a national policy level has been made to the Department of Health and devolved administrations.
- Several respondents requested clarification about the qualifications and training necessary for working with referred patients.
 - Firstly, it should be made very clear that the toolkit is <u>not</u>, by any means, <u>recommending a reduction in the qualifications and standards of exercise professionals responsible for designing, agreeing, adapting and reviewing a physical activity programme for referred patients. The BHFNC hope that by working in partnership with SkillsActive and the Register of Exercise
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Professionals that these issues have been clarified. A recommendation will be put forward to Government and the devolved administrations to look at the medical legal implications for schemes referring clients on to 'other instructors' in order to offer a wider range of activities.

- Some respondents had expressed concerns over the level of detail required in the sample referral form and felt that GPs would refer less if too much information was requested.
 - To some extent, the working party have taken on board these concerns and modified the sample referral form where feasible. However it must be noted that a referral form should comply with the standards outlined in NQAF and the sample in the toolkit also complies with SIGN best practice guidelines for primary care referrals.

Finally, a number of respondents questioned where exercise referral sits in relation to 'Lets Get Moving', walking schemes and other physical activity interventions. In addition some individuals wanted clarification about recommendation and referral.

- 'Lets Get Moving' represents an integrated care pathway for the promotion of physical activity in primary care in England, Exercise referral schemes which follow the Department of Health policy²⁵ are regarded to be one part of the delivery chain within this pathway and should, where appropriate, be considered for individuals with clinical needs.
- Even though exercise referral schemes are popular throughout the UK, it is important to recognise that such schemes represent only one type intervention that can be used by primary care professionals to promote physical activity for health gain. Self-directed unsupervised activities such as free swimming, gardening or lay led activities such as health walks, green gyms or supervised structured activities such as dance, tai-chi etc. all contribute to the wider concept of physical activity promotion for disease prevention.
- Recommending or sign-posting a patient to any of these broader physical activity opportunities is quite distinct from referring an individual to a dedicated service for the development of a tailored physical activity programme i.e. an exercise referral scheme. With the former the responsibility for taking part in any of these activities is up to the patient who is also responsible to act within the boundaries of the health professional's recommendation. The latter, exercise referral, requires the transfer of relevant medical information about an individual in order to develop a tailored physical activity programme; furthermore the exercise professional takes responsibility for the safe and effective design, delivery and management of this individual's physical activity programme.

Summary:

The level of interest and engagement from professionals, key stakeholders and partners involved in exercise referral schemes has shaped the toolkit into a resource far beyond our original ideas.

Although its development has been slow, the process has been worthwhile since it has resulted in a much more comprehensive resource with buy-in from key national stakeholders and relevant partners.

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Section 2: A Snapshot of Exercise Referral Schemes Operating in England, Scotland & N. Ireland -2006-2008





Section 2: Executive Summary

The purpose of this mapping exercise was to identify and survey existing exercise referral schemes in England, Scotland and Northern Ireland to ascertain the nature and extent of current practice.

A 50-item questionnaire was developed in consultation with the West and East Midlands Physical Activity Networks, this questionnaire was piloted with 4 exercise referral scheme coordinators before it was approved for use (see appendix). Questionnaires were sent to 198 named exercise referral professionals working in the North East, North West, West Midlands, East Midlands, South East, Eastern and Yorkshire and Humber regions. Questionnaires were also disseminated at 3 London region network meetings and through the existing Physical Activity and Health Alliance in Scotland.

In Northern Ireland two questionnaires were utilised for the mapping. One questionnaire specifically for healthcare professionals was sent to 370 GP practices in Northern Ireland. The second questionnaire specifically designed for leisure centre managers, was sent to contacts in 63 council-run leisure centres.

The audit was not conducted in Wales, as a review had been conducted as part of the development of the National Exercise Referral Scheme (NERS).

One-hundred and fifty-eight questionnaires were received for England and Scotland. Two-hundred and two questionnaires were received from GPs and forty-three questionnaires were returned by leisure centre managers in Northern Ireland.

Findings:

The results of this mapping show that there are various methods to delivering exercise referral schemes; it highlights that schemes operate at different capacities, with a range of different partners, operational structures and standards.

- A large geographical area of England, Scotland and Northern Ireland is covered by the schemes responding to the survey.
- There are some areas in England, Scotland and Northern Ireland which are not covered by schemes; however this may reflect a non-response rather than a lack of provision.
- The lead agencies responsible for schemes were in the public sector; the majority (75%) of schemes were developed and coordinated either by the PCT/NHS Health Board, the local authority or as a joint venture between local authorities and PCTs/NHS Health Boards.
- The majority of schemes in England and Scotland (69%) were fairly well established and had been operating for at least 4 years. In Northern Ireland schemes were slightly younger; the majority of schemes (72%) had been running for 4 years or less.

- The overall aim of the majority of schemes was to improve the health and wellbeing of the local population by promoting and providing opportunities for increased physical activity.
- The referral inclusion criteria differed from scheme to scheme depending on scheme aims, exercise referral staff experience and qualifications and the range of health professionals referring into the scheme.
- The most predominant conditions included by schemes being delivered throughout England, Scotland and Northern Ireland were:
 - Mental health problems.
 - Weight problems.
 - Hypertension.
 - Asthma.
 - Diabetes.
 - Inactivity.
 - Osteoporosis.
 - Arthritis.
 - Raised blood cholesterol.
 - Chronic obstructive pulmonary disease.
 - Coronary heart disease risk factors, such as smoking, family history.
- General practice was the most frequently cited route for referral with 94% of schemes accepting referrals from GPs and 89% accepting referrals from Practice Nurses. Over two-thirds of schemes now accept referrals from a range of allied health professionals, such as physiotherapists, specialist nurses.
- The majority of schemes adopted a range of methods for recruiting patients. The most commonly reported recruitment methods were patient initiated requests for referral, followed by opportunistic health professional referrals.
- Local authority leisure facilities (including leisure trusts) were the most popular setting for the delivery of the exercise referral programme. Almost two-thirds of schemes were also utilising community or outdoor settings for a variety of activities.
- The wider range of settings being utilised has enabled many schemes to move away from traditional leisure centre-based activities and to expand the range of activity options available to referred patients. The majority of schemes (55%) in England and Scotland offered between 3-to-7 different activities, whereas the majority of schemes in Northern Ireland (64%) provided 1 or 2 activities.
- The typical length of the referral period in England and Scotland was 12 weeks. This data was not available for Northern Ireland.
- The number of patients referred to schemes on an annual basis varied from one scheme to another. Data for England and Scotland showed that referral numbers ranged from 20 patients up to 6500 patients per annum. The number of patients being referred to schemes in Northern Ireland also varied; however the majority of schemes (86%) had between 26 to 150 referrals per annum.

- Patient completion rates were recorded by the majority of schemes, however it was difficult to provide an accurate picture of these across schemes due to the variations in the way schemes measured completion.
- The analysis of exit strategies used by schemes in England and Scotland highlighted that a variety of exit routes were utilised, the most popular being an offer of a concessionary rate. This data was not captured for Northern Ireland.
- Ninety-three percent of schemes reported being evaluated, of these the majority were evaluated internally either by the scheme coordinator, health improvement manager, PCT/health board or local authority.
- Ninety-seven percent of schemes also reported that they collected data on a range of patient health, fitness and physical activity indicators at some point during the referral period.
- The majority of schemes in England and Scotland reported using the National Quality Assurance Framework to inform the development and delivery of their scheme.
- The majority of schemes (44%) stipulated that their exercise instructors must hold a recognised exercise referral qualification as a minimum and a further 22% stipulated that their exercise instructors must hold a minimum of an advanced level 3 qualification and a recognised exercise referral qualification.

It is clear from the evidence gathered in this audit that exercise referral schemes are not, and cannot be, delivered as a 'one size fits all'. Schemes need to have some degree of flexibility to meet the needs, capacity and resources of the local situation. The purpose of this section is to give an overview of the characteristics, design and operating principles of exercise referral schemes in England, Scotland and Northern Ireland.

2.1. <u>Current Practice</u>

2.1.1. Methods

Questionnaires and a briefing paper,ⁱⁱⁱ explaining the rationale for the audit, were sent out via email during September 2006 to February 2008 to 198 named exercise referral professionals working in the North East, North West, West Midlands, East Midlands, South East, Eastern and Yorkshire and Humber regions. One-hundred and twenty-six questionnaires were returned, representing an overall regional response rate of 64% and individual regional response rates of between 33–94%. Questionnaires were also distributed to professionals with an interest in exercise referral during 3 consultation meetings held in the London region. Information was obtained from 10 schemes operating in the London region; however previous research¹ has indicated that there are 30 established schemes across Greater London, therefore the response rate represented exactly one-third of schemes known to be operating in the London region. In Scotland, the questionnaire and briefing paper was disseminated via email through the existing Physical Activity and Health Alliance database, information was obtained from 22 schemes. Due to the methods used for gathering data on schemes operating across Scotland it was not possible to calculate the response rate. A total of 158 responses were received across England and Scotland.

A similar approach was undertaken to gather data for Northern Ireland. The Health Promotion Agency identified 63 contacts working in council-run leisure centres. Questionnaires were sent to centre managers via post and telephone reminders were made to prompt a response. A total of 43 questionnaires were returned representing a 68% response rate.² A copy of the Northern Ireland exercise referral mapping report can be found at <u>http://www.bhfnc-exercisereferral/linksresources.html</u>

The audit was not conducted in Wales, as a review had been conducted as part of the development of the National Exercise Referral Scheme (NERS). NERS is a randomised controlled trial investigating whether self-reported physical activity (as well as depression, anxiety, quality of life and other physiological measures) at 12 months is different among those patients receiving an exercise referral programme compared to those receiving usual GP care and a leaflet on physical activity. The evaluation will also investigate the cost-effectiveness of the scheme. The final results of the trail will be available in the early autumn of 2010.

2.1.2. Limitations of the Mapping Exercise

The methodology of this mapping exercise is not without limitations. A central database of exercise referral schemes operating across the United Kingdom does not exist, thus the mechanism for identifying professionals responsible for the delivery, coordination or commissioning of schemes predominantly relied on the regional and

ⁱⁱⁱ See appendices 3 and 4 for a copy of the questionnaire and briefing paper

national physical activity coordinator's knowledge of schemes operating in their area. Scotland and several English regions have established physical activity networks; consequently the procedures for identifying the relevant exercise referral professionals were much more straightforward and potentially more reliable, than in the regions where such networks did not exist. While every effort was made to ensure that the database included all relevant exercise referral professionals working across these regions, there is no guarantee that this was accurate. The individual responsible for developing the exercise referral contact lists in these regions relied upon secondary sources to obtain contact names and email addresses, such as receptionists within key agencies e.g., Local Authorities, Primary Care Trusts, websites and the regional coordinator's contacts, where appropriate and practical. The lower response rates in these regions may reflect the difficulties in trying to identify relevant exercise referral professionals. Due to timescales and difficulties in identifying relevant exercise referral professionals this mapping exercise was not completed in the South West of England.

Previous reports have estimated that there are around 600-800 exercise referral schemes in existence across the UK³; in contrast this mapping exercise has uncovered a significantly smaller number of schemes. Consequently, this raises the question whether the present mapping exercise has failed to capture the true extent of exercise referral scheme provision across the UK or whether previous reports have overestimated the level of provision. However, there is a plausible explanation for the conflicting figures presented in this report and previous estimates; observations of the existing data reveal that many schemes operate across a number of provider sites with an overarching protocol or set of standards. For example, a recent evaluation of Eastern and Coastal Kent exercise referral scheme⁴ reported that the programme takes place across a multitude of leisure centres, these centres have signed up to a core set of standards and one exercise referral scheme strategy. In the present report the Eastern and Coastal Kent exercise referral scheme would count as one scheme whereas previous reports would have counted each provider site as a unique scheme. hence the large discrepancy in the levels of provision presented in this report and previously.

The information presented in this section provides a snapshot of the nature and extent of exercise referral schemes operating in England, Scotland and Northern Ireland during 2006-2008 and is based on self-report data. A self-report questionnaire was used to gather information about schemes, however there are limitations to using questionnaires to collect data, which must be recognised and taken into consideration in this report. It is possible that there is a real difference between those who respond to surveys and those who do not, thus the problem of a self-selecting sample is particularly apparent in relation to questionnaire-based surveys. Resultantly, there may be a response bias which may over or under-represent the issue being investigated. Typically surveys have low response rates, sometimes as low as 10-20% which can threaten the validity and ability to generalise the findings; however with an overall response rate of 64% the findings presented in this report are likely to be representative of other exercise referral schemes.

The questionnaire used to capture information about schemes operating in Northern Ireland was slightly different to the one used in England and Scotland. Where possible, the findings presented in this section incorporate evidence from the mapping exercise undertaken in Northern Ireland, where such data is not available or where there are slight variations in the data captured this has been stated in the respective sections.

2.1.3. Location of Schemes

Information was gathered from 158 schemes operating across England and Scotland, table 1 below shows a breakdown of the number of schemes responding to the survey by country and the number of schemes responding within each English region.

Geographical Area	No. of Schemes
Scotland	22
England	136
London Boroughs	10
North West	22
South East	11
Eastern Region	15
North East Region	15
Yorkshire & Humber Region	16
West Midlands	14
East Midlands	33
Overall	158

Table 1.Number of Responses by Country and Geographical Region

Respondents were asked about the area covered by the scheme, data highlighted that schemes are delivered in various sizes; some operate within district council boundaries, some cover full counties and others are city-wide. The scale of the survey and the varying sizes of schemes, e.g. town, district, county or city wide, made it extremely challenging to produce a summary of the number of schemes operating by boundary type; however a crude analysis of the data shows that the majority of schemes are district wide. Maps 1 & 2 on the following pages show the geographical distribution of schemes across England and Scotland respectively. As can be seen there are some areas in both England and Scotland which are not covered by schemes. However, it should also be noted that these maps are based on the responses to the survey, there may be some areas where schemes currently operate, but the information was not captured in this mapping exercise.

Sixty-five percent of respondents in Northern Ireland reported that their leisure centre was involved in a physical activity referral scheme to some level. Map 3 shows the geographical distribution of the schemes that GP practices currently refer patients to in Northern Ireland.

The maps showing the geographical spread of schemes within each region are included in appendix 8 of this document.



Map 1: Geographical distribution of exercise referral schemes across England


Map 2: Geographical distribution of exercise referral schemes across Scotland

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Map 3: Geographical distribution of exercise referral schemes across Northern Ireland



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2.1.4. <u>Responsibility for Schemes</u>

Respondents were asked to indicate who had the lead responsibility for the exercise referral scheme. Across England and Scotland, the lead agencies responsible for schemes were all within the public sector. While there were some slight variations in the lead agencies for schemes across the English regions; chart 1 below shows on the whole the majority of schemes in England and Scotland were developed and coordinated either by local authorities (27.2%) or as a joint venture between local authorities and Primary Care Trusts/NHS Health Boards (27.2%). The mapping exercise also found that PCTs/NHS Health Boards were named as the lead agency for a further 21% of schemes being delivered in England and Scotland. The remaining 24.8% of schemes were led by a range of agencies: of these 10.2% were delivered in partnership with leisure trusts or private sector providers; 9.6% were delivered as partnerships with no one lead agency and 5% were delivered by voluntary sector organisations such as the YMCA, Age Concern. Comparative data on the agencies responsible for the delivery and coordination of exercise referral schemes in Northern Ireland was not captured through their mapping exercise.



2.1.5. Length of Schemes

The first exercise referral scheme was set up in the early 1990's and over the past two decades there has been a significant and sustained growth in the number of exercise referral schemes operating across the United Kingdom. To gain a picture of the development of schemes over time respondents were asked how long the scheme had been in action. As can be seen from chart 2 below, the majority of schemes (69%) were fairly well established and had been operating for at least 4 years. Almost a tenth of schemes (9%) had been in existence for more than 13 years making them some of the longest running schemes in the UK. Several schemes (4%) had been established for less than 1 year or were in a pilot phase, indicating that in spite of the NICE guidance new schemes were still being launched.

In Northern Ireland the survey of leisure centre managers revealed that physical activity referral schemes were not as well established as those in England and Scotland. Twenty-nine percent reported that their leisure centre had been involved in the physical activity referral scheme for 1-to-2 years. A further 36% had been involved for 3-to-4 years and 24% had been involved in the scheme for over 4 years. A small number (7%) of leisure centre managers reported that they had been involved in running a referral scheme for less than one year.



2.1.6. Aim of Exercise Referral Schemes

Although the specific aim(s) of schemes varied from one scheme to another, the overall aim for the majority of schemes was to improve the health and wellbeing of the local population by promoting and providing opportunities for increased physical activity.

More than half of the schemes had more than one aim; further aims for many schemes were to:

- Increase physical activity levels amongst the most sedentary groups.
- Provide opportunities for people with underlying medical conditions to become more active.
- Provide access to safe and effective exercise in a supervised environment.
- Equip patients with the knowledge and skills to become more active.
- Raise awareness of the benefits of physical activity.
- To promote long-term behaviour change.

2.1.7. Inclusion/Exclusion Criteria

The referral inclusion criteria differed from scheme to scheme depending on scheme aims, exercise referral staff experience and qualifications, and the range of health professionals referring into the scheme. Fifty percent of schemes stated they have inclusion criteria based on patients' physical activity levels; however the physical activity measures used to determine whether a patient would be eligible for the scheme varied. Some schemes specified levels of activity as the inclusion criteria, i.e. sedentary or limited mobility (less than 30 minutes of physical activity per week) or insufficiently active (less than 5 times 30 minutes of physical activity per week); other schemes used a physical activity questionnaire e.g. Godin & Shephard, or a pre-screening tool e.g. GPPAQ to determine the patients physical activity levels. A few

schemes did not define levels of physical activity and recommended the referring health professional used their professional judgement about the patients suitability for the scheme based on the scheme protocol.

Most schemes accept patients with a wide range of medical conditions, ranging from:

- CHD risk factors, for example hypertension, raised blood cholesterol; family history, smoker.
- Mental health problems, for example, anxiety, depression, stress.
- Musculoskeletal conditions, for example, back pain, arthritis, osteoarthritis, osteoporosis, multiple sclerosis.
- Respiratory conditions, for example, asthma, COPD.
- Neurological conditions, for example, epilepsy, Parkinson's disease.
- Metabolic/endocrine problems, for example, diabetes, thyroid disease.

Box 1 below; shows the most predominant conditions included in schemes being delivered throughout England, Scotland and Northern Ireland.

Box 1: Most predominant conditions	
•	Mental health problems
•	Weight problems
•	Hypertension
•	Asthma
•	Diabetes
•	Inactivity
•	Osteoporosis
•	Arthritis
•	Raised blood cholesterol
•	Chronic obstructive pulmonary disease
-	Coronary heart disease risk factors

Where schemes have appropriately qualified level 4 exercise instructors, e.g. phase IV cardiac rehabilitation, falls prevention they are offering an integrated physical activity referral service which includes activities for patients with current severe disease or disability. While the integration of services for patients with current severe disease or disability, such as coronary heart disease, chronic low back pain and osteoporosis is becoming common practice it should be recognised that such patients are not considered suitable for a general exercise referral scheme. Patients with more chronic and enduring medical conditions should only be referred to specialist physical activity/ exercise sessions with appropriately qualified level 4 exercise instructors or health care professionals. Refer to section 9 for further information on qualifications and training for professionals working with referred clients (to download section 9 return to http://www.bhfnc-exercisereferral\downloads.html).

Seventy-one percent of schemes reported that they have defined exclusion criteria, the remaining twenty-nine percent either made no comment here (26%) or stated they do not have any exclusion criteria (3%). Of the schemes with defined exclusion criteria many based their exclusion criteria on a range of factors, for example: Age (less than 16 years of age); Physical activity (active at a moderate intensity on 3 or more occasions per week); ACSM contraindications to exercise testing⁵; BACR phase IV contraindications to exercise⁶; An unstable or uncontrolled medical condition such as diabetes, asthma, epilepsy, hypertension, psychotic illness; and severe medical conditions such as, heart disease, obesity (BMI greater than 40); osteoporosis or musculoskeletal disorders exacerbated by exercise.

The inclusion and exclusion criteria used by schemes are crucial as it enables referrers to assess patients' suitability for referral and should provide clear guidance about who is suitable for a particular scheme. Guideline 2 of the National Quality Assurance Framework (NQAF)⁷ recommends:

"each scheme should develop its own medically led selection criteria which is tailored to the health needs of the patient population, the competencies and qualifications of the exercise professionals and the exercise facilities and services available."

p.18, NQAF, 2001

2.1.8. <u>Referring Practitioners</u>

Since the initial development of exercise referral schemes the range of healthcare practitioners referring into schemes has grown in England and Scotland. Schemes are now accepting referrals from a range of professional disciplines, including community nurses, health visitors, dieticians, physiotherapists, mental health professionals, occupational therapists and specialist diabetes, asthma and epilepsy nurses.

Graph 1 below, shows the range of professionals referring into schemes in England and Scotland. General practice is still the most frequent route for referrals with 94% of schemes accepting referrals from GPs and 89% accepting referrals from practice nurses. Over two-thirds of schemes now accept referrals from physiotherapists (75%), cardiac rehab professionals (72%), specialist nurses (68%) and mental health professionals (65%). Referral routes from dieticians, occupational therapists and private health professionals are less utilised.

Forty-one percent of schemes indicated that they accept referrals from a variety of other routes, such as hospital department staff, community psychiatric nurses and HIV clinicians. Of this 41%, a small number of schemes (6%) reported that they have an open referral route and will accept referrals from any health professional who has access to a patient's full medical history.

In Northern Ireland, exercise referral schemes are in their relative infancy (72% of schemes are under 4 years old) and referrals are mainly from general practice. Ninety-two percent of referrals are from GPs and seventy-two percent are from practice nurses. Eleven percent of referrals are from nurse specialists or nurse practitioners working within general practice or other professionals, role unspecified (4%).²



At their inception exercise referral schemes were called 'GP referral schemes' or 'Exercise on Prescription' which may reflect why general practice is still the most popular route for referrals and why many schemes have strong buy-in from general practices in their locality. While the percentage of GP practices that refer into schemes falls as low as 4% in some localities; the majority (62%) of exercise referral schemes across England, Scotland and Northern Ireland have at least two-thirds of practices in their locality signed up as refers. Approximately 30% of schemes have buy in from 95-100% of general practices in their locality.

2.1.9. Patient Recruitment Methods

The majority of schemes adopted a range of methods for recruiting patients, typically these included:

- Opportunistic recruitment during routine consultations, health screening clinics or new patient consultations.
- Targeted recruitment via existing disease registers or condition specific clinics.
- Open recruitment via advertising in practices and local health centres.
- Patient initiated requests for referral while visiting their GP.

Graph 2 below, shows a breakdown of the variety of recruitment methods being used by schemes. The most commonly reported recruitment methods were patient initiated requests (80%), followed by health practitioner initiated referrals either in routine consultations (73%) or via existing condition clinics (67%).



2.1.10. <u>Referral Pathway</u>

Respondents were asked about the referral pathway, specifically who is responsible for booking the initial exercise referral consultation and how information and paperwork is transferred between the health professional and exercise professional.

As can be seen in graph 3 below, the most commonly adopted referral procedure involved the exercise professional booking the initial consultation with the patient; over half of the schemes used this referral pathway. Approximately one-third of schemes passed the responsibility for booking the initial consultation to the patient and a further seventeen percent relied on the health professional to book the initial appointment. A small number of schemes (4%) utilised the practice receptionist as a conduit for booking the initial referral consultation. Fifteen percent of schemes used a combination of one or more of the above methods to arrange the initial patient consultation.

In Northern Ireland the situation was reversed; in most cases (86%) the GP made contact with the leisure centre to arrange the referral, followed by the practice nurse (29%) and the patient (29%). Seven percent of schemes received referrals from practice managers or receptionists.²



The vast majority of schemes in England and Scotland (58%) stated that paperwork is transferred between the referring practitioner and the exercise professional via post. A further 20% of schemes reported that the patient hands the relevant paperwork to the exercise professional at the initial consultation. Other schemes transferred paperwork by fax (17.5%), by email (12%), by phone (10%), and by personal delivery and/or collection (9%). Twenty percent of schemes used a combination of the above methods to transfer paperwork between the referring practitioner and the exercise professional, the most popular combination being by post and in person via the patient. The combined methods enable schemes to keep an audit trail of the number of patients referred and the number of patients attending the initial consultation. A similar pattern was found in Northern Ireland, the majority of schemes reported that they receive referrals on paper (93%), in person (11%), by telephone (4%) and via email (4%).

In addition to the varied methods employed to transfer information between the referring practitioner and the exercise professional, the paperwork being used to transfer patient information differed from scheme to scheme. Some schemes used a referral letter, other schemes used a tailor-made exercise referral transfer form, and others used referral cards. Example referral letters, transfer forms etc. were collected during this mapping exercise, analysis of these revealed that the majority of forms gathered standard demographic (gender, age, ethnicity) and health information (height, weight, BMI, blood pressure, resting heart rate); the reason for referral and information about the patients prescribed medication. A sample transfer form has been produced based on the SIGN best practice guidelines for referral documentation and the common themes taken from the examples gathered, return to the downloads page for a word version of the sample transfer form.

2.1.11. Characteristics of Schemes

Facilities:

In previous reviews it has been found that schemes centred activities mainly within local leisure facilities, with some exceptions. While this mapping exercise found that local authority leisure facilities are still the most popular setting for the delivery of exercise referral schemes (90%), it also revealed that many schemes are now delivering activities in a number of settings. Today, almost two-thirds of schemes are utilising two or more settings for the delivery of their exercise referral programme, these other settings include sports clubs (8%); community venues (45%); green exercise facilities (11%); private leisure facilities (21%); outdoor venues (45%) and the home (26%). A number of schemes (8%) also reported using other settings for the delivery of their programme; these included schools, colleges, universities, GP surgeries, a day centre and a football stadium. Graph 4 below, shows the range of facilities and settings being utilised by exercise referral schemes across England and Scotland.



In Northern Ireland, the exercise referral activities were predominantly located in the leisure centre, with a few schemes offering activities in the community.^{iv}

Activities:

The wider range of settings being utilised has enabled many schemes to move away from traditional leisure centre-based activities and to expand the range of activity options available for referred patients. In England and Scotland activity options differed from scheme to scheme, ranging from the provision of only one or two activities^v (e.g. gym based activities or group exercise classes) to the provision of a wide range of activities. The majority of schemes offered between 3-7 activities (55%). A small

^{iv} Actual numbers were not available from the Northern Ireland audit.

^v 13.3% of schemes provided 1 or 2 activities.

number of schemes (13%) offered 10 or more different activities for patients involved in the exercise referral programme. In Northern Ireland fewer activity options were provided for referred patients, with the majority of schemes (64%) providing only one or two activities.

Graph 5 below, shows the type of activities offered by schemes in England and Scotland: gym- based sessions, group exercise classes, swimming and walking were the most common activities. Ninety-one percent of schemes offered gym-based activities; seventy-four percent offered group exercise classes, sixty-eight percent offered swimming and a further fifty-eight percent offered led-walks. Two-fifths of schemes also offered chair-based activities, condition specific exercise classes, resistance exercise sessions, yoga, Pilates and tai-chi. A small number of schemes also offered alternative activities such dance, hydrotherapy, sports, lifestyle activities and cycling.



Schemes offered either exclusive activity sessions for referred individuals and/or the opportunity to exercise in suitable mainstream activities established in a leisure centre or local community. Exclusive activity sessions tended to be in leisure facilities at 'off-peak' times and therefore operated during the daytime.

In Northern Ireland, the activities offered as part of the exercise referral scheme were less diverse. As can be seen in graph 6 below, the most common activities were gymbased and swimming sessions: all schemes reported that they offered gymbased activities as part of their referral programme and almost two-thirds offered swimming. The provision of other activities was less widespread; however a small number of schemes reported that they offered class-based activities (11%), led-walks (7%) and team sports (4%) as part of their exercise referral scheme.



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Length of Referral Period:^{vi}

Respondents were asked to indicate how long the 'referral period' lasted for their scheme. Chart 3 below, shows that the typical length of the referral period was 12 weeks for most schemes (47%), however the referral period ranged from 4 weeks to 1 year in some areas. Almost a quarter of schemes operated a referral period of 10 weeks or less and a slightly less than one-fifth of schemes operated a referral period of 14 weeks or more.

A small number of schemes (5%) offered patients a set number of sessions (ranging from 8 to 36) which were not time limited. Seven percent of schemes did not specify either the length of the referral period or the number of sessions offered to exercise referral patients.

The mapping exercise in Northern Ireland did not capture data on the length of the referral period.

^{vi} The 'referral period' represents the amount of time patients access the scheme for supervised and sometimes subsidised, physical activity with qualified exercise referral staff.



Patient Charges:

The charges made to patients accessing exercise referral programmes across the country varied considerably, from scheme to scheme. Just over a tenth of schemes (11%) reported that they do not charge patients anything during the referral period. The remaining 89% of schemes reported charging patients either a one-off fee for the referral period or a discounted rate per activity session during the referral period. The one-off charges differed across schemes starting from £6.70 for a 10 week programme to £67.50 for an 8 week programme. The charge to patients, per session during the referral period also varied from scheme to scheme, ranging from 50p to £7.50 (the average charge levied by schemes, per session was between £1.50 and £2.00). The costs patients' incurred also varied depending on the activities they were accessing within a scheme, for example some schemes offered free swimming, cycling or walking and charged for gym-based sessions and group-based exercise classes. Almost a fifth of schemes (18%) charged patients for the initial consultation or assessment, these charges ranged from £2.90 to £35.00. The charges patient incurred during the referral period were variable depending on whether the patient was entitled to free prescriptions or other concessions.

Data on costs patients may or may not have incurred during the referral period were not captured through the mapping exercise in Northern Ireland.

2.1.12. Referral Numbers and Uptake

The number of patients referred to schemes on an annual basis varied from one scheme to another. Data for England and Scotland showed that the number of referrals^{vii} ranged from between 20 patients per year to 6500 patients per annum. It should be noted here, that it would be erroneous to assess the quality of a scheme simply by patient throughput, the scope and size of the scheme is clearly a determining factor in the number of referrals each scheme receives on an annual basis.

vii Number of referrals is also commonly referred to as 'patient throughput'.

The numbers being referred to schemes over the course of the year also varied in Northern Ireland. The majority of schemes (86%) had between 26-150 referrals and approximately a tenth of schemes (11%) had more than 150 referrals over the year.²

Following the referral the next step in the exercise referral process is the 'uptake' of the referral. While the research literature highlights that there are variations in the way 'uptake' is determined by schemes, for the purpose of this mapping exercise 'uptake' was determined by whether the patient attended the initial exercise referral consultation. In England and Scotland, rates of uptake varied across schemes, ranging from 30% to 98% of patients attending the initial exercise referral consultation. A third of schemes (33%) indicated that more than 80% of patients referred attend the initial exercise referral consultation (range 80-98%). A further 28% indicated that patient uptake was around 71-80% and 18% of schemes reported that uptake ranged from 61-70%. Ten percent of schemes indicated that between 30-60% of patients took up the offer of referral and the remaining ten percent of schemes did not know what percentage attended the initial consultation. Rates of uptake reported in the research literature are between 43-79% hence for the majority of the schemes (60%) included in this report uptake rates compare favourably.

The majority (82%) of schemes indicated that they have systems in place to follow-up patients who do not attend the initial exercise referral consultation. These systems varied depending on who was responsible for booking the initial appointment, typically follow-up involved between 1-3 phone calls, a letter/postcard or a combination of these.

Data on uptake rates and information regarding systems to follow-up patients who do not attend the initial consultation was not available for Northern Ireland.

2.1.13. Programme Attendance

Ninety-five percent of schemes reported that they collect routine data on patient attendance during the referral period either electronically at the point of entry to a leisure facility or via patient registers at each exercise session. Data on levels of attendance across schemes was not reported in this mapping exercise. However, given that the majority of schemes use predominantly objective systems to record patient attendance it might be worth exploring whether it is feasible to track attendance at the individual patient level.

A small percentage of schemes (5%) used vouchers as a way of monitoring patient attendance. Some schemes used a combination of electronic monitoring, patient attendance registers, patient activity logs and vouchers. It was also interesting to note that schemes offering a diverse range of activities i.e. leisure facility, community exercise classes, walking, outdoor activities, home-based programmes had introduced a range of systems which enabled to them to capture patient attendance or patient activity levels. For example, registers in community based exercise classes and walking groups, step-o-meters to capture activity levels for patients following home-based activities and patients pursuing independent lifestyle activities were contacted by a Lifestyle Officer at set points throughout the programme to assess progress and update activity plans.

Almost 90% percent of schemes indicated that they have systems in place to follow-up patients who fail to attend during the referral period. These systems typically followed the recommendations outlined in the National Quality Assurance Framework, which states exercise professional should telephone patients who fail to attend to determine the reason for non-attendance and if no contact is made this should be followed up by a letter.

2.1.14. Scheme Completion Rates

Patient completion rates were recorded by the majority of schemes, however it is difficult to provide an accurate picture of these across schemes due to the variations in the way schemes measured 'completion'. Some schemes calculated completion rates by the number of patients who finished the designated referral period (i.e. 10/12/14 weeks); others based it on the number of patients who attended the end of referral period assessment; others based it on the number of sessions attended and others calculated it on the number of patients who attended follow-up consultations.

Data collected for England and Scotland showed that completion rates ranged from between 20-90%, however it is unclear whether these completion rates relate to the percentage of all patients who were referred to the scheme or the percentage of all patients who took up the initial exercise referral consultation. Consequently the completion rates reported here should be interpreted with caution.

For Northern Ireland completion rates were reported as the proportion of referred patients who made it to the end of the referral period. Completion rates for schemes varied considerably. Twenty-two percent of respondents (n=5) reported that over eighty percent of referrals completed the referral period, a further twenty-two percent (n=5) reported that between sixty-one to eighty percent of referrals were successful. Thirteen percent of respondents (n=3) reported that twenty percent or less of those referred to the scheme made it to the end. The remaining schemes (n=10) reported completion rates of between 21-to-60%. Only 23 responses were obtained for this question, therefore care should be taken when interpreting these results.

2.1.15. Exit Strategies

The primary objective of an exercise referral scheme is to provide patients with a positive introduction to physical activity as a way of encouraging them to adopt and maintain a physically active lifestyle. In order to support this long-term change in physical activity behaviour, the majority of schemes (89%) have introduced a range of strategies to make the transition from the exercise referral scheme into mainstream activities easier. Eleven percent of schemes reported that they did not have an exit strategy, either because resources did not allow this or because programmes were continuous.

Of those schemes (n=141) who had introduced an exit strategy, the offer of a concessionary rate was the most popular method used to encourage patients to continue to exercise. As can be seen in graph 7 below, 68% of schemes offered reduced rates for referred patients after the referral period. The next most popular exit strategy involved sign-posting patients to other local exercise opportunities: 32% of schemes promoted alternative activities.

Eleven percent of schemes reported that they: Phased out the referral programme with graduate classes, which typically followed the format of the referral scheme, but group sizes are much bigger and patients are encouraged to take more responsibility for their exercise choices; Or offered patients continued support and motivation; Or provided opportunities for patients to join support groups. A small number of schemes (8%) offered patients' an exit interview at the end of the referral period to discuss options to maintain an active lifestyle.

The procedures followed after an individual completed the designated referral period varied widely and depended upon the availability of facilities, staff, funding and the activity programme completed by the referred individual.



Information regarding scheme exit strategies was not available for Northern Ireland.

2.1.16. Patient Progress and Feedback

Ninety-seven percent of schemes (N=154) reported that they collected data on a range of health and fitness indicators and physical activity at some point during the referral programme. Across these schemes there were variations according to when data was collected and what data was collected: 74% of schemes indicated that they collected data on various indicators at the start of the programme; 79% collected data at the end of the referral period and 55% collected data at some point during the referral period. Approximately 65% of schemes collected data on a variety of patient indicators at the start and end of the referral period which allowed pre-post comparisons of the patients' progress. A further 45% of schemes collected data prior to, at some point during the referral period and at end of the referral period.

As mentioned above a combination of patient indicators were monitored either prior to, during or at the end of the referral programme. Graph 8 below, shows the range of, and the most popular indicators assessed by exercise referral schemes in England and Scotland (N=154). As expected the majority of schemes measured physical activity

(82%). Physical fitness and blood pressure were the next most commonly assessed indicators (56% and 58% respectively) and between 46-49% of schemes collected data on body composition, mood, stage of change, attitudes towards physical activity and use of medication. Finally a third of schemes collected data on quality of life at some point during the scheme.



Eighty-two percent of schemes in Northern Ireland reported that they carried out routine monitoring and evaluation. The type of information gathered included patients BMI, blood pressure, health and physical ability, general feelings and well-being and other medical statistics.

Approximately 70% of schemes provided feedback to the referring health professional on the progress that had been made by the patient as a consequence of the scheme. Data was not collected regarding how and when this information was fed back to the referrer. In addition, 77% of patients also received feedback about the progress they made while participating in the scheme.

The incidence of schemes providing reports to referrers varied in Northern Ireland. Thirty-six percent reported that they always provided the GP with a report and a further twenty-five percent reported that they did this sometimes. Eighteen percent of schemes did not provide any reports as they were not requested by the GP. The remaining 21% stated that they either did not provide a report to the referring GP or they were unsure if a report was provided. Of those schemes providing reports, the majority provided them at the end of the scheme (65%).

2.1.17. Monitoring and Evaluation

Ninety-three percent of schemes (N=147) reported being evaluated, of these almost 20% reported that this included both internal and external evaluation activities (N=28). The majority of schemes were evaluated internally (N=134; 91%) either by the scheme coordinator, health improvement manager, PCT/NHS health board or local authority.

Twenty-two percent of schemes (N=32) indicated that they were externally evaluated and of these evaluations, three-fifths were undertaken by universities or external evaluation consultants.

Despite the theory that evaluation should be planned and agreed by all stakeholders, less than one fifth of schemes engaged stakeholders in planning the scheme's evaluation activities.

The timelines for evaluation varied across schemes, some schemes conducted evaluation at a single point in time, for example quarterly or bi-annually; other schemes conducted evaluation at multiple time points for example, monthly, quarterly, bi-annually and annually. The percentages reported here reflect that some schemes completed evaluation activities at more than one point in time. Of those schemes that undertook evaluation activities, 48% (N=71) indicated that they provided quarterly monitoring and evaluation reports; 12% (N=18) provided bi-annual reports and a further 47% (N=69) provided annual monitoring reports. Almost seventeen percent of schemes (N=24) undertook both quarterly and annual monitoring and evaluation. Of those schemes (N=13; 9%) that responded to the other category these mainly reported on a monthly basis.

Schemes were asked a number of specific questions about their evaluation activities, i.e. whether activities offered within the scheme were implemented as planned and whether the scheme reached the target population. Eighty percent of schemes assessed whether the activities offered within the scheme were implemented as planned and seventy-one percent of schemes assessed whether the scheme reached its target population. Although these observations provide some reassurance that scheme targets and operational plans are being monitored, no details were provided as to how schemes were assessing these factors or to what extent they were doing this. Furthermore, these figures also show that one-fifth of schemes were not tracking whether schemes were being implemented as planned and almost thirty percent were not assessing whether the scheme reached its target audience.

Approximately 40% of schemes reported that they evaluated the cost-effectiveness of their scheme; however details of what this entailed was not captured in this study.

Of the 93% of schemes who reported that they engaged in evaluation: 97% of these schemes assessed patient outcomes, the majority of these focused on short-term outcomes of the patients who adhered to the exercise programme.

Respondents were asked to rate to how well they thought their evaluation activities helped to assess whether the scheme was meeting its specified aims and objectives. Only 93 responses were received for this question, of these, 70% thought that their current evaluation activities enabled them to assess the delivery of their scheme against its aims and objectives 'a lot' or 'somewhat'. However, chart 4 below shows that the remaining 30% of respondents thought that their current evaluation activities did not or only to a small extent enabled them to assess whether their scheme was meeting its aims and objectives.



The analysis of scheme monitoring and evaluation activities revealed that the majority of schemes are mainly monitoring patient throughput, patient attendance and patient completion rates rather than long-term behaviour change. When interpreting this monitoring and evaluation data, readers should take into account that the majority of scheme evaluation has been conducted in-house by scheme coordinators or providers, with limited resources and capacity for robust evaluation, which tends to bias findings.

2.1.18. Quality Assurance

The National Quality Assurance Framework was introduced in 2001 by the Department of Health as a means to improving the quality and delivery of exercise referral schemes across the UK. At the time of its release some researchers and practitioners voiced concerns that the impact of the NQAF would be mininimal without appropriate systems to monitor or audit its application. One hundred and two shcemes responded to this question and it is interesting to note that more than 80% of schemes reported that they had used the NQAF 'a lot' or 'somewhat' to inform the development and delivery of their scheme (see chart 5 below).

Respondents were also asked to rate how useful they had found the National Quality Assurance Framework in the:

- Initial planning and design of the scheme.
- Implementation and delivery of the scheme.
- Evaluation.
- Ongoing scheme development.

On the whole responses were positive; respondents felt that the NQAF was very useful in the scheme planning, design and implementation phases and useful in designing the scheme evaluation. Data regarding the use of NQAF was not captured in the Northern Ireland mapping exercise.



2.1.19. <u>Qualifications</u>

According to the NQAF the minimum level of qualification recommended for exercise professionals responsible for devising exercises programmes for low-to-medium risk referred patients is a level 3 advanced instructor with a recognised exercise referral qualification.

Respondents were asked whether their scheme has a minimum level of qualification for instructors working with referred patients. The majority of schemes (44%) stipulated that their instructors must have a recognised exercise referral qualification as a minimum; a further 22% stipulated that the instructor must have a minimum of an advanced level 3 qualification and a recognised exercise referral qualification. A fifth of schemes reported that instructors required a level 2 exercise qualification as the minimum (some specified this should be with a recognised exercise referral qualification). The remaining respondents either left this question blank or did not specify what qualifications were required or indicated that this was flexible depending on the activities being offered and the patient's risk.

The responses to this question must be interpreted with some caution – taking the best case scenario from the data above, one can infer that two-thirds of exercise referral instructors working in schemes across England and Scotland are meeting the recommended qualifications stipulated in the National Quality Assurance Framework. This inference is made on the basis that an exercise instructor must hold a level 3 instructor qualification before they can qualify for a place on a recognised exercise referral course. In Northern Ireland respondents indicated that any fitness instructors involved in delivering schemes had received training in exercise referral. The majority (79%) also reported that the fitness instructors involved in the scheme are registered on the Register of Exercise Professionals (REPS).^{viii}

^{viii} REPS is an independent public register which recognises the qualifications of exercise and fitness professionals in the UK. REPs provides a system of regulation for instructors and trainers to ensure that they meet the health and fitness industry's agreed National Occupational Standards.

Summary:

This mapping exercise provides a snapshot of the nature and extent of exercise referral schemes in England, Scotland and Northern Ireland during 2006-2008. The results highlight that there are various methods to delivering exercise referral schemes; it shows that schemes operate at different capacities, with a range of different partners, operational structures and standards. It is clear from the evidence gathered in this mapping that exercise referral are not, and cannot be, delivered as a "one size fits all".

2.2. <u>References</u>

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Section 3: Exercise Referral Research





Section 3: Executive Summary

The review of exercise referral research identified some key implications for practice, where appropriate, these have been used to develop some of the good practice guidelines and recommendations within the toolkit.

Research has shown that good quality evaluation is one of the key challenges for many existing exercise referral schemes and consistently highlighted that there should be more systematic gathering of quality data across exercise referral schemes using valid, reliable and comparable measures.

The evidence recommends that exercise referral schemes should offer a wider range of physical activity opportunities to meet the needs and preferences of different population sub-groups.

Section 3: Exercise Referral Research

The purpose of this section is to not to present a critique of the exercise referral research, rather it aims to extract information from key studies with a view to guiding and improving future service delivery.

3.1. Introduction

The benefits of a physically active lifestyle for health promotion and disease prevention are well documented.^{1,2} The Chief Medical Officer's Report: '*At least five a week*' stated that:

"Adults who are physically active have a 20-30% reduced risk of premature death and up to 50% reduced risk of developing the major chronic diseases such as coronary heart disease, stroke, diabetes and cancers."

p1. CMO (2004)²

There is increasing recognition, both globally and in the UK, of the need to promote healthier lifestyles and improve physical activity levels in order to reduce premature mortality and morbidity from chronic diseases.²⁻⁴ The World Health Report (2002) estimated that 3% of all disease burden in developed countries was caused by physical inactivity.⁵ In the UK, there is a considerable public health burden due to physical inactivity, in 2003-2004 researchers found that physical inactivity was responsible for 3.1% morbidity and mortality.⁶

Lord Darzi⁷ highlighted that the growth in the prevalence of many long-term conditions such as coronary heart disease, diabetes, hypertension, depression and chronic obstructive pulmonary disease, can be attributed not only to unhealthy lifestyle choices, but also to missed prevention opportunities. Many long-term conditions are commonly diagnosed, treated and monitored in primary care; however Darzi found that 54% of patients said that their GP had not provided advice on diet and exercise.⁷

Primary care is recognised as a potentially important setting for the promotion of physical activity. Primary healthcare professionals come into frequent contact with the general public, about 85% of the population visit their GP surgery on an annual basis.⁸ Every consultation provides an opportunity to promote behaviour change or to refer patients to relevant support services.⁹

In the UK exercise referral schemes are one of the most popular interventions used by primary care practitioners to encourage sedentary individuals and individuals with long-term medical conditions, such as diabetes, hypertension, asthma, arthritis, obesity etc. to become more physically active. The first exercise referral scheme was set up in the late 1980's and over the past two decades there has been a significant and sustained growth in the number of exercise referral schemes operating across the United Kingdom.

Further Cochrane review level evidence on the therapeutic benefits of exercise with respect to several major chronic diseases can be found in section 4.2 of this toolkit.

3.2. Research Evidence

To date, most research surrounding exercise referral schemes has predominantly focused on assessing the effectiveness of schemes in increasing physical activity levels, with little attention being paid to the scheme characteristics and how these relate to access, uptake and adherence. The purpose of this section is to not to present a critique of the exercise referral research, rather it aims to extract information from key studies with a view to guiding and improving future service delivery.

The research design adopted in the included exercise referral studies can be grouped into three broad areas: controlled and randomised controlled trials; uncontrolled longitudinal cohort studies and qualitative research. Most of the evidence from the controlled and uncontrolled studies has been presented in systematic reviews. This section will consider the evidence from these collective studies and highlight considerations for practice.

3.2.1. Review Evidence

The first national review of exercise referral schemes¹⁰ was commissioned by the former Health Education Authority in 1994. The authors, Biddle, Fox and Edmunds found that exercise referral schemes were becoming increasingly widespread across England, with 121 schemes operating at the time of the review and a further 52 schemes planned. Biddle and colleagues identified two distinct types of scheme: first, practice-managed schemes where members of the primary care team retained responsibility for their patients' physical activity programme and second, leisure-centre managed schemes where members of the primary care team passed on the responsibility for physical activity promotion to a local leisure facility by referring suitable patients. In their review Biddle and colleagues found that this latter type of scheme was the most common.

While the review identified the number and location of schemes, the authors acknowledged that it was much more difficult to estimate the number of patients either currently or previously engaged in these schemes. In spite of the limited of evidence on patient numbers, Biddle and colleagues presented a brief profile of the types of patients being referred to schemes: typically more women were involved in schemes than men; participants were predominantly middle-aged with relatively low CHD risk. The authors concluded that very few schemes had clear criteria for targeting patients and on the whole the selection of patients seemed ad hoc.

Biddle and colleagues also reported that the expertise and training of key personnel involved in schemes was variable, however they suggested the success of a scheme often depended on the qualities of the personnel in contact with patients. The authors highlighted that there was a need for appropriate training in health promotion techniques and counselling for exercise for key personnel in contact with patients. Finally, the national review found evidence that schemes were successful in that they were popular with patients, primary healthcare professionals and leisure facilities. However, the authors concluded that due to the absence of any rigorous evaluation it was difficult to assess whether schemes are effective in achieving sustained increases in physical activity.¹⁰

Post the HEA review¹⁰ exercise referral scheme numbers continued to grow and with them emerged a number of published and unpublished, evaluations of individual schemes. Moreover, evaluations of some larger funded exercise referral studies and effectiveness trails started to appear in the research literature.

In 1998, Riddoch and colleagues¹¹ undertook a review of the effectiveness of physical activity promotion schemes in primary care. The study involved a systematic review of the empirical data relating to the effectiveness of schemes and analysis of three case studies of existing schemes. Twenty-five UK empirical studies were identified and twelve of these met the inclusion criteria. These studies included a variety of outcome measures and assessment methods; and both physical activity and follow-up periods varied making it difficult to quantify results. The results were encouraging, in that the majority of studies reported small improvements in physical activity and other activity-related measures. Eight studies from outside the UK were also reviewed for comparative purposes, again small effects were observed. The adherence data was disappointing across nearly all studies,

Riddoch and colleagues also reviewed 'grey literature' from 45 existing schemes. Most of these schemes (93%) reported undertaking some form of 'in-house' evaluation, however the authors concluded that the evaluation design was consistently flawed and many schemes were selective in reporting positive findings. The data from these schemes suggested a much greater level of effect compared to the published studies.

As mentioned above, the authors included three cases studies in their review in order to assess the wider perceived effectiveness of the schemes and the overall level of impact for the key stakeholders, e.g. doctors, nurses, scheme organisers, leisure centre staff. Data collection lasted several days and included a range of methods, semi-structured interviews, informal discussions, observations and document searches. All three schemes were perceived as very successful and were perceived to have a positive impact on a range of parameters and a variety of people involved in such schemes. The main effects on patients were perceived to be social-psychological in nature. For patients who were initially anxious about exercise, the individually tailored exercise prescriptions and close supervision were seen as important factors. Riddoch and colleagues concluded that the case studies revealed that exercise referral schemes had other benefits, which the controlled trials of effectiveness had so far missed.

The two-stage review provided a valuable summary of the evidence on physical activity promotion schemes in primary care, taken together the evidence was generally positive. The experimental data suggested small, positive effects and the case studies suggested wider-ranging and more significant effects. However the authors highlighted a number of limitations with the existing research in this field: Very few UK studies of acceptable quality were available to form the basis of a systematic review; most studies had been conducted overseas thus their applicability to the UK context is uncertain. A wide range of outcome measures of physical activity had been used, resulting in contradictory findings in some cases. With regards to the research on existing GP exercise referral schemes in the UK, most evaluations had been conducted internally by scheme coordinators or providers with limited resources for robust evaluation, which tends to bias findings.

Riddoch and colleagues concluded that:

"Primary-care based exercise referral programmes, often involving referral of a patient by a General Practitioner to a local leisure facility, are not necessarily effective in increasing long-term physical activity." <u>p.12, Riddoch et al., (1998)</u>

Finally, Riddoch and colleagues highlighted a number of important considerations for exercise referral schemes in the UK, suggesting that:

- The design, delivery and evaluation of schemes should be theoretically based and they should use evidence-based strategies that are known to be successful.
- Closer working relationships between health and leisure need to established and maintained.
- Both primary care and exercise referral staff should be trained in relevant theory-led behaviour change techniques.
- Appropriate criteria for referral should be developed, to take account of health status, activity status and readiness to change.
- Exercise referral instructors should undertake appropriate training, this is vital to the success and safety of the scheme.
- Schemes should offer a range of non-facility based exercise options, such as homebased and community based activity options which may promote longer-term adherence.
- Local exercise referral networks should be established to offer support and opportunities for interaction during and beyond the referral programme.
- Schemes should carefully select outcome measures and evaluation methodology to ensure data gathering is cost-effective and not too onerous.
- There should be more systematic gathering of quality data across the many schemes, using valid and comparable measures.

A further ,review of the evidence for the effectiveness of exercise referral schemes was conducted by Morgan.¹² Morgan identified nine studies, based in a primary care setting which included interventions providing access to exercise activities and/or facilities. Four studies were from the UK, four from the USA and one from New Zealand. The UK studies evaluated interventions similar to those currently found in primary care, whereas the non-UK studies evaluated interventions which would be difficult to replicate in UK healthcare settings.

Consistent with the previous review,⁴ the author reported that both the UK and non-UK data suggested small effects on physical activity outcomes, however effects due to the initial intervention were reduced over time. Similar to Riddoch and colleagues,¹¹ Morgan reported that the measurement of physical activity varied considerably between studies. Morgan highlighted that most studies had used self-report measures of physical activity and suggested that the contaminant bias associated with self-reported physical activity was one of the greatest weaknesses of the studies.

Morgan highlighted that the uptake of the exercise interventions were generally low in the UK studies, ranging from 33% - 87%. The recruitment in most of the non-UK studies was via media advertising or telephone surveys, which may have resulted in the recruitment of a highly select group of volunteers. The author reported that adherence to the exercise intervention appeared to be higher in participants who were slightly active at baseline, older and overweight.

Morgan concluded that:

"Exercise referral schemes appear to increase physical activity levels in certain populations, although the effect may wear off over time." <u>p.369, Morgan (2005)</u>

In 2005, the continued prominence of exercise referral schemes in policy¹³ and practice coupled with the uncertainty about their effectiveness led the Department of Health to commission the National Institute of Health and Clinical Excellence to review the evidence of the effectiveness for exercise referral schemes.

The NICE exercise referral review¹⁴ examined the evidence for the effectiveness of exercise referral schemes in increasing physical activity levels amongst adults. Studies were included in the review if they assessed the effect of an exercise referral scheme to increase physical activity in the adult population using a controlled research design and measured physical activity or physical fitness outcomes at baseline and from 6 weeks post intervention. Four randomised controlled trials satisfied the inclusion criteria¹⁵⁻¹⁸ Three of the studies^{15,17,18} took place in the UK and the other took place in Australia.¹⁶

The effectiveness of the interventions was examined over three timescales:

- The short term (6-12 weeks)
- The long term (over 12 weeks)
- Over the very long term (e.g. over 1 year)

Two of the trials^{15,16} examined the short-term effects of an exercise referral scheme on physical activity levels and both found a positive effect. Four studies assessed the effect of an exercise referral scheme on physical activity levels in the long term; overall the evidence indicated that exercise referral schemes were ineffective in increasing physical activity levels in the long term. Three trials¹⁵⁻¹⁷ examined the effects of an exercise referral scheme on physical activity levels over the very long term; two studies^{17,18} found no effect and the other study¹⁶ reported a positive effect.

NICE concluded that exercise referral schemes can have short-term positive effects on physical activity levels, but they are ineffective in increasing activity levels in the long term and over the very long term.¹⁴

The two studies^{15,16} which had a positive short-term effect on physical activity were scrutinised in a bid to identify any aspects of these interventions that could be used to inform practice. The participants in both studies were recruited from GP practice lists; all received physical activity advice, written information and were referred for an individual consultation before commencing the scheme.

The study by Halbert¹⁶ showed short-term, long-term and very long term effects while the study by Taylor¹⁵ showed only short-term effects, based on this distinction it appeared that:

 Written information which included a personal physical activity plan and strategies to overcome barriers was more effective in increasing physical activity levels, particularly over the long and very long-term, than generic CHD prevention written information.

- Longer-term increases in physical activity were more likely to occur if the duration of the exercise referral programme was not limited by time.
- Individual advice from an exercise physiologist based in primary care had a longerterm effect on physical activity levels than an introductory assessment delivery by an exercise referral officer in a local leisure centre.

The feasibility of implementing a scheme similar to Halbert and colleagues¹⁶ is limited in the UK, as there are few if any, exercise physiologists based in primary care settings. Taylor and colleagues¹⁵ specifically targeted adults with CHD risk factors or on CHD risk registers within the general practice, given the move towards cardiovascular risk screening for adults over 40 years old, it would be viable to implement an exercise referral scheme which specifically targets particular 'at risk' groups.

Many of the previous reviews on exercise referral schemes have been commissioned in order to assess the effectiveness of schemes in improving physical activity behaviour. However, the lack of rigour in evaluations of exercise referral schemes has resulted in many studies failing to meet the strict inclusion criteria of systematic reviews, which often preclude studies that deviate from the randomised controlled trial (RCT) model.^{11,19} Although a certain level of rigour and methodological coherence is necessary to obtain meaningful results,¹⁹ it is important to recognise that exercise referral schemes and other physical activity promotion strategies should be guided by research that includes, but is not restricted to controlled trials.²⁰ In order to understand an exercise referral scheme in its entirety it is argued that the research has to embrace and recognise the intervention complexity, rather than attempt to control the environment and strip away the layers, as an RCT would.²¹ James and colleagues²² suggested that exercise referral scheme effectiveness is likely to be influenced by the characteristics of the individual who gets referred and whether the exercise referral intervention is appropriate for them.

A systematic review by Gidlow and colleagues²³ aimed to compare evaluations of existing schemes with randomised controlled trials in order to explore the characteristics of patients who attend exercise referral schemes in the UK and to identify why participants drop out of schemes. The review focused on attendance as the main outcome variable rather than changes in physical activity or other related variables. Given that most exercise referral schemes attempt to monitor attendance the authors felt their decision to focus on attendance as the outcome variable was justifiable. Studies were included in the review if they were investigating exercise referral interventions that were based in primary care in the UK, reported attendance related outcomes and were published in peer reviewed journals. Five evaluations of existing schemes and four randomised controlled trials satisfied the inclusion criteria.

The authors found that there were no marked differences in the design of the exercise interventions in the trials or existing schemes; they followed the typical model of delivery: the patient is referred by the healthcare professional for an initial assessment or consultation with an exercise professional. Where frequency was specified, patients were encouraged to attend two or three sessions per week for either 10, 12 or 14 weeks. One RCT lasted for two years, although only reported 10 month outcomes. All interventions were facility-based; however one evaluation study and one RCT reported the inclusion of home-based activities. Exercise sessions were either free of charge or offered at concessionary rates.

In the four evaluations patients were recruited through referral by GPs during routine consultations, the other evaluation used voluntary health screening visits at GP practices. One evaluation employed additional recruitment methods which included community screening and patient self-selection. In contrast patients in 3 RCTs were identified from practice registers and recruited by researchers, the other RCT approached patients during routine consultations and subsequent postal recruitment. Gidlow and colleagues suggested the differences between recruitment methods could have implications on exercise referral scheme uptake and attendance which must be considered. Patients are unlikely to respond to researcher and GPs in the same way. Some patients hold GPs in esteem and therefore may be more likely to act upon a referral. However, Graham and colleagues²⁴ have reported some health professionals perceive barriers to referral and therefore may be more reluctant to promote schemes whereas researchers have a vested interest in recruiting study participants.

The authors suggested that the characteristics of scheme participants were generally not well reported and were limited to age and gender. In both evaluations and trials it appeared that men were harder to recruit, with women accounting for 60% of participants in two evaluations and 3 trials. Participants were mostly middle-aged and older, in RCTs this was the result of the inclusion criteria. Two RCTs performed baseline surveys to identify inactive patients and one targeted patients with modifiable CHD risk factors. Gidlow and colleagues²³ found that no existing scheme evaluations reported specific patient targeting. Few studies provided details of the medical conditions for which patients were referred.

The authors commented that due to the retrospective nature of the evaluations it was unknown how many patients may have declined an offer of referral by their GP. Response rates to invitations were only available for the trials, these ranged from 15-70%, Gidlow and colleagues suggested these figures might provide insight into the proportion of people, if offered might accept a referral opportunity.

In practice referral is the entry point to exercise referral and according to Stevens and colleagues²⁵ the most important component in terms of the financial viability of schemes, therefore it has several practical implications. Gidlow recommended that more thorough patient profiling is necessary at the point of referral; there is a need to better understand characteristics of those who decline the offer of a referral and why this might be so.²³

Following the referral by the health professional, the next step in an exercise referral scheme is 'uptake' of the referral. The authors found that referral uptake varied widely in both trials and existing evaluations. Gidlow and colleagues reported that differences in the way existing evaluations and RCTs defined referral uptake affected the levels recorded: referral uptake ranged from 23% to 60%. Scheme attendance levels in the evaluations were generally poor: three evaluations reported that between 12-18% of patients attended their final assessment. One trial reported 28% of patients attended based on the number who completed 75% of the exercise sessions, another reported similar attendance levels at the final assessment (25%). Attendance levels were most encouraging in the evaluation reported by Hammond and colleagues²⁶ they reported improvements in attendance from 20 to 56% over a one-year period following several changes to their scheme. Given the relative ease with which attendance can be measured, Gidlow²³ remarked that it was disappointing that only one trial and one evaluation study, in their review, used leisure centre records to objectively monitor the number of sessions attended by scheme participants. The authors suggested that more systematic attendance monitoring is needed.

Characteristics of the patients who took up the referral or attended were even less well reported than for baseline, however based on the data available Gidlow and colleagues found that there appeared to be better uptake in women, but subsequent attendance was better in men. The fact that men are more likely to attend despite lower referral rates highlighted the importance of targeting men.

Gidlow and colleagues were critical about the content and quality of information available on attendees. They suggested there is a need for more detailed patient monitoring at the point of referral and at each stage of the scheme to determine the profile of who drops out; this should enable modifications to the scheme to reduce attrition. The authors also argued that schemes must recognise the importance of routinely collecting accurate and adequate data to enable quality evaluations. Relying on retrospective evaluations is not satisfactory and processes should be implemented at the design stage so that they are not necessary.

The majority of schemes still remain facility based, however the reasons patients cited for dropping out of the scheme highlight the need for schemes to diversify away from the facility based model, at least in part this may overcome several potential barriers such as transport, not wanting to attend alone, cost of attendance, disliking the gym environment and inconvenient session times.

Attrition from exercise referral schemes is reportedly very high, 80% of patients who take up a referral drop-out before the programme ends, which suggests that many patients may be inappropriately referred. The authors concluded that schemes are obliged to determine which members of the population are attending and why others miss out or are put off attending schemes, they suggest there is a need for more patient targeting in order that exercise referral schemes are effective for more than just a minority of the population.²³

The most recent systematic review by Williams, Hendry, France and colleagues²⁷ aimed to assess whether exercise referral schemes are effective in improving exercise participation in sedentary adults, particularly in the long-term and to find reasons for non-adherence.

The review included a range of studies controlled trials (randomised or not), observational studies, process evaluations and qualitative studies. Study participants had to be adults, referred to an exercise referral schemes from primary care. The authors defined an exercise referral schemes as:

"Referral by a primary care clinician to a programme that encouraged increased physical activity or exercise, involving an initial assessment and a programme tailored to individual needs, as well as monitoring and supervision throughout the programme. Eligible participants could be recruited during routine consultations or after searching the primary care medical record database. The programme usually took place in a leisure centre, swimming pool or private gym, but could also involve gardening or walking."

p.980, Williams (2007)

Eighteen studies met the inclusion criteria: these consisted of six randomised controlled trials (2 of which included a qualitative component); one non-randomised controlled trial; four observational studies; six process evaluations (2 of these included a qualitative component) and one qualitative study.

Three of the randomised controlled trials compared a gym-based exercise referral scheme with an intervention sheet; one compared community based exercise classes against no intervention, another compared walking with exercise advice and the other compared a gym-based scheme with a walking scheme and no advice. The non-randomised trial compared a walking programme for patients with type 2 diabetes with no programme. Patients in 4 RCTs were identified from practice registers and recruited by researchers, in the other 2 trials patients were recruited during routine consultations. The duration of the exercise intervention lasted between 12-16 weeks in 4 of the 6 RCTs and the controlled study. In one trial the intervention lasted for 2 years and in the other there appeared to be no time limit. Referral uptake varied 26-92% attended the initial exercise session and less than half completed the full intervention.

Five of the RCTs measured the proportion of individuals who were moderately active, defined as taking at least 90-150 minutes of moderate intensity exercise per week. Results of these trials were combined in a meta-analysis. There was a statistically significant, but small effect in the numbers of patients doing moderate intensity exercise with a combined relative risk of 1.20. This small effect was likely at least in part, a result of the poor uptake and adherence rates to the exercise intervention. Williams and colleagues calculated that 17 sedentary adults would need to be referred to a scheme for one to become moderately active.

Three of the RCTs and the non-randomised controlled study assessed a range of anthropometric, physiological and biochemical outcomes. The authors found that there were no statistically significant differences between the exercise groups and controls, the authors noted that:

"Any improvement in these outcomes in the exercise group, particularly in the subgroup which reached the exercise target, was mirrored by similar improvement in the control group."

p.982, Williams (2007)

One other RCT measured skinfold thickness and found a statistically significant reduction (8%) in the exercise group compared to the control at 16 weeks.

Four trials measured a variety of psychological outcomes (stages of change, perceived intrinsic and extrinsic barriers to exercise) and used a range of assessment methods (Hospital Anxiety and Depression Scale, SF36), follow-up periods also varied, thus making it difficult to quantify results.

Williams and colleagues²⁷ reviewed the evidence from one US and three UK observational studies, which provided data on the long-term effects of exercise referral schemes on physical activity levels. They reported that study qualities were moderate to poor. Results of the studies varied:

- One survey found no difference in activity levels of scheme adherers and nonadherers at 6 month intervals up to 3 years after completion.
- One survey reported that two-thirds of respondents were more active than before the referral, 3-5 years later, however it wasn't established whether this was a consequence of the scheme.
- The US cohort study found that 33% of females referred to an exercise scheme were still attending after 1 year.
- The other study found that 63% of frail older adults made the transition to a leisure centre-based exercise programme following a tailored exercise scheme.

It should be noted that these studies used self-report measures to assess physical activity which is a major weakness due to bias associated with self-reported physical activity.

The authors identified six process evaluations which provided data on typical exercise referral schemes.²⁷ Consistent with previous reviews¹² the authors reported that uptake was low with around a third of referred patients not participating in schemes. Adherence to schemes was also poor with between 12-42% completing a 10-12 week programme; however sustained increases in physical activity levels were observed in those patients who completed the exercise programme. Studies reported improvements in aerobic fitness and stages of behaviour change and reductions in BP, resting heart rate, weight, BMI, anxiety and depression. Positive lifestyle changes were also reported. However it is interesting to note, that data from these process evaluations suggested a much greater level of effect compared to the controlled studies.

Williams and colleagues included one qualitative study in their review and examined the qualitative component of four of the previously reported studies. These studies used mixed methods: two used semi-structured interviews, two used focus groups and the other did not report study design. The review found that patient's satisfaction with schemes was largely attributed to the professional, supportive, encouraging and friendly service provided by staff. Participants reported that they had derived physical, social and psychological benefits as a result of attending the schemes. The qualitative studies also identified barriers to participation. Williams and colleagues grouped these as personal barriers: such as lack of self-efficacy, poor body image, poor time management and lack of social support and scheme barriers: such as intimidating gym environment, inadequate supervision, poor organisation of the scheme, inconvenient operating hours and narrow range of activities.

Williams and colleagues²⁷ concluded that their review was broadly in agreement with the NICE public health intervention guidance, exercise referral schemes have a small short-term effect on increasing physical activity in sedentary people, but it is not certain whether this small benefit is an efficient use of resources.

3.2.2. Longitudinal Cohort Studies

Scheme reach:

The systematic review undertaken by Gidlow and colleagues²³ highlighted that there were several gaps in the evidence regarding which members of the population engage in exercise referral schemes. Several longitudinal cohort studies have attempted to examine data on scheme reach, i.e. who refers into schemes; which patients get referred; reasons for referral and who participates. It is necessary to consider the wider population impact of exercise referral schemes to determine whether schemes are reaching sedentary populations and whether schemes offer equitable access.

Five published studies^{21,22,28-30} were identified, which provided detailed information on the characteristics of patients accessing five existing exercise referral schemes in England. The scope and scale of the schemes varied from district-wide to county-wide and schemes were based in both urban and rural locations and in areas of social deprivation.

These studies reported data on patients who had been referred into schemes over a 2 to 5 year period. Uptake rates ranged from 65-79% which is consistent with previous research.²³ Data showed that a consistently higher number of females were referred into schemes than men (59-65% vs 35-41%). Referrals were most prevalent in the 40-70 year age category, accounting for approximately 60-70% of all referrals and of all referred patients the average age was 51 years. Studies also found that younger patients were least likely to take up the referral opportunity.

Data on the ethnic background of referred clients was not reported in any of the studies.^{ix} Three studies²⁸⁻³⁰ examined the influence of socioeconomic deprivation on referral uptake: two studies^{29,30} found that patient deprivation status had no influence on the likelihood of attending the first exercise referral appointment. In contrast the other study²⁸ reported that patients from more deprived areas were less likely to take up a referral. Sowden and colleagues³⁰ also found that general practices in more deprived areas are more likely to refer patients, perhaps illustrating that exercise referral schemes do not follow the 'inverse care law', which has been reported for other preventive health care services.

Four studies^{21,22,29,30} reported data on the reasons for referral. Harrison and colleagues²⁹ found that the two most common reasons for referral, in addition to sedentary behaviour, were musculoskeletal (32.8%) and cardiovascular risk factors (29.9%). Dugdill and colleagues²¹ reported data from two schemes: being overweight was the most popular reason for referral, followed by hypertension and mental illhealth in one scheme and having arthritis, low back pain and being overweight were the most common reasons for referral in the other scheme. James and colleagues²², found that the most common reasons for referral were overweight or obesity (30.3%), followed by musculoskeletal reasons (26.3%) and cardiovascular disease (16%).

Harrison²⁹ and James²² also examined whether the primary reason for referral was related to the likelihood of attending the first exercise referral appointment. Harrison and colleagues found that the reason for referral had some impact on the likelihood of attending the first appointment, patients referred for a specific reason were more likely to attend the first appointment compared with a referral with 'no reason' (other than sedentary behaviour), they found that those referred for mental health or fitness were most likely to attend.

James and colleagues also found that the primary reason for referral was associated with referral uptake: patients referred for weight reasons; musculoskeletal health; mental health conditions and for 'other' reasons were less likely to take up a referral opportunity than patients with a referral for a cardiovascular condition. The inconsistent findings regarding the likelihood of patients with mental health problems attending the initial appointment needs further consideration, especially given that mental health conditions, such as stress, anxiety and depression account for some of the most commonly included conditions across existing schemes. Sowden and colleagues also reported data on relative likelihood of uptake by referral condition; they found that patients referred for musculoskeletal/neurological reasons were more likely to take up a referral than those who were referred for other reasons.³⁰

Previous literature has reported the proportion of patients attending and completing referrals is low: one systematic review²³ reported completion rates of between 12-56%;

^{ix} Data on the ethnic background of referred client is available in Sowden's PhD thesis (2008) University of London³⁸

another²⁷ reported completion rates of between of 12-42%. To date, there has been inadequate participant profiling of those patients who attend and complete schemes.

Four of the previous longitudinal cohort studies^{21,22,28,30} have attempted to profile those patients who complete schemes based on age, gender, socioeconomic status, reason for referral and referring practitioner. Consistent with previous literature¹⁵ these studies show that of those patients who took up the offer to join the scheme, between 31-46% completed the full referral programme. All of these studies observed that women were consistently more likely to be referred to a scheme than men and more likely to take up the referral than men. Three of these studies^{21,22,28} found the odds of completion were lower in women than men, again these observations concur with results of previous reviews.²³

Dugdill and colleagues²¹ reported that a larger number of patients in the older age categories (61-70; 71+) compared to younger category (18-30) completed the scheme, 23%, 42%, 48% respectively. Gidlow and colleagues²⁸ reported similar results, of those who took up the referral the odds of completion increased with age; there was a 3-fold difference between the youngest (under thirty) and oldest age groups (over sixty). James²² and Sowden³⁰ also found that increasing age was positively associated with scheme completion.

Two studies^{28,30} examined the influence of socioeconomic deprivation on the likelihood of programme completion. Gidlow and colleagues²⁸ found that patients from more deprived and rural areas were more likely to remove themselves from the scheme at the earliest opportunity. However, Sowden and colleagues³⁰ found that once given access to a scheme, patients living in areas of social deprivation were as likely as those from more socio-economically advantaged to take up and complete the scheme. Sowden and colleagues concluded that the results of their study suggest that concerns that leisure centre-based schemes are unlikely to recruit people from groups that are classified as deprived and that such people are unlikely to adhere to exercise programmes, may be unfounded. Gidlow and colleagues²⁸ warned that exercise referral schemes may not be the solution to redressing inequalities; however the authors went on to suggest that this does not mean they should be dismissed completely.

Three of these longitudinal cohort studies^{21,22,30} examined whether there was a relationship between the reason for the referral and the likelihood of a patient completing the referral period. One study²² found no association wherease two studies^{21,30} found an association. Dugdill and colleagues found markedly higher adherence rates in those patients who were referred for established heart disease (61% adherence) compared to those referred for mental health problems (33% adherence). Sowden and colleagues found that patients referred for primary or secondary prevention of cardiovascular disease were more likely to complete the referral programme and patients referred for diabetes were less likely to complete the programme.³⁰

The evidence presented here on the characteristics of patients who take-up and complete an exercise referral scheme is limited as it relates only to a small number of studies, however it does support findings of previous reviews.^{23,27} It shows some consistent age and gender patterns in exercise referral uptake and scheme completion, consequently there are a number of practical considerations that can be drawn for these studies.
The evidence that women are more likely to take up the opportunity to participate in an exercise referral scheme, but are less likely to complete the referral than men suggests there is a need for schemes to:

- 1. Adopt a more proactive strategy to engage men, the introduction of cardiovascular risk screening and NHS mid-life check may offer timely opportunities to make the case for this with primary care partners.
- 2. Offer a diverse range of activity opportunities that appeal to women and where possible introduce strategies to reduce drop-out (e.g. crèche, transport, opportunities to exercise with friends).

Exercise referral schemes seem to be much more appealing and effective with some segments of the population than others namely middle-aged patients (40-69 years).

Finally, Harrison and colleagues²⁹ highlighted that few patients were referred relative to the percentage of the sedentary population residing in the scheme catchment area; they suggested that maybe exercise referral schemes should be reserved for those patients with medical conditions which require a safe and strictly supervised exercise environment.

The nature of inappropriate referrals:

While the above studies shed light on the characteristics of those patients who fail to attend the first consultation, they offer little explanation of why this might be the case. Johnston and colleagues³¹ highlighted that few studies have investigated the nature of inappropriate referrals to schemes or investigated why some patients are removed by the exercise professional at the initial appointment or why some patients choose to remove themselves from a scheme despite having agreed to a referral with their health professional. The next case study³¹ looks at this issue in more detail, however it must be borne in mind this is one study and further research is required is before any definitive conclusions can be made.

Following a scheme audit in 1998 Somerset physical activity advisory group introduced a Centralised Referral Mechanism (CRM) as way to address the problem of inappropriate referrals. The CRM system which involves an intermediary person (an accredited exercise scientist) between the referring health professional, the referred patient and the leisure provider, it adds an extra level of quality assurance to ensure unsuitable patients are removed from the scheme at the earliest opportunity. The CRM database records all referrals which are made regardless of the whether patients attend the initial appointment or not.

A review of the database between May 2000 and October 2002 found that 16% of patients were removed by the exercise scientist following the healthcare professional's referral as they were deemed inappropriate (207 males; 251 females). Further analysis of the CRM database revealed that 29% of these patients were removed for medical reasons (18% of these due to cardiac conditions). When this data was considered in relation to the original reason for referral it showed that the only medical conditions which were significantly more likely to be removed were established cardiac conditions. It is interesting to note that these patients were referred contrary to the guidelines issued to practitioners

Forty-five percent of all inappropriate referrals were removed from the scheme because they were classified as not ready for exercise, sixteen percent were removed because they deemed themselves to be already active and the remaining nine percent cited a range of psychosocial reasons which prevented them from taking part (i.e. family ties, preference for alternative activities than a leisure centre, too young, too old, no transport). These inappropriate reasons for referral were classified as psychosocial reasons.

Johnston and colleagues reported that of all the inappropriate referrals significantly more patients were removed for psychosocial reasons (71%) compared to medical reasons (29%). Significantly more women were removed for psychosocial reasons than men (59% vs 41%) and although not statistically significant more men (56%) were represented in the medical condition group. The authors suggested there is a need to distinguish between those individuals who have no choice about being removed and those who essentially made some level of personal choice not to take part.³¹

These observations show that of those patients removed from the scheme between the point of referral and the initial appointment, 5% were removed due to medical reasons. Within this group a high proportion were removed due to contraindications relating to heart disease such as unstable angina and unstable blood pressure, this was despite detailed referral guidelines with a list of contraindications being sent to all practice managers. Johnston and colleagues suggested it may be the case that the referral guidelines are not being disseminated effectively within practices or that referring health professionals require further training in this respect. It may be necessary to provide referring health professionals with access to appropriate risk stratification tools.

Referral guidelines predominantly include details of medical contraindications which are used to assess patient suitability for a scheme; the results of this study suggest that it might also be helpful if guidelines included guidance on assessment of patients' readiness to change.

Given that almost a third of patients do not take up the referral opportunity James and colleagues²² recommend that health professional may need additional training regarding the benefits of physical activity for health, so they are better informed about why the referral will benefit patients with a particular condition and make the referral more personalised to the patient. This might enable patients to make honest and more informed choices about whether they consider the scheme is appropriate for them.

3.2.3. Qualitative Research

Patient experience:

Current health policy emphasises the need for health services which genuinely focus on the needs of patients and empower patient choice, consequently patient feedback regarding healthcare provision and their experiences as service-users is essential in order to offer services which are 'personal and responsive'.

Only one study³² was identified which focused on the views of exercise referral scheme participants themselves. Wormald and Ingle commented that issues such as participants' views of the scheme, their opinions on its ability to increase physical activity and their perceptions of how schemes can be improved have rarely been the focus of investigations.

The authors conducted six focus groups which included thirty 30 white adults (10 men and 20 women, predominantly (77%) aged between 55-74 years (77% of study participants). All study participants had attended at least one session of the exercise

referral scheme in one of the four scheme leisure-centres. Participants were categorised by leisure centre staff as either 'completers' (patients who attended the complete 10- week referral period) or 'non-completers' (patients who had not). Focus groups were chosen as the method of data collection, the authors selected this option as these are recommended as a suitable tool for exploring a range of opinions in health research. Focus groups lasted between 45-60 minutes and included between 2 to 8 participants in each group.

Three main themes emerged from the focus group data:

- 1. Role of primary care staff;
- 2. The exercise programme, environment & staff;
- 3. Perceived effects of the scheme.

Overall, patients reported positive experiences and had appreciated and enjoyed participating in the exercise referral scheme. Many patients felt the scheme had increased their physical activity levels, approximately half reported that they had gone on join a leisure facility and other patients reported they had intentions to do so. Even the non-completers had gone on to participate in other activities such walking or community based exercise classes, thus reinforcing the perceptions of some that non-completion may not always equate to a negative outcome. Patients perceived the scheme had improved their physical and mental health and general wellbeing.

Some patients felt that access to the scheme seemed to be restricted due to a lack of awareness of among primary care staff. On the whole patients reported positive experiences and were very satisfied with the level of service they had received from the exercise leaders. Patients reported that they were grateful for the supportive and personalised service they received and reported that the supervision had encouraged them to continue with the scheme. However, the authors reported that some respondents felt the scheme could be improved by ensuring appropriate and consistent supervision and support from exercise staff, broadening the scheme operating times and providing more opportunities to socialise, particularly with other referred patients. It should be noted that the findings of this study are predominantly the views of patients who completed the scheme and may be subject to bias as these participants may hold more positive and enthusiastic opinions about the scheme.

The authors concluded that despite the current focus on the promotion of informal, unsupervised, non-facility based physical activity, for some individuals the supervision, support and structure provided by an exercise referral scheme may act as powerful motivator in maintaining exercise adherence. Exercise referral schemes should be seen as one approach to promoting physical activity and must be part of a broader strategy encompassing a diverse range of physical activity initiatives.³²

Wormald and Ingles identified several considerations for practice:

- Healthcare professionals need to be briefed more about the availability of exercise referral schemes and the benefits of the scheme to them and their patients;
- Where possible, scheme should ensure continuity of staff, a familiar face may improve patients' confidence to attend the programme.
- Offer a wider range of activities.
- Increase opportunities to socialise with other participants e.g. exercise sessions exclusive to referred patients, group induction, buddy systems.
- Where possible, scheme should provide opportunities for family or friends to attend.

Health Professionals' Perspective:

Wormald and Ingle's study³² highlighted that access to the North Yorkshire scheme seemed to be restricted due to a lack of awareness among primary care staff. They suggested this might be due to a general lack of confidence in promoting physical activity in primary care or it may be a product of the high workload and lack of time currently faced by primary care staff.

A recent qualitative study by Graham, Dugdill and Cable²⁴ sought to gain an understanding of the key factors that affected scheme operation from the health professionals' perspective. With the exception of two earlier studies^{33,34} examination of health professionals' opinions and attitudes towards physical activity promotion in the context of an exercise referral scheme has not been investigated.

This study specifically aimed to gain an understanding of the perceived barriers to referral, priority given to an exercise referral scheme in general practice, perceived importance of their role in the process of behaviour change and referral practices to an exercise referral scheme. Uniquely an understanding of the referral process rather than patient outcome was sought.

The authors²⁴ adopted a unique mixed-method approach which combined quantitative and qualitative data collection techniques and detailed content analysis in an attempt to gain a comprehensive understanding of health professionals' opinions and practices towards physical activity promotion in relation to exercise referral schemes.

A questionnaire was sent to 144 General Practitioners in 52 practices which fell in the scheme's catchment area. The questionnaire aimed to obtain the GPs perspectives and views on a range of issues: their referring practices; beliefs about the relative importance of physical activity; barriers to referral; feedback and training of health professionals within exercise referral schemes, partnership working and support for exercise referral schemes and perceived impact of the scheme with regard to other risk factors. Forty-nine percent of GPs from thirty-five of the targeted practices responded to the survey.

Semi-structured interviews were also carried out in order to gain a more in-depth understanding of how healthcare professionals relate to an exercise referral scheme. Ten GPs (6 male; 4 female) and two practice nurses volunteered to be interviewed, interviews lasted around 30 minutes. The interview script was developed on the basis of the responses to the postal questionnaire. Interviews were recorded and transcribed, the transcripts were then analysed by topic for key theme development using content analysis.

Graham and colleagues²⁴ found four key themes emerged from the combined data analyses, there were:

- 1. Priority of physical activity promotion by health professionals in primary care,
- 2. Health professionals' barriers to referral,
- 3. Health professionals' perceived role in promoting physical activity behaviour change,
- 4. Methods for identifying patients for referral to an exercise referral scheme.

1. Priority of physical activity promotion

The results of this study suggested that physical activity was not a priority for the majority of primary care professionals. When compared to referrals for smoking cessation and dietetics, referrals for exercise were a lesser priority. Some health professionals perceived that their patients lacked the motivation to change their physical activity as it required a longer-term commitment, consequently health professionals did not prioritise physical activity in consultations as they perceived they would have limited effect. Health professionals expressed concerns about the medico-legal responsibility with respect to referring patients to an exercise referral scheme; they perceived the referral pathways for other services, such as dietetics and smoking cessation were much clearer. Due to the uncertainty regarding their clinical accountability, some health professionals were cautious about referring patients who exhibited symptoms of, or who had a history of heart disease.

2. Health professionals' barriers to referral

In addition to the issues raised above, Graham and colleagues found there were a number of other barriers to referring patients to the scheme. Time limitations during routine consultations put pressures on health professionals to treat the primary reason for the patient's visit, which meant physical was not a high priority in consultations. For some health professional a lack of feedback from the exercise referral scheme about their patient's progress and the associated benefits was a concern, and barrier to referring.

3. Health professional's role in promoting exercise behaviour change.

Graham and colleagues reported that health professionals' opinions differed as to their perceived role in patient behaviour change, some felt that their role was central whilst others did not.

4. Methods for identifying patients for referral to an exercise referral scheme

This study found that the way health professionals identified suitable patients for the scheme varied between practices. Although eligibility criteria exist for referral to the scheme, patients were often identified for referral to the scheme in an unsystematic way. Graham and colleagues stated that:

"Lack of feedback to health professionals with information as to what types of patients the exercise referral scheme works best for means that health professionals have a lack of evidence about who best to select for a referral".

p.1420, Graham et.al, 2005

Graham and colleagues made several suggestions which have implications for practice.

- Closer partnership working is required between health professionals and exercise providers;
- Health professionals require training and practical resources to assist them in making a decision to refer a patient.
- In order to overcome some of the practical and perceived barriers to referral there
 needs to be greater feedback about the patient benefits;
- Alternative and more systematic mechanisms for identifying suitable patients for referral need to be in operation at the primary care level.

3.2.4. Evaluation Research

As previously noted there has been a rapid and uncontrolled expansion of exercise referral schemes throughout the UK in the past two decades, in spite of the fact that the evidence base regarding their effectiveness is 'thin'. Dugdill, Graham and McNair²¹ argued that in the present climate of evidence-based practice and clinical effectiveness, it is no longer acceptable for agencies involved in the delivery of exercise referral to ignore the need to evaluate schemes.²¹ Furthermore, the NICE¹⁴ public health guidance on four commonly used methods for promoting physical activity called for 'more rigorous and controlled evaluation of exercise referral schemes.'

Regardless of the NICE recommendations many PCTs and local authorities are unlikely to be in a financial position to be able to fund such rigorously designed and controlled evaluations. Moreover, Sowden and Raine³⁵ have recently argued that evaluation of the effectiveness of exercise referral schemes in England in terms of improvements in health and reductions in health inequalities is now an unrealistic aim for several reasons. Firstly, they suggest the extent of exercise referral provision across England would make it difficult to identify a suitable site for a study; secondly it is doubtful that funding for a rigorously controlled exercise referral trial would be available. Finally they also suggested the results are unlikely to make a difference to provision as the consequences of disbanding ineffective schemes would have a much wider impact on local partnerships.³⁵

Besides some authors have pointed out that there is danger in regarding evidence from randomised controlled trials as the only evidence as counts.^{11,21,36} The arguments presented above do not, however give schemes complete freedom to ignore the need for more rigorous evaluation. Gidlow, Johnston and colleagues propose that those agencies involved in the delivery of exercise referral schemes must recognise and become attuned to evaluation as an integral part of practice; these authors suggest there is a need to develop an 'evaluation culture'.³⁷

The National Quality Assurance Framework for exercise referral schemes moved some way towards developing a framework for evaluating exercise referral schemes, however Dugdill and colleagues argue that the NQAF guidance is limited and does not give practitioners a clear process to follow.²¹

The mapping exercise reported in section two found that the evaluation practices of many existing schemes tend to be confined to the assessment of physical activity and physiological indicators at the start and end of the referral period. In addition, many schemes typically use data on the number of patients who pass through the scheme on an annual basis as a means of evaluation. Often these evaluation practices are governed by commissioning arrangements and limited by resources and capacity for evaluation within schemes. Dugdill and colleagues highlight the limitations of this approach, suggesting that issues of quality (i.e. patient experiences) and sustainability (long-term physical activity adherence) are lost.²¹

Dugdill and colleagues recommend:

"There is a need to move away from the 'physiological measurement only' model, which predominates in most ERS research currently and look for broader, more meaningful measurement of quality experience and health outcome from all stakeholder perspectives, which incorporates both quantitative and qualitative indicators."

p.1398, Dugdill et al., (2005)

Gidlow and colleagues³⁷ endorse the importance of using qualitative methods in evaluating exercise referral schemes, they consider qualitative research may improve our understanding of exercise referral schemes and offer insight into why they work for some and not others. It is interesting to note that Dugdill and colleagues criticised the way schemes are often designed suggesting many are set up in an 'off the shelf fashion.' However, there is little qualitative evidence examining the exact nature of the intervention to determine whether certain characteristics are associated with programme completion and long-term behaviour change (i.e. the referral pathway and patients experiences through it, who refers, who gets referred, the length and nature of the referral period (number of sessions, exercise intensity, duration of sessions, or mode of activity)). Thus, until such evidence is available local schemes will continue to model the content and delivery of their localised scheme on programmes that are currently in existence.

Evaluation needs to be built into schemes from their inception, all stakeholders need to agree on the purpose of, and the methods for, evaluation and it is imperative that the resources (people, finances) necessary for systematic evaluation are made available. According to Gidlow and colleagues the overall data collection processes implemented at the design phase, with subsequent and regular evaluation and re-evaluation, should facilitate collation of sufficient good quality data that can explain scheme outcomes and as such inform and improve practice.37 This sentiment is echoed by Dugdill and colleagues who suggest that evaluation which goes beyond mere measurement should produce data and information which are meaningful and appropriate for the purpose of effecting change within a scheme.²¹

Finally the research suggests that effective process and outcome evaluation strategies which are built into schemes at the planning stage should ultimately produce better quality data and if successful, this should negate the need for 'one off' experimental evaluations that employ complex and unsustainable research methods.

Summary:

Several consistent implications for practice have been identified from the research evidence considered in this section, some are more applicable to referring health professionals others are more pertinent to exercise professionals and exercise referral scheme coordinators. Many of these issues have been integrated as practical suggestions within the guidance sections of the toolkit.

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Section 4: Guidance for Referring Healthcare Professionals





Executive Summary

Healthcare professionals have a crucial role to play in promoting physical activity with patients and ensuring that patients are offered the safest and most appropriate physical activity pathway to meet their healthcare needs and personal preferences.

The aim of this section is to provide health professionals with background information to exercise referral schemes, it is an introduction and any health professionals involved in exercise referral schemes should ensure they obtain additional information about local scheme protocols before referring patients to exercise professionals.

It is good practice identify a member of the practice team who can take particular responsibility for the exercise referral scheme, specifically liaising with the scheme coordinator and other referring professionals about training opportunities, changes in protocols etc.

It is recommended that referring healthcare professionals:

- Assist service providers and commissioners to
 - determine scheme protocols & guidelines e.g. inclusion & exclusion criteria based on local priorities
 - o agree governance arrangements
- Engage in briefing sessions about the scheme and become acquainted with:
 - o their roles and responsibilities
 - o scheme documentation
 - o their medico-legal responsibilities
- Adopt a more systematic approach for identifying patients suitable for referral.
 - Be proactive in identifying patients for example, via CVD screening, targeting.
 - Use a risk stratification tool to determine which patients would be most suited to the exercise referral scheme.
 - o Assess readiness to change
- Work with commissioners and scheme providers to agree a mechanism for profiling the characteristics of those who decline the offer of a referral and methods for recording why this might be so.
- Agree scheme evaluation and monitoring procedures.

Primary care professionals should ensure that exercise referral schemes operate in conjunction with (or as part of) coordinated health promotion and disease prevention programme in primary care.

Section 4: Guidance for Referring Practitioners

The aim of this section is to provide health professionals with background information to exercise referral schemes, it is an introduction and any health professionals involved in exercise referral schemes should ensure they obtain additional information about local scheme protocols before referring patients to exercise professionals.

There are clearly significant issues regarding the roles and responsibilities of all professionals involved in an Exercise Referral Scheme (ERS) and more detailed information on these can be found in the Department of Health (2001) Exercise Referral Systems: A National Quality Assurance Framework.¹ The health professional's responsibility is essentially the same 'duty of care' that he/she would expect to exercise as they would when referring a patient to any other third party for additional or further treatment. The GP remains responsible for the overall management of each patient's clinical care programme.

This section of the toolkit provides healthcare professionals with a brief overview of the health benefits of physical activity; a summary of the options for increasing physical activity and an outline of the distinction between recommendation and referral. Finally this section provides answers to a number of questions frequently raised by healthcare professionals about exercise referral schemes.

4.1. The relationship between physical activity and health

There is strong scientific evidence that physical activity is essential for good health. Regular moderate intensity physical activity can substantially reduce the risk of developing or dying prematurely from heart disease, diabetes, several forms of cancer and high blood pressure.² For example, regular physical activity can reduce the risk of developing coronary heart disease, stroke and type II diabetes by up to 50% and reduce the risk of premature mortality by about 20-30%. Individuals who are active are almost two times less likely to die prematurely from a heart attack than their inactive contemporaries. Regular physical activity can also modify the classical cardiovascular risk factors, such as high blood pressure and adverse lipid profiles.³

Regular physical activity is important to the health and well-being of people of all ages; it offers direct protection against the risk of developing more than 20 different diseases and long-term medical conditions.²

One in three people in the UK is currently living with a long-term condition.⁴ Long-term conditions are now the most common cause of death in most industrialised nations and in many developing countries.⁵ The role physical activity can play in the treatment and management of long-term conditions is significant given the prevalence of these conditions in society today.

Regular moderate intensity physical activity:

 Is important in preventing weight gain and essential to weight management for individuals who have lost weight.⁶

- Can produce metabolic benefits that contribute to the management of type II diabetes.⁶
- Can delay the progression of osteoporosis and osteoarthritis.
- Is effective in the treatment of mild-to-moderate depression and can help in the treatment of anxiety.⁶
- Is important in the prevention and management of osteoporosis.⁶
- Can help in the treatment and management of lower back pain, arthritis, chronic obstructive pulmonary disease, stroke, hypertension and many more long term medical conditions.⁶

Furthermore, the improvements in mobility associated with moderate physical activity are essential in maintaining functional independence in later life.⁶

In spite of the well documented benefits of regular moderate intensity physical activity the majority of the adult population in the United Kingdom fail to meet the current physical activity guidelines to confer health benefits. It is recognised globally that there is a need to promote healthier lifestyles and improve physical activity levels in order to reduce premature mortality and morbidity from chronic diseases.^{2,7}

A study examining the burden of physical activity related ill-health in the UK found that in 2003-2004 over 35,000 deaths could have been avoided if the population were physically active at the levels recommended by the UK government. Physical inactivity was directly responsible for 3% of mortality and morbidity in the UK and accounted for an estimated £1.06 billion of direct costs to the NHS.⁸ On average an inactive person spends 38% more days in hospital than an active person and has 5.5% more family physician visits, 13% more specialist service visits and 12% more nurse visits than an active individual.⁹

4.2. The role of primary care

Primary care has been recognised as an important setting for the promotion of physical activity. Primary care professionals come into frequent contact with the general public, indeed it is estimated that 85% of the population visit their GP surgery on an annual basis.¹⁰ Every consultation provides an opportunity to promote behaviour change or to refer to relevant support services.¹¹ Furthermore there is strong clinical and cost-effectiveness evidence to demonstrate the importance and the potential of using health professionals to promote physical activity.¹²

4.3. Options to increase physical activity

There are a range of interventions which can be used by primary care practitioners to promote physical activity for disease prevention, these include:

- Routine advice to increase physical activity.
- Physical activity counselling or brief interventions.
- Recommending activities, facilities or services such as:

- Self-directed, unsupervised activities, e.g. swimming, gardening, cycling, walking, activities of daily living.
- o Lay-led activities e.g. health walks, green gyms.
- Supervised, structured activities e.g. dance, tai-chi, and aerobics.
- Referring into a specific structured system with a specialist exercise professional such as an exercise referral scheme, condition-specific class (cardiac rehabilitation, falls prevention).

Exercise referral schemes represent only one type of intervention that can be used by primary care professionals to promote physical activity for health gain, such schemes should operate as part of a coordinated health promotion and disease prevention programme.

4.4. Recommendation versus Referral

Recommending a patient increase their physical activity or sign-posting a patient to any of the broader physical activity opportunities, i.e. walking scheme, is quite distinct from referring an individual to a dedicated service for the development of a tailored physical activity programme i.e. an exercise referral scheme. With the former the responsibility for taking part in any of these activities is up to the patient who is also responsible to act within the boundaries of the health professional's recommendation. The latter, exercise referral, requires the transfer of relevant medical information about an individual in order for an exercise professional to develop a tailored physical activity programme. Furthermore the exercise professional takes responsibility for the safe and effective design, delivery and management of this individual's physical activity

programme.

It is important to adopt an approach which best suits the characteristics and expressed needs of the individual patient. Some inactive people may find community-based physical activity programmes, such as a led walking group more accessible and more appealing than formal exercise programmes, such as an exercise referral scheme.

Making a decision about whether a patient is suitable for exercise referral or which physical activity option is best for an individual patient relies on the health professionals' clinical judgement and is based on a number of factors (see FAQ).

4.5. Frequently Asked Questions

These questions have been identified following consultation and discussion with a number of healthcare professionals engaged in exercise referral schemes. Questions have been grouped under three headings: The exercise referral pathway, clinical governance and scheme governance arrangements (specifically focusing on issues relating to scheme management).

The questions are listed below and answers are provided on the respective pages.

4.5.1. The Exercise Referral Pathway

- 4.5.1.1. How does exercise referral work?
- 4.5.1.2. Who can refer into a scheme?
- **4.5.1.3.** How much paperwork will this involve?
- **4.5.1.4.** Will referring patients for exercise be time consuming?
- 4.5.1.5. What information do I need to provide about the patient?
- **4.5.1.6.** How is information about the patient transferred to the exercise professional?
- **4.5.1.7.** Is the patient's consent needed to transfer their medical information?
- **4.5.1.8.** Are there any guidelines about who to, and who not to, refer?
- **4.5.1.9.** How do I decide which patients are suitable for referral?
- **4.5.1.10.** What should I do about those patients who would benefit from being more physically active, but not suitable for the ERS?
- 4.5.2. Clinical Governance
- **4.5.2.1.** Is there any evidence that physical activity is beneficial to my patient's health?
- **4.5.2.2.** Are physical activity/exercise referral schemes effective?
- **4.5.2.3.** Is it safe for me to refer my patients to an ERS?
- **4.5.2.4.** What relevant qualifications do the exercise professionals need to have to ensure they can safely develop an exercise programme for my patients?
- **4.5.2.5.** Why should I refer my patients is this an effective use of my time and resources?
- **4.5.2.6.** How will I know whether the scheme has been beneficial to my patient and who is responsible for patient follow-up and feedback?
- **4.5.2.7.** Do I need to pass on information about any relevant changes in the health of my patient?

4.5.3. Governance Arrangements

- 4.5.3.1. Who is responsible for developing and managing an ERS?
- **4.5.3.2.** Do I play a role in scheme design or only refer when schemes are established?
- **4.5.3.3.** How will I obtain information about the ERS protocol?
- **4.5.3.4.** Will I be legally responsible if my patient has an adverse event as a consequence of me referring them for exercise?
- 4.5.3.5. Who is responsible for ensuring confidentiality of my patient's records?
- **4.5.3.6.** Who is responsible for risk assessing the ERS?

4.5.1. The Exercise Referral Pathway

4.5.1.1. How does exercise referral work?

Exercise referral schemes operate in various ways; typically schemes involve a partnership between primary care trusts and local leisure services. In the main schemes involve a member of the primary care team, or another health professional, referring a patient to a suitably qualified exercise professional for an assessment of the patient's need, the development of a tailored exercise programme, monitoring of progress and a follow-up. The exercise programme usually takes place in a leisure centre, swimming pool or gym; however some schemes offer a range of community-based activities, such as tai-chi, cycling, led-walks, green-gyms, and conservation work. Eligible participants are normally recruited during routine consultations or in some circumstances after searching the practice database for patients at risk of coronary heart disease or other long term conditions.

4.5.1.2. Who can refer into a scheme?

Health professionals are the primary gatekeeper for patients entering the exercise referral process and hence play a pivotal role in current scheme design. Historically the majority of referrals have been initiated by a General Practitioner or practice nurse, however more recently a range of other health professionals are now referring into schemes, these include physiotherapists, diabetes specialist nurses, dieticians, mental health teams. <u>At the present time only registered healthcare professionals can referint into an exercise referral scheme</u>.

Where a referral is initiated by another allied health professional, working with delegated authority, the scheme organisers should issue guidance outlining the procedures for referral. This should include information about informing the patient's GP regarding the intended referral as well as the boundaries within which the referral can be made. For example, if the allied healthcare professional is unable to provide basic information about the patient's health status, e.g. current blood pressure, heart rate reading and details of medication it is recommended that the patient seeks a referral from their GP. GP's should not be placed in a position whereby they have to accept somebody else's referral and then endorse it without having the opportunity to discuss this with the patient.^x

4.5.1.3. How much paperwork will this involve?

Most exercise referral schemes have referral documentation in place, such as a referral letter or patient transfer form. The referring practitioner is required to complete the relevant transfer letter or form, and to obtain the patient's consent to transfer all of the relevant clinical information to the exercise professional. Patient consent to transfer the relevant clinical information to the exercise professional is required as their personal information is being transferred to a non-medically qualified professional.

Referral letters or forms should be no more than 2-sides of A4. In an attempt to simplify the referral process some schemes accept a print out of the patient's drug and/or medical history as an attachment to the referral form. If the referral form is considered too lengthy it is recommended that GP's discuss this option with the

^x Recommendation from Royal College of General Practitioners (2009)

exercise referral scheme coordinator to explore how this approach might work. An example of a referral form based on SIGN good practice guidelines for referral documentation can be found in appendix 9.

4.5.1.4. Will referring patients for exercise be time consuming?

No, once a GP, Practice Nurse or allied healthcare professional has decided to make an exercise referral, all relevant clinical information is transferred to the exercise professional, via the referral form. It generally takes between 2-to-3 minutes to complete the referral form.

4.5.1.5. What information do I need to provide about my patient?

It is the referring practitioner's responsibility to ensure that all relevant clinical information about the patient's health status is disclosed to the exercise professional to enable them to develop a safe and effective exercise programme that will meet the needs and ability of the patient.

The NQAF for Exercise Referral Systems states:

"There must be meaningful transfer of relevant information to the person who will be conducting the exercise intervention."

<u>p.29 NQAF (2001)</u>¹

NQAF recommends that referral forms should include the following information:

- Relevant current and past health problems.
- Details of any medications being taken and known impact on everyday functional ability.
- If known, the possible effects of diagnoses and medications on activities of daily living and on physical activity.
- Standard measures, such as blood pressure, heart rate, body mass index and lifestyle factors, for example, smoker, heavy drinker.
- Any special considerations or advice given to the patient, for example, a patient with osteoarthritis should be advised to recognise and respect an increase in pain, stiffness or swelling.
- Information about any exercise already being undertaken or for which the patient or referrer has expressed a preference should also be included.

<u>p.29 NQAF (2001)</u>¹

However, it is recognised that it may be too time consuming for GPs, practice nurses and allied healthcare professionals to provide details such as known impact of medications on functional ability or physical activity and the patient's current exercise status.

It is therefore recommended, <u>as a minimum the referral documentation must state</u> <u>clearly the reason for referral and provide information about the patient's current health</u> <u>status, medication and relevant medical history</u>. It is also good practice to indicate on the referral form how long the referral is valid for. "Referral letters or forms 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 all relevant clinical information is available."

4.5.1.6. <u>How is the information about my patient transferred to the exercise</u> professional?

A protocol for processing referrals should be agreed between the commissioners and service providers after consultation with the referring practitioners. Typically paperwork is transferred via telephone, post and email or presented in person by the referred patient. Some schemes are also in the process of developing electronic referral systems. If electronic referral forms are the preferred option for transferring information this should be discussed with the commissioners and service coordinator or provider to consider how this could be developed and implemented.

4.5.1.7. Is the patient's consent needed to transfer their medical information?

Yes, under common law, a healthcare professional wishing to disclose a patient's personal information to anyone outside of the team providing care should first seek the consent of that patient. Generally an exercise referral form will have a section for patient consent.

4.5.1.8. Are there any guidelines about who to, and who not to, refer?

Guideline 2 of the National Quality Assurance Framework recommends:

"each scheme should develop its own medically led selection criteria which is tailored to the health needs of the patient population, the competencies and qualifications of the exercise professionals and the exercise facilities and services available."

p.18 NQAF (2001)¹

Patient referrals should be made on the basis of these agreed criteria. Generally, exercise referral schemes have been set up to cover a range of low to medium risk populations with specific medical conditions or health risk factors.

The NQAF¹ defines **low risk populations** as 'people with minor, stable physical limitations or two or less CHD risk factors' and **medium risk populations** as 'people with significant physical limitation related to chronic disease or disability'.

In the absence of a national standardised risk stratification tool, the risk tool developed by Irwin and Morgan¹³ provides straightforward referral guidelines for healthcare professionals which can be used to categorise patients during a clinical consultation (see appendix 10).

According to the NQAF people with current severe disease or disability (*high risk*) are <u>not considered suitable for a general exercise referral scheme</u> and should only be referred to medically supervised, and/or specialist physical activity/ exercise sessions with a clinical exercise lead.¹

There are also several absolute contra-indications to exercise which referring health professionals should be familiar with, see list below.^{xi} Patients with absolute contraindications should not exercise until such conditions are stabilised or adequately treated.

⁴Absolute contra-indications to exercise:

- A recent significant change in a resting ECG, recent myocardial infarction or other acute cardiac event.^{xii}
- Symptomatic severe aortic stenosis.
- Acute pulmonary embolus or pulmonary infarction.
- Acute myocarditis or pericarditis.
- Suspected or know dissecting aneurysm.
- Resting Systolic Blood Pressure ≥ 180mmHg / DBP ≥ 100mmHg.
- Uncontrolled / unstable angina.
- Acute uncontrolled psychiatric illness.
- Unstable or acute heart failure.
- New or uncontrolled arrhythmias.
- Other rapidly progressing terminal illness.
- Experiences significant drop in BP during exercise.
- Uncontrolled resting tachycardia \geq 100 bpm.
- Febrile illness.
- Experiences pain, dizziness or excessive breathlessness during exertion.
- Any unstable, uncontrolled condition.^{xiii}

The decision to refer is for the individual health professional when faced with the individual patient. A health professional is under no obligation to make a referral.

4.5.1.9. How do I decide which patients are suitable for referral?

As previously discussed each scheme will have an agreed set of inclusion and exclusion criteria that specifies which patients are suitable for referral. Some schemes may only include individuals who are insufficiently active with existing medical conditions; other schemes may include individuals who are inactive, with no underlying medical problems.

Generally referrals for exercise are most suitable for patients who are insufficiently active and are likely to need help with motivation, exercise programming, supervision and monitoring and/or need assistance in selecting the appropriate type, intensity, frequency and duration of activity, directed at a specific health outcome.

Health professionals can use different tools to identify which patients would benefit from being more physically active and would be appropriate for referral. NICE

^{xi} Absolute contraindications taken from BACR (2006) Phase IV Exercise Instructor Training Manual & ACSM (2006) Guidelines for Exercise Testing and Prescription

^{xii} Appropriate guidance on this should be provided either by the patient's cardiologist or cardiac rehabilitation team

xiii Diabetes may be an exception here as exercise can help individuals' in the management of uncontrolled diabetes

recommends primary care professionals should use a validated tool, such as the Department of Health's General Practice Physical Activity Questionnaire (GPPAQ), to identify inactive individuals (see appendix 11).¹²

In addition, as part of NHS Health Checks health professionals can screen practice registers to identify suitable patients for exercise referral, for example patients at increased risk of cardiovascular disease. UK guidelines recommend that all people aged 40 or over should have a routine cardiovascular risk assessment. Primary care professionals can calculate a patient's risk of developing cardiovascular disease during routine consultations using a simple risk factor calculator, such as QRISK or the Framingham Risk Calculator. Patients with a moderate-to-high predicted CVD risk may benefit from lifestyle interventions to increase physical activity; such patients may be ideal candidates for an exercise referral scheme.

It is also recommended that the referring healthcare professional should assess patient's readiness to change behaviour as this may screen out patients who are unlikely to attend the initial assessment or likely to drop-out before the end of the exercise referral programme.¹

Typically, patients who are regularly active would not be considered for a referral scheme. However, there may be exceptions to this rule, for instance when an active patient is newly diagnosed with a medical condition, e.g. diabetes, a referral might be judged as necessary in order to increase the likelihood of a safer and more effective exercise experience.

Making a decision about whether a patient is suitable for exercise referral or which physical activity pathway is best for an individual patient relies on the health professionals' clinical judgement and is based on a number of factors.

The table 1 below provides a quick guide to determining which physical activity pathway (referral or recommendation) is best for an individual patient.

Factors to consider when assessing options to increase an inactive patient's physical activity		
Factor	Favours exercise referral	Favours recommendation
General health status	Fair/poor	Good
Ready to change behaviour	Ambivalent	Yes
Requires activity for specific health outcomes	Yes	No
Requires tailored exercise programming	Yes	No
Able to safely exercise alone	No	Yes
Needs motivational support	Yes	No
Social circumstances	Living alone/ not coping	Good

In summary, referral to a qualified exercise professional for the development of a tailored exercise programme may be favoured for some patients who: are inactive; living with a medical condition which will benefit from being more active; and need help with motivation, exercise programming and supervision.

4.5.1.10. What should I do about those patients who would benefit from being more physically active, but not suitable for the physical activity/ exercise referral scheme?

Given that only a third of the adult population meet the current physical activity recommendations for health¹⁴ the majority of the general population would benefit from becoming more active. However, the bulk of the population who are inactive do not necessarily require supervised exercise in the guise of an exercise referral scheme. For the majority of the population recommendations to try to become more physically active in order to gain health benefits may be suffice.

Recent NICE guidance recommends that:

"primary care professionals should take the opportunity whenever possible, to identify inactive adults and to advise them to aim for 30 minutes of moderate activity on 5 days of the week or more."

<u>p. NICE (2006)¹²</u>

The National Quality Assurance Framework¹ makes the distinction between recommending a patient to become more active and specifically referring a patient to a third party where a tailored exercise programme can be devised and delivered. A recommendation to become more active may be made as part of general lifestyle advice and would be no different to any other recommendation, for example to stop smoking. However, when making the decision to recommend a patient becomes more habitually active, the healthcare professional should ensure there are no underlying medical conditions which would make this recommendation a particular risk.^{XIV} Healthcare professionals should also consider whether the person is receptive to and capable of carrying out this recommendation safely.

The presence of a severe disease or disability, such as cardiovascular disease, stroke, osteoporosis, depression, dementia, chronic pulmonary disease, chronic renal failure, peripheral vascular disease, or arthritis (which may all be present within a single individual) should not preclude individuals from being active. While patients who are classified as '*high risk'* may not be suitable for a general exercise referral scheme, regular clinically supervised exercise and/or physical activity is likely to be extremely beneficial to the treatment and management of their condition.

High risk populations who would benefit from being more physically active are likely to require medically supervised physical activity and/or specialist exercise sessions in secondary and/or tertiary health care settings, for example, phase III or phase IV

^{xiv} The medico-legal issues regarding specifically referring patients to a third party are discussed later in this section. With regards to general lifestyle advice to become more physically active NICE do not think practitioners would be liable if they had taken reasonable steps to ensure there weren't any underlying medical conditions making exercise a particular risk, i.e. take a proper history and do basic tests such as check blood pressure to exclude underlying disease. Given the evidence of the important therapeutic benefit of exercise, if practitioners are not advising patients about exercise they might be considered not to be practicing medicine to the benefit of the patient and liable to challenge. Personal communication with NICE 16/06/2008

cardiac rehabilitation, phase III osteoporosis, falls services, stroke rehabilitation, COPD rehabilitation clinic. Information about these opportunities should be available from the Primary Care Trust, Community Health Partnership or Local Health Board.

The National Quality Assurance Framework provides a contextual diagram for matching patients medical characteristics with professional expertise (see appendix 11).

4.5.2. Clinical Governance

4.5.2.1. <u>Is there any evidence that physical activity is beneficial to my patient's health</u>?

There is a wealth of scientific and epidemiological evidence documenting the health benefits of regular moderate-to-vigorous physical activity across the life course. In a report summarising the evidence on the impact of physical activity and its relationship to health the Chief Medical Officer concluded the scientific evidence is compelling.²

Regular physical activity is important to the health and well-being of people of all ages; it offers direct protection against the risk of developing more than 20 different diseases and long-term medical conditions.²

Several Cochrane systematic reviews have found that physical activity/exercise interventions have therapeutic benefits with respect to several major chronic diseases, for example:

- Exercise significantly improves gylcaemic control, reduces visceral adipose tissue and plasma triglycerides, but not plasma cholesterol in people with type 2 diabetes, even without weight loss.¹⁵
- In people with asthma, physical training can improve cardiopulmonary fitness without changing lung function. It does not have an adverse effect on lung function and wheeze in patients with asthma.¹⁶
- Exercise forms an important component of the management of Chronic Obstructive Pulmonary Disease. Exercise rehabilitation relieves dyspnoea, fatigue, improves emotional function and enhances patients' sense of control over their condition. These improvements are moderately large and clinically significant.¹⁷
- Therapeutic exercise is used as one modality to treat people with osteoarthritis. Both high intensity and low intensity aerobic exercise appear to be equally effective in improving a patient's functional status, gait, pain and aerobic capacity in people with osteoarthritis of the knee.¹⁸
- Some patients with chronic fatigue syndrome may benefit from exercise therapy and no evidence that exercise therapy may worsen clinical outcome on average.¹⁹
- In adults living with HIV/AIDS aerobic exercise appears to be safe, the main results indicated that performing constant or interval aerobic exercise may improve cardiopulmonary fitness and psychological well-being.²⁰

Further review level evidence documents the therapeutic benefits of exercise interventions for people with a range of long-term medical conditions such as fibromyalgia syndrome, rheumatoid arthritis, intermittent claudication, non-specific low back pain, depression and breast cancer.²¹⁻²⁶

4.5.2.2. Are physical activity/exercise referral schemes effective?

Exercise referral schemes are a popular intervention used to encourage patients with long-term medical conditions, such as diabetes, obesity, mental health problems, osteoarthritis, chronic fatigue syndrome etc, to become more physically active. At a local level such schemes are often considered very successful and perceived to have a positive impact on a range of functional and social-psychological parameters of the people referred. For patients who are initially anxious about exercise, the individually tailored exercise prescriptions and close supervision are seen as particularly important factors.²⁷

Despite their popularity a recent NICE review of the effectiveness of four commonly used methods to increase physical activity found that exercise referral schemes can have positive effects on physical activity levels in the short-term (6 to 12 weeks), however the evidence of the effectiveness of exercise referral over the longer term (over 12 weeks) was equivocal.¹²

NICE concluded that there <u>is insufficient RCT</u> level evidence to recommend the use of exercise referral schemes where their primary purpose is to increase physical activity. However, research conducted by Riddoch and colleagues examined several case studies and revealed that exercise referral schemes had other benefits, which the controlled trials of effectiveness had so far missed.²⁷

Following the publication of the NICE guidance the Department of Health released a statement urging commissioners, practitioners and policy makers to continue to provide high quality exercise referral schemes for their local population where these address:

- a) The medical management of conditions, for example mild-moderate hypertension, type 2 diabetes, obesity, osteoarthritis and osteoporosis.
- b) Approaches specific to preventing or improving individual health conditions (e.g. falls prevention), which fall outside the overarching advice to achieve 30 minutes moderate activity on at least 5 days a week.²⁸

The DH statement endorsed the NICE recommendation that use of exercise referral schemes solely for the purpose of increasing physical activity are recommended only when they are as part of a properly designed and controlled research study to determine their effectiveness.

It is recognised that there is a need to build the evidence base with respect to the longterm effectiveness of exercise referral schemes for increasing physical activity participation and their cost-effectiveness relative to other physical activity or lifestyle interventions.

4.5.2.3. Is it safe for me to refer my patients to an exercise referral scheme?

There will always be an element of risk associated with referring patients for exercise; however the risks need to be put into context. Thousands of patients have participated in exercise referral schemes, in spite of this there remain very few reported serious adverse reactions. Exercise referral schemes provide an opportunity for people with long-term medical conditions to increase their physical activity in a safe environment under the appropriate guidance of a suitably qualified and insured exercise professional.

All professionals involved in exercise referral have a duty of care, where a healthcare professional is concerned; the law would expect reasonable care and skill to be shown in undertaking an assessment of the risks and benefits of the patient exercising. This assessment should take account of past and present medical history, family history and medication. To comply with duty of care the referring healthcare professional must ensure there is a meaningful transfer of all relevant information to the exercise professional who will be responsible for designing and supervising the exercise programme.

Where the exercise professional and the service provider 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. The Register of Exercise Professionals²⁹ (REPS) Code of Ethical Practice requires its members to confine themselves to practice those activities for which their training and competence is recognised by the Register. Therefore exercise professionals working with referred clients should have the relevant knowledge, skills and competencies to design, agree, adapt and review a physical activity programme appropriate to the referred patients medical condition and physical limitations (see section 9 of the toolkit for further information).

4.5.2.4. What relevant qualifications do the exercise professionals need to have to ensure they can safely develop an exercise programme for my patients?

The National Quality Assurance Framework recommends that patients are referred to exercise professionals who are members of the Register of Exercise Professionals and registered as a Level 3 exercise referral instructor or where service delivery necessitates registered Level 4 specialist instructor. REPS registration signifies that the exercise professional meets the National Occupational Standards for practice, including continuing education and insurance.

As part of the service level agreement commissioners should specify the qualifications for exercise professionals working with referred patients. Furthermore, service providers are responsible for ensuring that all exercise instructors working with referred patients hold the appropriate qualifications, registration and insurance.

4.5.2.5. Why should I refer my patients - is this an effective use of my time and resources?

Data on the benefits of exercise referral schemes for referring healthcare professionals are not routinely collected. However, evidence extracted from studies which have used exercise as an alternative or adjunctive treatment for patients with a range of long-term medical conditions have shown positive benefits for primary care practice.

A randomised controlled trial of exercise training in primary care patients with persistent, unexplained physical symptoms found that primary care consultations rates and prescriptions were significantly reduced in the 6 months after training. In addition, the number of secondary care contacts and the number of patients who were newly referred to secondary care significantly declined from the start of the programme to six month follow-up.³⁰

The 'Diabetes Prevention Programme' found that those at high risk of developing type II diabetes can delay and possibly prevent the disease by lifestyle modification. The trial showed that diet and exercise were significantly more effective than metformin in the prevention of diabetes in glucose intolerant patients. The lifestyle intervention group reduced incidence of diabetes by 58% as compared to the placebo group, metformin reduced incidence by 31%. This study indicated that professionals would need to treat 7 people for 3 years with lifestyle intervention to prevent 1 new case of diabetes compared to 14 people for 3 years with metformin.³¹ Other NNT studies have compared exercise with clinical and/or pharmacological intervention and found that the numbers needed to treat are much lower than more invasive and pharmacological interventions.

For an average practice of 20,000 patients (made up equally of men and women) each year there are 68 new cases of CHD and 38 new cases of stroke that could be mitigated by promoting physical activity effectively in primary care (using QOF data; statistics are relevant for the year of the study).³²

It has been calculated that 9% of CHD could be avoided if all those who are sedentary and lightly active became more moderately active³³ and that regular moderate physical activity has the potential to reduce half the incidence of hip fractures in over 45 year olds.³⁴

Physical inactivity is a public health burden in the UK; it is estimated to directly cost the NHS around £1.6 billion per year. For a practice population of 10,000 patients the cost of five conditions^{xv} attributable to physical inactivity averages £50,000 per year.³⁵

4.5.2.6. <u>How will I know whether the scheme has been beneficial to my patient</u> and who is responsible for patient follow-up and feedback?

It is the responsibility of the exercise professional (service provider) to provide the referring healthcare professional with information about the patient's progress and benefits to their patient. Most schemes will have a protocol in place for providing feedback to referring practitioners either for individual patients or for the practice population. The referring healthcare professional needs to agree with service providers how information about their patient's progress or lack of it, is to be fed back to them.

4.5.2.7. Do I need to pass on information about any relevant changes in the health of my patient?

Whilst NQAF states that the GP is responsible for the overall management of each patient's care programme and should therefore pass on any information about any relevant changes in the health of the patient to the exercise professional. It is recognised that this might present practical problems.

^{xv} Post-menopausal breast cancer, lower gastrointestinal cancer, cerebrovascular disease, cardiovascular disease and type 2 diabetes.

As an alternative to the GP being held responsible for passing on this information, it is advised that some responsibility should be put on the patient to disclose any changes in circumstances and GPs are advised to give patients examples of such things, e.g. changes in medication, shortness of breath, dizziness. In these circumstances the exercise professional may seek further information from the patients GP. According NQAF the GP has a duty of care to respond in an appropriate and timely manner to enquiries about the patient from the exercise professional.

4.5.3. Governance Arrangements

4.5.3.1. Who is responsible for developing and managing the exercise referral scheme?

The planning of each exercise referral scheme should be undertaken locally by a multidisciplinary steering group. It is good practice for the steering group to involve representatives from the local health board, (Primary Care Trust or Community Health Partnership), leisure services, referring healthcare team and an exercise professional.

The planning group should determine the protocols and guidelines for the scheme, including:

- Who can be referred into the scheme (inclusion/exclusion criteria).
- Who can initiate a referral.
- Who can receive referrals (Level 3 advanced exercise professionals).
- What physical activity referral opportunities will be available.
- Who is responsible for running the scheme.
- The administrative processes in place.
- The organisations involved and
- The monitoring and evaluation procedures.

It is recommended that the scope of a scheme is determined by the demographic and health needs of the local population and the competencies and qualifications of the exercise professionals at the point of delivery, the exercise facilities and services available.

Generally the scheme will be managed by an exercise referral coordinator employed either by the local health board (Primary Care Trust or Community Health Partnership) or leisure service.

4.5.3.2. <u>Do I play a role in scheme design or only refer when schemes are</u> <u>established</u>?

As mentioned above it is good practice for a representative of the referring healthcare team to be a member of the scheme steering/planning group, however where schemes are already established this might not be feasible.

4.5.3.3. <u>How will I obtain information about the exercise referral scheme</u> protocol?

Most schemes will offer a briefing session for healthcare professionals engaged in a local exercise referral scheme. It is good practice and important that all referring

healthcare professionals involved in new or established schemes are fully briefed regarding the scheme protocols and guidelines.

Referring healthcare professionals also have a responsibility to read and familiarise themselves with all relevant scheme documentation and protocols to ensure they are clear about:

- Their roles and responsibilities;
- Which patients the scheme is intended to support and the criteria (medical or otherwise) that will guide exclusions from the scheme;
- The referral process;
- The feedback and evaluation mechanisms and
- Patient exit routes after the "referral period".

4.5.3.4. Will I be legally responsible if a patient has an adverse event as a consequence of me referring them for exercise?

NO, the referring healthcare professional does not develop the exercise programme. The referrers role is to decide whether the patient is eligible for the scheme and make the referral into an exercise referral scheme which is quality assured. By making a referral to an appropriately qualified exercise professional the healthcare professional is not assuming responsibility for the design, delivery or supervision of the exercise programme. Indeed NQAF specifies that:

"..when an individual is specifically referred for exercise by a health practitioner, once all of the relevant medical information has been transferred to the exercise professional, the responsibility for safe and effective management, design and delivery of the exercise programme passes to the exercise and leisure professionals."

p.13 NQAF (2001)

Medical Defence Union members have questioned whether they could be criticised or held to account by the General Medical Council for referring patients for exercise programmes, particularly when they do not know what the programmes involve, or where the exercise professionals are not registered with appropriate regulatory bodies. The GMC has indicated that it would have no concerns about a GP referring a patient to an exercise professional on the Register of Exercise Professionals since REPS is a recognised body by the Department of Health.

4.5.3.5. Who is responsible for ensuring confidentiality of my patient's records?

The scheme organisers will be responsible for ensuring that local protocols and structures are suitable for the purpose of ensuring that the patient's confidentiality is maintained throughout the referral process. Scheme organisers will be responsible for ensuring patients' health records are securely protected during their transportation between sites or organisations.

4.5.3.6. Who is responsible for risk assessing the exercise referral scheme?

The service provider has a duty of care which must be fully considered in establishing and running a quality assured exercise referral scheme. In meeting this duty of care, leisure managers and scheme coordinators will need to liaise with their insurance risk manager and undertake a risk assessment of all aspects of the exercise referral scheme and potential patient groups.

Regardless of where the exercise is taking place, i.e. public, private or voluntary health and fitness facility, community centre, swimming pool or the local park, there must be evidence that the exercise environment has been risk assessed. This should demonstrate the environment is fit for the purpose, all health safety legislation is complied with and appropriate insurance is in place (p16 NQAF).

Summary:

Healthcare professionals have a crucial role to play in promoting physical activity with patients and ensuring that patients are offered the most appropriate physical activity pathway to meet their healthcare needs and personal preferences.

Healthcare professionals tend to have knowledge of the local health priorities and health issues and exercise referral schemes should be designed around the needs of the local population. To ensure this happens, it is recommended that a representative healthcare professional engages with other relevant stakeholders to design the local exercise referral service.

It is also good practice to identify a member of the practice team who can take particular responsibility for the exercise referral scheme, specifically liaising with the scheme coordinator and other referring healthcare professionals about briefing sessions, scheme protocols and documentation.

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Section 5: Guidance for Exercise Professionals





Section 5: Executive Summary

Exercise professionals have a crucial role to play in ensuring an exercise referral scheme is delivered efficiently and effectively. Consequently exercise professionals need to be clear about local scheme operating procedures; their roles and responsibilities; and ensure they have the appropriate qualifications and training before embarking on work with referred patients.

This section will outline the roles and responsibilities of the exercise professional responsible for developing the exercise programme for a referred patient. It draws upon evidence from relevant exercise referral guidance^{1,2} and information gathered from a number of existing schemes which outlined the exercise professional's role.

Checklist for working with referred patients:

- Check the appropriateness of the referral and ensure the referral paperwork contains all the relevant information about the patient's health status.
- Ensure the patient is adequately informed about the referral scheme and is consulted and clear about their responsibilities whilst participating in the scheme.
- Conduct an appropriate pre-exercise assessment prior to designing the exercise programme.
- In consultation with the patient design, agree and deliver an exercise programme which takes into consideration their health status and meets their needs and preferences.
- Provide an appropriate range of exercise opportunities, for a defined period of time, which encourage long-term exercise adherence.
- Periodically monitor the patient's progress and review the patient's exercise programme.
- Identify and follow-up patients who fail to attend.
- Ensure the referring health professional is kept informed about their patient's progress throughout the scheme.
- Ensure the confidentiality of patient information and adhere to the data protection and freedom of information act procedures.
- Facilitate long-term support for patients to maintain increases in physical activity.

Recommendations for Exercise Professionals:

This section makes a number of recommendations which aim to strengthen the role of exercise professionals working within exercise referral schemes in the UK.

- Undertake appropriate Level 3 training necessary for working with referred clients.
- Become familiar with the scheme operating procedures and their roles and responsibilities.
- Undertake training in relevant theory-led behaviour change techniques and monitoring and evaluation procedures.
- Keep records of the nature and extent of all inappropriate referrals.
- Keep records of patient characteristics, e.g. age, gender, ethnicity, socioeconomic status, reason for referral.
- Keep records of the initial patient consultation and the patient's progress throughout the referral period.
- When developing the patient's personalised physical activity plan include information on strategies for overcoming barriers.
- Provide opportunities for patients to sample a diverse range of activities which are facility and non-facility based.
- Provide opportunities for referred patients to socialise with other referred patients, e.g. offer exclusive exercise sessions, buddy systems and group inductions.
- Provide ongoing monitoring and support for patients.
- Regularly update the referring health professional about their patient's progress.
- Regularly engage in continuing professional development.
Section 5: Guidance for Exercise Professionalsxvi

The aim of this section is to provide general guidance on the roles and responsibilities of exercise professionals working with referred patients. A guide to training and qualifications for exercise professionals involved in the delivery of exercise referral schemes in the UK is also included in the toolkit and it is recommended that exercise professionals become acquainted with these guidelines (refer to section 9).

It is recognised that in some schemes the exercise professional and the scheme coordinator may be the same person, where this is the case it is recommended that these professionals familiarise themselves with the whole of the toolkit and do not just read this section and the guidance for scheme coordinators (section 6). There are implications for the development of schemes contained across all sections of the toolkit which will support exercise referral coordinators in developing high quality schemes.

5.1. Exercise Professional's Roles and Responsibilities

If the aim of an exercise referral scheme is to provide patients with a positive exercise experience with the objective of achieving self-sustaining physical activity levels in the longer term, the role of the exercise professional is crucial in this process.

According to the National Quality Assurance Framework (NQAF) (2001)¹ and information from the operating standards for a number of existing schemes the generic roles and responsibilities of exercise professionals involved in the delivery of exercise referral schemes are to:

5.1.1. Check the Appropriateness of the Referral

The exercise professional should ensure there is a written referral/transfer form for each patient which has been signed and dated by the referring health practitioner. The referral documentation must state clearly the reason for the referral and provide all relevant information about the patient's health status, for example:

- Relevant current and past health problems.
- Details of any medications being taken and known impact on everyday functional ability.
- If known, the possible effects of diagnoses and medications on activities of daily living and on physical activity.
- Standard measures, such as blood pressure, heart rate, body mass index and lifestyle factors, for example, smoker, heavy drinker.
- Any special considerations or advice given to the patient, for example, a patient with osteoarthritic knees may have been advised to recognise and respect an increase in pain, stiffness or swelling.
- Information about any exercise already being undertaken for which the patient or referrer has expressed a preference may also be included.

^{xvi} In this context the exercise professional is identified as the person responsible for developing the exercise programme for a referred patient

"Referral letters or forms with insufficient information about the patient's health status 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 all relevant clinical information is available." p.15 NQAF (2001)

Where a referral is initiated by another allied health professional, working with delegated authority in a scheme, the exercise professional will still require all relevant information about the patient's health status. If the allied health professional is unable to provide such information about the patient's health status and provide a current blood pressure and heart rate reading then the referral must go via the patient's GP.

Until such information is obtained the position given above from the NQAF should be followed.

Where the allied health professional is able to provide the relevant information, it is good practice to inform the GP of the referral and use the recommended question to the GP from the Medical Defence Union '*is there any medical reason why this patient of yours should not take part in an exercise programme of this sort?* (A sample courtesy letter for the patient's GP is included in appendix 13; to download a word version of this letter go to <u>http://www/bhfnc-exercisereferral/downloads.html</u>).

The NQAF explicitly states that "<u>ONLY</u> a medically qualified individual, or another allied health professional working within a protocol with delegated authority, can initiate a referral into an exercise referral scheme."

p.39 Guideline 6 NQAF (2001)

Where there is uncertainty or ambiguity regarding a patient's suitability for the exercise referral scheme the exercise professional should contact the referring health practitioner to discuss any potential clinical reasons for exclusion which may be borderline or modifiable. In circumstances where a patient is considered to be unsuitable for a scheme, it is good practice for the exercise professional to provide the referring health practitioner <u>and</u> the commissioning organisation with written details of why the patient has been declined entry to the scheme, this should be done within a timely manner of any such decision being made. Furthermore the NQAF states that:

Exercise professionals <u>must not</u> accept a person through a referral system where the patient's medical practitioner, or other health professionals undertaking delegated responsibility for referrals, has declined to make a referral."

p.14 NQAF (2001)

5.1.2. Ensure the patient is consulted and involved in the referral process and is encouraged to take responsibility for their health and physical activity participation

It is vital that the patient has a clear understanding of how the scheme will operate and their role whilst participating in it.

At the first meeting with the patient, it is good practice for the exercise professional to provide the patient with an information sheet which outlines how the scheme works from entry to exit. This information sheet should also include details of the patient's commitment to the scheme, what to do if they are unable to attend and what to do should any problems arise. This should be discussed with the patient as it will help clarify what the patient is expected to do and will provide an opportunity for the patient to raise any concerns they might have about participating in the scheme. An example patient information/pre-exercise screening consent form is included in appendix 14; to download word version of this form http://www/bhfncа go to exercisereferral/downloads).

Responsibility for consenting to take part in the exercise programme and adhering to its design and guidance remains with the patient, who must give informed consent. Obtaining informed consent from patients' prior to undertaking the pre-exercise assessment and commencing exercise is an important ethical and legal consideration. Although the content of a patient consent form may vary, according to the American College of Sports Medicine (ACSM)³ enough information must be present in the informed consent process to ensure that the patient knows and understands the purposes and risks associated with any pre-exercise assessments and participation in the exercise programme.

In addition to the patient consent form, some schemes use a patient contract as a way of formalising the patient's commitment to the scheme and encouraging the patient to take responsibility for their health and physical activity participation.

5.1.3. <u>Conduct an appropriate pre-exercise assessment prior to</u> <u>designing the exercise programme</u>

For most people, physical activity should not pose any problem or hazard; however it is essential that some form of screening or pre-exercise assessment is undertaken with all referred patients. The pre-exercise screening/assessment should be for the purposes of developing an exercise programme which encourages the patient to adopt an independent, physically active lifestyle.

Pre-exercise screening assessment range self-administered or can from questionnaires to sophisticated diagnostic exercise tests. Exercise professionals should establish pre-exercise screening or assessment procedures appropriate for their clients. As an initial, minimum step, it is good practice to obtain a health and physical activity history of the patient which can be checked against the information from the referring practitioner. The modified American Heart Association (AHA)/ACSM Health/Fitness Facility Pre-participation Screening Questionnaire³ and the Physical Activity Readiness Questionnaire (PAR-Q)⁴ represent examples of pre-exercise screening questionnaires suitable for prospective exercisers. (A sample PAR-Q is included in appendix 15).

Pre-exercise assessments are usually conducted immediately after pre-exercise screening at the initial ER consultation. The pre-exercise assessments may include a battery of physiological, psycho-social, functional or lifestyle tests, for example blood pressure, heart rate, body mass index, physical fitness, quality of life, mood, sit-to-stand and an assessment of physical activity levels. The purpose and nature of any pre-exercise assessment should be clearly explained and discussed with the patient. According to the NQAF:

"The content of a pre-exercise assessment should be based on the patient's needs and characteristics (e.g. risk stratification), the exercise professional's competencies and/or availability of the supervising medical practitioner. Local policies, circumstances and resources will also play a part. Assessments should be neither solely for the purposes of monitoring and evaluation, nor for demonstrating practitioner competence to the patient."

p.21, NQAF (2001)

In some circumstances pre-exercise assessments are conducted for purposes other than diagnosis and/or prescription (i.e. audit and/or research), it is therefore good practice to clearly outline this during the consent process and this should also be reflected on the Informed Consent Form. In the case of research, applicable ethical policies on human subjects for research must be implemented. Where information is being used for audit purposes only, Caldecott or equivalent clearance must be obtained.

The exercise professional should explain pre-exercise assessment results so that patients understand what was measured as well as the implications of the results and the recommended action, such as acceptance into the scheme, referral back to the GP, referral to other specialist/exercise professionals or temporary deferral.

An example patient information/pre-exercise screening consent form is included in appendix 14; to download a word version of this form go to <u>http://www/bhfnc-exercisereferral/downloads.html</u>).

5.1.4. <u>Design, agree and deliver an exercise programme which</u> <u>matches the health status, needs and preferences of the</u> <u>patient</u>^{xvii}

The primary role of the exercise professional is to design a safe and effective personalised exercise programme which takes account of the patient's characteristics, health status and is matched with risk stratification. The law would expect reasonable care and skill to be shown in minimising any potential risks for the patient participating in the exercise programme it is therefore, important that the exercise professional considers the referring clinician's intention and advice when developing the exercise programme. The exercise programme should be based on the patient's needs, preferences and long-term goals.

^{xvii} It is beyond the scope of this guidance to outline the principles of exercise programming and prescription for referred clients, the exercise instructor should have gained these competencies from the relevant Level 3 qualifications and exercise referral training. Exercise instructors working in ER schemes are advised to regularly update their knowledge and skills on the latest guidelines for exercise testing and prescription for specific medical conditions.

A written, personalised exercise plan should be produced and agreed with the patient and the patient should be given a copy. The written copy of the exercise programme provides an opening to explain fully what the patient is expected to do and discuss any potential risks if the programme advice is not carried out as directed. A copy of the exercise programme should also be kept on the patient's file. Patients should also be encouraged to keep a personal record of their activity, possibly in the form of a log, diary or chart.

If applicable, at the initial consultation the exercise professional should also inform the patient of any leisure facility protocols or other relevant information, for example, evacuation or emergency procedures, dress code, who to contact if a problem arises, how to use equipment and facilities safely etc.

Given that the initial exercise referral consultation involves a range of activities from pre-exercise screening, pre-exercise assessments, patient feedback and exercise programme design and prescription, developing a basic checklist of points to cover in the initial consultation meeting may be a good way of standardising delivery. An example checklist is presented in appendix 16, this list is by no means definitive and schemes are advised to develop a list based on their protocol for the initial exercise referral consultation.

5.1.5. <u>Provide a specific range of appropriate and agreed physical</u> <u>activities for a defined period of time</u>

Adherence to exercise programmes has been shown to average from 50 to 80% for the first 5 to 6 months of a programme. The majority of people dropout of an exercise programme during the first 12 weeks.⁵ Therefore, exercise programmes should be designed not only to improve health and fitness, but also to enhance long-term adherence.

Some patients entering an exercise referral scheme will not find traditional structured activities based at leisure facilities, such as gyms, desirable or convenient for initiating and/or maintaining an increased level of physical activity. Thus, it is imperative that exercise referral schemes include activities that patients are interested in and provide experiences that encourage long-term behaviour change. Even the most motivated patients will only stay with a displeasing activity for a limited time.

The nature of the exercise programme itself has a significant impact on participation and adherence to exercise interventions:

- Exercise programmes which are enjoyable and include variation in the types of activities on offer are most successful and have been shown to influence long-term adherence.⁵
- Poorer exercise compliance has been observed in exercise programmes where individuals exercise alone compared to exercise programmes incorporating opportunities for social interaction.⁶
- High intensity exercise programmes appear to be neither enjoyable nor well tolerated by the average participant who is exercising for general health and fitness. To promote long-term adherence the intensity should be sufficient to elicit and maintain health and/or fitness benefits, but not so intense as to be off-putting.

In addition, opportunities for physical activity should be at convenient times for potential participants and they should also be perceived as easily accessible. Accessibility and convenience are both necessary if physical activity is to become a lifelong habit. The patient should therefore be provided with a choice, where possible, which includes quality assured activities that are run external to those offered by the scheme providers. Furthermore, where appropriate, patients should be offered home-based programmes, as evidence suggests that home based programmes appear to be superior to centre-based programmes in terms of adherence to exercise (especially in the long-term).⁷

Community-based programmes or outdoor activities may well be the most popular options, particularly if they are convenient, safe and affordable and can be sociable. Supportive evidence for the use of outdoor activities is presented in a paper by Vuori; the author reported that the most popular venues for physical activity were outdoor sites especially walking and cycling trails.⁸

It is important however, that exercise referral schemes ensure that patients who prefer to exercise in the community or elect alternative activities, such as tai-chi or dance, are only referred to activities/programmes with an appropriately qualified and experienced professional. This is extremely pertinent for patients who have conditions which may place them in either the medium or high risk category in an exercise environment.

5.1.6. <u>Monitor patient progress and review the patient's exercise</u> programme

Patient monitoring is critical in the exercise referral context as many patients are likely to be new to exercise and uncertain about what to expect. Furthermore, due to the nature of the medical conditions an exercise professional is likely to encounter, there is a need to review the patient's exercise programme prior to exercise and to monitor the patient's progress during the exercise session to ensure patient safety.

The patient review prior to the exercise session allows the exercise professional to:

- Check for any contraindications to exercise.
- Gather information about any changes in the patient's health status, such as new symptoms, drugs or a deterioration of an existing condition.
- Modify the patient's exercise programme, if necessary.

During the exercise session, monitoring enables the exercise instructor to:

- Determine how well the patient is coping with the exercise programme.
- Check how the patient feels about the exercise programme.
- Identify any changes in the patient's response to exercise.
- Identify any changes that need to be made to the exercise programme.
- Provide continuing help and support to the client.

At the end of the exercise session the exercise professional should discuss progress and developments with the patient and agree any necessary adjustments to the exercise programme. An end of exercise session review also provides an opening for the exercise professional to raise any concerns about non-compliance to the exercise programme and to discuss the potential risks if the programme advice is not carried out as directed. A well-trained, highly motivated and enthusiastic exercise professional is one of the most important factors in promoting exercise adherence.⁴

Furthermore, the support and supervision offered by the exercise leader has been found to be crucial in maintaining motivation and adherence to an exercise referral programme.⁹

According to the NQAF exercise professionals should review the patient's progress at the middle, and at the end of the referral period.

At the middle of the referral period (often about 5 or 6 weeks) it enables the exercise professional to review and/or modify the patient's exercise programme, if necessary, and to set new goals. It also presents an opportunity to monitor changes in any health and fitness indicators and it provides a progress update for the referring health professional.

As previously reported only one-half of schemes conduct mid-point reviews and collect data about patient progress, however this assessment provides important feedback for the patient. It allows patients to see their progress, which can be motivating and help prevent drop-out from the scheme.

Guideline 11 (NQAF) recommends appropriate assessments should be conducted at the end of the referral period to monitor changes in exercise behaviour and relevant health and fitness indicators. The end of programme review also allows the exercise professional to discuss the patient's progress and strategies for maintaining an active lifestyle.

Details of the review and summary of progress should be forwarded to the referring health professional.

5.1.7. Identify and follow-up dropouts

As previously mentioned the exercise professional is an important factor in promoting exercise adherence and long-term behaviour change, therefore exercise professionals need to have a good understanding of behaviour change and how to identify and manage drop-out.

Physical activity programmes based on established behaviour change models can help patients new to physical activity anticipate and plan for events which might cause them to drop out of the scheme. It should be acknowledged and discussed with the patient that most people experience lapses in their physical activity at some point or another, either due to illness, injury or other factors.

Because most drop-out usually occurs early in the exercise programme it is important that exercise professionals are able to quickly identify patients who fail to attend. The majority of schemes collect routine data on patient attendance during the referral period either electronically at the point of entry to a leisure facility or via patient registers at each exercise session. The exercise professional and/or the scheme coordinator should regularly scrutinise this data to identify patients who are not attending. The National Quality Assurance Framework recommends that:

"If a patient does not attend the exercise programme for an unknown reason for successive sessions, for example two weeks, 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".

p.23 NQAF (2001)

As previously reported most schemes have systems in place to follow-up patients who fail to attend during the referral period, however for those schemes that do not this should be considered. It may be that one short phone call will make the difference in someone continuing with the scheme.

The exercise professional's ability to identify and follow-up dropouts can be an important factor in preventing a lapse in behaviour becoming more permanent dropout.

If a patient terminates their involvement in the exercise referral scheme, it is good practice to notify the referring practitioner and to keep a record of any communication and the patient's reason for dropping out, if known.

5.1.8. Ensure the referring health professional is kept informed of the patient's progress

According to the NQAF it is the exercise professional's responsibility to keep the referring health professional informed about the patient's attendance and progress throughout the scheme. Therefore it is important for the exercise professional to keep clear and accurate records whilst the patient is participating in the scheme.

While approximately 70% of schemes provide feedback to the referring health professional about their patient's progress, it should however, be acknowledged that a lack of feedback about patient progression has been identified as a barrier to referring for some health professionals.¹⁰

Scrutiny of several good quality scheme protocols has highlighted that information should be fed back to the referring health professional on a regular basis. These protocols suggest the most appropriate times for feedback are: after the patient's initial assessment; mid-point during the referral period and after the end of scheme assessment.

After the initial exercise referral consultation the NQAF stipulates that it is good practice for the exercise professional to send the referring health professional a summary of the patient's initial assessment results and basic details of the proposed physical activity programme (for example, frequency, duration, intensity and type of activity).^{xviii} This gives the referrer the opportunity to consider whether the proposed programme aligns with their intention and the initial advice given to the patient and the exercise professional.

^{xviii} It is recommended that exercise professionals check with referrers what level of detail they require regarding the proposed activity programme.

At the middle of the referral period (often about 5 or 6 weeks) it is recommended that the exercise professional provides the referring health professional with an update on the patient's progress. The level of detail provided in this mid-point update will depend on what systems are in place for monitoring patient progress within the scheme and level of feedback required by the referring health professional.

The exercise professional should also provide the referrer with an end of scheme progress report about their patient. The content of this report will depend on the referring healthcare professional's preference, but as a minimum it should include the results of any end of scheme assessments. A more detailed report may include an outline of the patient's physical activity programme and the patient's strategies for maintaining an active lifestyle.

Feedback about the patient's progress is vital as this is an integral part of the health practitioner's ability to maintain clinical responsibility for the patient. Furthermore the Medical Protection Society (2000)¹¹ stated that:

"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."

Information about patient progress can also be used to make a successful business case for exercise referral schemes.

5.1.9. Ensuring confidentiality of patient information

As participation in an exercise referral programme requires the disclosure, accumulation and maintenance of medical information NQAF states that:

"It is essential that the personnel delivering exercise to referred patients on an exercise referral scheme are bound by confidentiality." <u>p.15 NQAF (2001)</u>

Procedures must be followed to ensure that all patient information is securely stored with access limited to authorised personnel only. Staff should be trained in the legal framework covering the disclosure of confidential patient information. They should also be provided with the procedures for obtaining explicit consent and guidance on where to seek advice if they are unsure whether they should disclose such information.

No members of staff employed by leisure providers or exercise professionals should discuss individual patient details with other customers or other staff members who are not trained or designated to work with exercise referral scheme patients.



5.1.10. <u>Facilitate long-term support for patients to maintain</u> <u>increases in physical activity</u>

The objective of an exercise referral scheme is to provide sedentary individuals and individuals with long-term medical conditions with a positive introduction to being physically active. The introductory exercise programme should enable patients to maintain a physically active lifestyle, without dependence on the exercise professional in the longer term.

Thus, in order to achieve this objective the role of the exercise professional is crucial. The exercise professional can facilitate long-term behaviour change by:

- Providing positive feedback during the exercise sessions feelings of success will help build the patient's confidence in their ability to be active.
- Attributing positive changes in physical activity to the patient this will help reinforce their sense of personal responsibility for having successfully made changes to their physical activity and it will foster independence.
- Encouraging patients to sample a variety of activities some activities will be more appealing to some than others; patients need to find activities that they enjoy.
- Reinforcing the benefits of being physically active the more benefits people perceive will result from being physically active the more likely they are to make a strong personal commitment to being active.
- Helping patients to anticipate and prepare for brief lapses in their behaviour the more prepared patients are for any lapses in their behaviour the less likelihood of failure.
- Helping patients to set short-term and realistic long-term goals.
- Identifying sources of social support make use of existing networks such as walking groups, activity motivators or buddy systems.
- Offering a supportive environment or a boost of support from time to time: regular contact with an exercise professional tends to encourage sustained changes in physical activity, simple follow-up telephone calls can promote long-term adherence.¹²
- Having an appropriate exit strategy in place.
- Ensuring that clients are signposted to appropriate quality assured physical activity options after the programme. If possible look to providing subsidised rates.

Summary:

The information above provides background guidance on the roles and responsibilities of an exercise professional working within an exercise referral scheme. It draws upon evidence from relevant exercise referral guidance^{1,2} and information gathered from a number of existing schemes and outlines several recommendations which aim to strengthen the role of the exercise professional working with referred patients.

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Section 6: Guidance for Exercise Referral Scheme Coordinators





Section 6: Executive Summary

A critical success factor of any exercise referral scheme is the existence of a dedicated, knowledgeable and enthusiastic scheme coordinator. The aim of this section is to provide advice to professionals new to the delivery and coordination of exercise referral schemes and to offer a checklist for reflection for those professionals already performing this role.

This section will outline the roles and responsibilities of an exercise referral coordinator responsible for the development of a scheme from grass roots. It draws upon evidence from relevant exercise referral guidance^{1,2} and information gathered from a number of existing schemes which outlined the coordinator's role.

It is recommended that exercise referral coordinators familiarise themselves with the whole of the toolkit and do not just read this section, there are implications for the development of schemes contained across all of the chapters which will support scheme co-ordinators in meeting the checklist and recommendations contained in this chapter.

Checklist for developing or redesigning schemes:

- Set up a multi disciplinary Steering Group who will be responsible for setting the aims and objectives of the scheme, its operating procedures, protocols and monitoring and evaluation processes.
- Develop and agree the aims and measurable objectives of the scheme.
- Identify the required and available resources for the delivery of the scheme and determine any additional resources required – this includes financial requirements, staff, facilities, publicity etc.
- Design the scheme to meet the requirements of the local population whilst adhering to the National Quality Assurance Framework for Exercise Referral Systems.¹ This will include the following areas for decision making:
 - Determine the size and scope of the scheme.
 - Determine protocols for the operational procedures of the scheme including referral routes; inclusion and exclusion criteria; referral processes; who is eligible to receive referrals; the initial and subsequent consultation processes for programme reviews; exercise/activity opportunities provided by the scheme; monitoring attendance of patients/clients; exit strategies and medico legal responsibilities.
- Plan the monitoring and evaluation processes for the scheme.
- Engage with partners, referrers and service providers.
- Ensure exercise staff have the appropriate qualifications and are trained in the protocols and procedures for the scheme. Develop procedures for ongoing Continuing Professional Development (CPD) of staff.

- Ensure that Data Protection and Freedom of Information Act procedures are adhered to and that all staff receives appropriate training on these.
- Implement the scheme, recognising the need to revisit, adapt and revise protocols and procedures as required.
- Ensure that the monitoring and evaluation procedures for the scheme are implemented and utilised to inform future developments of the scheme.

Recommendations for exercise referral coordinators:

This section makes a number of recommendations for exercise referral coordinators to strengthen the development and delivery of schemes in the U.K.:

- Establish closer working relationships with primary care & other referring health professionals.
- Where possible, engage referring health professionals in the development of scheme protocols and operating procedures and consult with them regarding any proposed changes.
- Provide clear scheme protocols outlining roles and responsibilities of all partners engaged in the delivery and evaluation of the scheme.
- Map the characteristics of the local patient population against the competencies of local exercise professionals and local exercise opportunities to develop clear criteria regarding which patients the scheme can safely accommodate.
- Work with referrers to identify their training needs provide specific training about the scheme - aims, protocols, operating procedures etc and the benefits of the scheme to them and their patients, where necessary provide additional training about the benefits of physical activity for health.
- Work with referring practitioners to develop a more systematic approach to identifying suitable patients for referral, for example, targeting specific 'at risk' or underrepresented groups or link to other initiatives such as the NHS Health Checks and the "Let's Get Moving" Physical Activity Care Pathway.
- Develop criteria for referral which take account of the patient's health status, activity status and readiness to change.
- Provide referring health professionals with access to appropriate risk stratification tools, e.g. see Irwin and Morgan sample risk stratification tool in appendix 6.4.5.
- Where possible provide opportunities for patients to sample a diverse range of activities which are facility and non-facility based and at convenient times.
- Ensure that monitoring and evaluation processes for the scheme are developed, implemented and utilized to determine further developments to the scheme.

- Develop appropriate exit strategies, which:
 - Establish links with other local exercise providers and identify other suitable exercise opportunities for patients to explore after the referral period.
 - Develop local exercise referral networks to offer support and opportunities for interaction during and beyond the referral programme.
 - Consider opportunities to provide subsidised physical activity options.
- Explore opportunities to develop a referral programme which is not time limited.
- Develop more thorough patient monitoring procedures which track patients from the point of referral and at each stage of the scheme to determine the profile of patients: i.e. who does/does not take up the offer of referral; drops-out through the referral period, who completes the scheme and who continues to be active.
- Where possible introduce more systematic monitoring procedures to record the number of sessions patients attend.
- Agree the purpose of, and methods for, evaluation with all stakeholders and agree budgets for conducting the evaluation.
- Provide regular feedback to referring health professionals about the benefits of the scheme for their patients via newsletters, e-bulletins.
- Regularly verify the qualifications and training of existing and new exercise professionals.

Section 6: Guidance for Exercise Referral Scheme Coordinators

A critical success factor of any exercise referral scheme is the existence of a dedicated, knowledgeable and enthusiastic scheme coordinator. The aim of this section is provide advice to professionals new to the delivery and coordination of exercise referral schemes and to offer a checklist for reflection for those professionals already performing this role. This section outlines the roles and responsibilities of an exercise referral coordinator responsible for the development of a scheme from grass It draws upon evidence from relevant exercise referral guidance^{1,2} and roots. information gathered from a number of existing schemes which outlined the coordinator's role. It is recommended that exercise referral coordinators familiarise themselves with the whole of the toolkit and do not just read this section, there are implications for the development of schemes contained across all of the chapters support scheme co-ordinators in meeting which will the checklist and recommendations contained in this chapter.

The National Quality Assurance Framework¹ highlights that National Occupational Standards for the role of the exercise referral scheme coordinator do not exist; generally guidelines about the roles and responsibilities of the individual coordinating the scheme are drawn up locally for each scheme. These roles and responsibilities may vary depending on: where the individual is employed (within a dedicated exercise setting or within a healthcare setting); their professional background (e.g. health promotion specialist, doctor, nurse or allied health professional, exercise scientist, advanced exercise instructor); and the status of the scheme (i.e. in-development, pilot stage, well-established, under-going review).

6.1. Setting up the Scheme

In setting up a scheme it is important that the coordinator recognises the key areas of the National Quality Assurance Framework¹ that relate to the development of a quality assured scheme and that they have an understanding of the wider physical activity context within which the scheme will be implemented e.g. Let's Get Moving Pathway³ NHS Health Checks.⁴

The following steps are recommended when developing a new scheme:

6.1.1. <u>Set up a Steering Group</u>

The planning of an exercise referral scheme should be undertaken by a multidisciplinary group. This group should consist of representatives from the relevant primary care trust, health board or health commission, a leisure provider, a general practitioner, other potential referrers and an exercise professional. It is also good practice to include a member of the clinical governance team from one of the relevant health partners and, if practical, a representative from a patient-user group.

The steering group will be responsible for: agreeing the aims and objectives of the scheme; developing the fundamental operating procedures needed to implement the scheme (for example, protocols, quality standards) and deciding what monitoring and evaluation procedures will be used.

6.1.2. Agree Aims and Objectives of the Scheme

It is important to be clear about what the scheme intends to achieve and that these intentions are realistic and can be measured.

The aims (or aim) should describe in general terms what the scheme is trying to achieve. Whereas the objectives should be much more specific, they outline the desired end state (or result or outcome) to be achieved within a specified time period. Objective setting is a critical stage in the planning of an exercise referral scheme.⁵ Objectives should be attainable and expressed in ways that are as measurable as possible, for example specifying quantity, quality and a time when they will be achieved. The steering group will need to agree the aims and objectives of the scheme before any further planning can be undertaken.

Example: Yew Tree Exercise Referral Scheme aims to increase the physical activity levels of patients at risk of developing coronary heart disease.

The objectives are to:

- Screen the practice populations to identify all patients with a Framingham 10 year predicted CHD risk of 20% or more.
- Invite 15% of all 'at risk' patients to take part in the exercise referral scheme within 6 months of being identified.
- Increase the physical activity levels of all patients attending the exercise referral scheme by 50% at the end of the 12 week scheme.

6.1.3. Identify Resources

The steering group should decide what resources are going to be used in order to deliver the exercise referral scheme. Identify what resources are already available, what resources will be needed, what additional resources will need to be acquired and what level of funding is required.

- Identify all the people who will be involved in the delivery of the scheme, referrers, leisure providers, exercise professionals, scheme administrator, evaluation specialists, others?
- Find out what local leisure facilities, exercise classes and groups already exist and whether these are fully utilised.
- Identify whether any relevant material resources are available, for example leaflets about local leisure opportunities, training packs.
- Ascertain what financial resources are available and determine what financial resources are needed. The cost of running an exercise referral scheme will depend on the type of scheme to be delivered and what existing staff and facilities are available. Costs that need to be considered include: training of exercise instructors and health professionals; facility charges; purchase of equipment; publicity/ promotional and operational/administrative materials; other subsidies or payments such as transport, gym membership, GP enhancements; evaluation.

6.1.4. Design the Scheme

Each stakeholder may have a different view about how the scheme should operate. It is therefore essential, right from the start, to identify and reconcile as far as possible these differing views. The bottom line is the scheme must meet the requirements of the local population and the standards of the National Quality Assurance Framework. The following steps should be considered in designing the scheme:

Determine the Size and Scope of the Scheme

The steering group will need to agree, as early as possible about the size and the scope of the scheme. This will depend on the local population (e.g. age, health profile, nature and extent of medical conditions) and the resources and capacity available locally (for example facilities, staff numbers and their qualifications) and any funding that may be acquired.

Determine Protocols

The protocols are perhaps <u>**THE**</u> most important element of an exercise referral scheme as they specifically relate to the operational procedures of the scheme, therefore it is essential to make these clear. Furthermore to ensure schemes are operating efficiently and effectively it is important that established protocols are monitored and reviewed regularly.

Each scheme will develop its own protocols based on local priorities, however there are common themes which all exercise referral scheme protocols should address and whatever is developed locally, should reflect national quality standards.

Scheme protocols typically include information about:

- 1. Referral routes.
- 2. The inclusion and exclusion criteria.
- 3. The referral process.
- 4. Who is eligible to receive referrals.
- 5. The initial exercise referral consultation.
- 6. Exercise opportunities.
- 7. Monitoring patient attendance.
- 8. **Programme review.**
- 9. The exit strategy.
- 10. Follow up.
- 11. Medico-legal responsibilities.

1. Referral routes:

This section should include information about who can refer into the scheme and how referrals from allied health professionals will be managed, if applicable. Examples of the range of allied health professionals who might be suitable to refer into a scheme can be found in the relevant section on current practice. It should be noted that the NQAF explicitly states that:

"<u>ONLY</u> a medically qualified individual, or another allied health professional working within a protocol with delegated authority, can initiate a referral into an exercise referral scheme."

p.39 Guideline 6 NQAF (2001)

The term allied health professional^{xix} includes roles such as Physiotherapists, Occupational Therapists, Psychologists, Dieticians, or other medically trained professionals who often have a remit regarding further diagnoses and determining treatments for patients. Non-Allied Health Professionals e.g. Health Trainers are not medically trained or qualified to diagnose and treat patients and as such the acceptance of referral forms directly from Health Trainers or other non- allied health professionals should not be initiated by schemes. Non-allied health professionals can play an important part in facilitating referrals to schemes, working with primary care practitioners and allied health professionals. However the referral form needs to be completed and signed by a medically qualified individual or allied health professional.

2. The inclusion and exclusion criteria:

The decision, about which patients are suitable or not suitable for referral into a scheme, should be made on the basis of an agreed set of criteria. The NQAF recommends that schemes should establish medically-led selection criteria that relate to individual or community health needs.

To enable schemes to agree and develop clear criteria regarding which patients it can safely accommodate, it is good practice to map the characteristics of the patient population against the competencies of local exercise professionals and the exercise facilities and services available. This mapping should be guided by the NQAF contextual diagram for matching participant characteristics with exercise professional expertise (see appendix 12). Referral from specialist clinic and rehabilitation routes should only be initiated if the scheme's exercise professionals have the relevant expertise e.g. referrals from Cardiac Rehabilitation Phase 3 should only be accepted if schemes have access to qualified Phase IV Cardiac rehabilitation instructors. (Refer to section 9 for further information on qualifications and training for professionals working with referred clients: to download return to http://www.bhfnc-exercisereferral\downloads.html).

The exclusion criteria should clearly indicate which patients the scheme is not suitable for, while these may be based on a range of factors, most exclusions are due to medical reasons (refer to section 2.1.7 in Section 2: A snapshot of exercise referral schemes). The outcomes of the mapping process recommended above can also be used to define which patient population groups cannot be accommodated within the scheme due to a lack of professional expertise.

^{xix}Further information on allied health professionals can be found at <u>www.ahpf.org.uk</u>.

In this section of the protocol it might also be useful to distinguish between patient suitability for referral and the actual need for referral. Given that the majority of the population are inactive, many patients are likely to be eligible for an exercise referral scheme. However, many of these patients are unlikely to require supervised exercise in the guise of an exercise referral scheme. For the majority of the population recommendations to become more physically active in order to gain health benefits may suffice. This also presents a good opportunity for health professionals to sign-post these patients to other local schemes, such as led-walks.

This section should also consider how potentially eligible disabled patients, who may require 1:1 supervision, can be accommodated in a scheme. The Disability Discrimination Act⁶ would expect an exercise referral scheme to anticipate how it would accommodate a disabled patient if the above scenario should arise. Schemes should have a contingency plan in place which would need to show a willingness to make reasonable adjustments to accommodate disabled patients who require 1:1 support, i.e. provide an alternative service or funding for an additional instructor or a support worker for this individual patient. According to the law,⁶ schemes cannot offer a lesser service for disabled individuals. Each scheme will need to review this at a local level in relation to what is considered to be reasonable and may want to seek advice from HM Government Office of Disability Issues.^{xx}

There are significant benefits from investing time in developing clear inclusion and exclusion criteria in consultation with medical professionals and scheme providers, it:

- Provides an opportunity to clarify the purpose of the scheme.
- Reduces the number of inappropriate referrals.
- Clarifies whether the scheme is suitably equipped to accept high risk patients.

The Medical Protection Society⁷ stated that:

"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."

3. The referral process:

This section of the protocol should include information about how each element of the referral process will operate or be managed, and specifically cover the following issues:

- How patients will be recruited, e.g. opportunistically through routine consultations; targeted via existing disease registers or via the vascular risk check programme; patient initiated/self referral.
- Who is responsible for booking the patient's initial exercise referral consultation, e.g. health professional, patient, exercise professional, central administrator.
- How information and paperwork will be transferred between the referring practitioner and the exercise professional. It is recommended that referral forms are no longer than 2 sides of A4 - if the referral form is too lengthy this could act as a disincentive for GPs to refer or they might not be fully completed. The referral process could be simplified by permitting GPs to print out drug and/or history and include this with the referral form.

^{**} Further information on the Office of Disability Issues can be found at: http://www.odi.gov.uk

- What information will be transferred and where, if essential information is not provided or accessible how this will be managed. For example, some referring allied health professionals might not have full knowledge of, or access to a patient's medical information and therefore, may be unable to complete all sections of a referral form, how this is managed needs to be agreed in the protocol. If the allied healthcare professional is unable to provide basic information about the patient's health status, e.g. current blood pressure, heart rate reading and details of medication it is recommended that the patient seeks a referral from their GP. GP's should not be placed in a position whereby they have to accept somebody else's referral and then endorse it without having the opportunity to discuss this with the patient.^{xxi}
- How inappropriate referrals will be managed.
- How the patient's progress will be fed back to the referring practitioner.
- How information concerning any changes in the patient's health status will be transferred to the exercise professional.
- How long a referral is valid for.

In order to encourage GPs and other allied health professionals to become involved in referring patients for exercise it is important that guidelines are simple and they do not feel that they are being asked to take on responsibilities for which they are ill equipped.⁷

4. Who is eligible to receive referrals:

This section should specify what qualifications and professional competencies are required of those professionals who can receive referrals. According to the NQAF the minimum qualifications recommended for exercise professionals devising exercise programmes for referred patients are:

- Level 3 advanced instructor.
- Recognised exercise referral qualification.
- Relevant CPR qualification.

In addition, the exercise professional should have current status of Level 3 on the Register of Exercise Professionals^{xxii} (REPs)⁸ and possess appropriate insurance.

In February 2005, the General Medical Council (GMC) and Medical Defence Union (MDU)⁷ issued a statement which said:

"The MDU advises doctors that it goes against GMC guidance to refer a patient to a professional not registered with a statutory body. One notable exception are exercise professionals registered with the Register of Exercise Professionals (REPs) as this organisation is a Department of Health recognised body and the GMC has indicated it would have no concerns about a doctor referring a patient to someone on that register."⁷

There is a need to reassure health professionals of the competencies of the staff who are receiving referrals, therefore procedures for verifying and monitoring the

^{xxi} Recommendation from Royal College of General Practitioners (2009)

^{xxii} REPs is an independent public register which recognises the qualifications of exercise and fitness professionals in the UK. REPs provides a system of regulation for instructors and trainers to ensure that they meet the health and fitness industry's agreed National Occupational Standards.

qualifications and training of existing and new exercise referral instructors could be included in this section of the protocol. (Refer to section 9 for further information on qualifications and training for professionals working with referred clients: to download return to <u>http://www.bhfnc-exercisereferral\downloads.html</u>).

It is recommended best practice that all staff working on the scheme have a CRB check undertaken due to the potential for staff to be working with adults who could be considered to be vulnerable.

5. Initial exercise referral consultation:

Details of key elements of the initial exercise referral consultation should be outlined in this section of the protocol, this might include information on:

- Reviewing referral paperwork transfer form, patient consent.
- Pre-exercise screening PAR-Q⁹ or equivalent.
- Pre-exercise assessments procedures for conducting tests, how to interpret the results, how to present results to the patient.
- Motivational interviewing assessment of readiness to exercise, barriers, activity goals and preferences.
- Criteria for risk stratifying the patient.
- Development of the exercise programme patient centred.
- Patient's responsibilities attendance, following programme advice.
- Programme monitoring how to keep a record of the exercise programme, monitor exercise intensity.
- Relevant leisure facility protocols evacuation, emergency.

6. Exercise opportunities:

The location and accessibility of the scheme is a key factor in its potential success. Travel distance, cost and the time involved are significant barriers to using recreational facilities; research shows that the rate of use of a recreational facility falls progressively as the distance grows between the user's home and the facility.⁹ Also opportunities for physical activity should be at convenient times for potential participants; for that reason consideration should be given to the differing needs of the patient population, i.e. single parents, full-time workers, unemployed, retired.

As previously noted in section 5, some patients entering an exercise referral scheme will not find traditional, structured activities based at leisure facilities, such as gyms desirable or convenient for initiating and/or maintaining an increased level of physical activity.¹⁰ In order to improve short-term adherence to the referral programme and increase the likelihood of long-term behaviour change, where possible, patients should be provided with a range of activities (including home based and unstructured activity) which cater for different needs and preferences.¹¹ However, this needs to be balanced against the facilities, activities and staffing available locally.

This section of the scheme protocol should clearly describe the programme components, what is to be provided and what standards of performance, outputs and outcomes are expected. For example:

- Exercise opportunities, for example the range and location of activities available to referred patients.
- Model of delivery the frequency and duration of the referral period.
- The costs to the patient.

- Regulations and procedures for transferring patients to another exercise professional, i.e. when and if this is appropriate, responsibilities of the other professional.
- Operational requirements for exercise facilities: health, safety and insurance requirements, risk assessment of the exercise environment.

Please refer to the guide to qualifications and training for further information on the process for widening the activities available for exercise referral clients and the qualifications that staff will require to enable this to happen effectively.

7. Monitoring patient attendance:

As previously noted in section 5, adherence to exercise programmes has been shown to average from 50 to 80% for the first 5 to 6 months of a programme. The majority of people dropout of an exercise programme during the first 12 weeks.¹² Given this, patient monitoring is going to be crucial; schemes need to have clear guidelines about how they will monitor patient attendance and follow-up patients who either do not attend the initial consultation meeting or during the referral period. The NQAF provides guidance on timelines and processes for following up patients and what to do about patients who drop-out.

In this section of the protocol, schemes might also want to outline how they plan to capture data on the reasons why patients fail to attend a programme.

Schemes should consider developing protocols to enable patients who have dropped out of the scheme to return to their programme under the original referral, providing that their health status has not changed. Implementing such a policy would enable schemes to support patients back into activity, without creating pressure on the capacity of schemes that may occur if patients are frequently rereferred for initial assessments. Such a policy would ensure that patients are not caught in a loop of constant re-referrals. Some current schemes allow patients to re-enter a scheme up to 12 weeks after they have dropped out of the activities, under the initial referral, providing that there has been no change to their health status. The time period is often linked to policies on how long a referral form is valid for once it has been signed by the health professional. It is recommended that scheme coordinators ensure that there is some flexibility in the protocols for returning patients due to the nature of certain chronic health conditions which may hinder a patient's ability to adhere to their programme e.g. mental health, rheumatoid arthritis.

8. Programme review:

The NQAF recommends that all referred patients should be offered a programme review at some point during the referral period and at the end of the referral period. The details of how and when this will occur, what this involves and who is responsible for this should be outlined in the scheme protocols. In addition, this aspect of the protocol should also identify how, when and in what format this information will be fed back to the patient and the referring practitioner.

9. Exit strategy:

There comes a point when a patient will have to exit the referral programme and this aspect of the protocol should outline how this is to be managed. A good quality exit strategy is going to be crucial if physical activity behaviour is to be maintained over the longer-term.

A quality exit strategy might include:

- Information about similar activities taking place elsewhere in the community and circulating details.
- Opportunities for patients to sample a variety of activities some activities will be more appealing to some than others.
- The undertaking of an updated PAR-Q and a letter confirming completion of the Exercise Referral Scheme to aid the patient in moving onto other activities.
- Strategies for helping patients to adhere to long-term goals.
- Information about sources of social support make use of existing networks such as walking groups, activity motivators or buddy systems.
- Dedicated opportunities for patient support from time to time regular contact with an exercise professional tends to encourage sustained changes in physical activity, simple follow-up telephone calls or a welcome back day can promote long-term adherence.¹³

10. Follow Up:

It is recommended that schemes implement systems to monitor and evaluate the physical activity levels of clients up to 1 year after completion of the referral programme to determine longer term behaviour change. This should be agreed in the service specification and can be undertaken through a variety of means e.g. phone calls, questionnaires, face-to-face consultation.

11. Medico-legal responsibilities:

All parties involved in exercise referral schemes need to be clear about the medicolegal aspects of referrals for exercise. This aspect of the exercise referral protocol should outline what these are and the need for professionals to regularly update their knowledge in this area.

Different aspects of the scheme protocol will be more relevant to one partner than another; therefore it is good practice to have an overarching protocol for the scheme coordinator and specific protocols for the referring practitioners, leisure providers and exercise professionals.

6.1.5. <u>Agree legal requirements for data protection, disclosure of</u> <u>information and ensuring confidentiality of patient</u> <u>information</u>

Exercise referral processes require the disclosure, accumulation and maintenance of medical information. The NQAF states that:

"It is essential that the personnel delivering exercise to referred patients on an exercise referral scheme are bound by confidentiality." <u>p.15 NQAF (2001)</u>

All organisations that handle personal information are required by law to adhere to the Data Protection Act.¹⁴ The Act covers the way in which organisations process personal information and the disclosure of information to individuals regarding computer and paper records that are held regarding them.

The Act works around eight key principles to ensure that personal information is:

- Fairly and lawfully processed.
- Processed for limited purposes.
- Adequate, relevant and not excessive.
- Accurate and up to date.
- Not kept for longer than is necessary.
- Processed in line with your rights.
- Secure.
- Not transferred to other countries without adequate protection.

This effectively means that clients can request access to their records and any correspondence such as emails and letters regarding them. It should be made clear to all staff on schemes that patients can request to see the records that are held on them and as such staff should ensure that all information is recorded in a professional and factual manner.

The Freedom of Information Act¹⁵ gives the public a general right of access to official information held by most public authorities. The Act sets out a number of requirements that public authorities must adhere to including: an approved publication scheme for documentation; processes for dealing with information requests and when these requests are exempt from the Law.

Due to the potentially sensitive nature of the information that exercise referral schemes may hold on their clients it is imperative that schemes are adhering to the Data Protection Act. As such it is recommended the exercise referral scheme coordinators know their organisation's Data Protection and Freedom of information Policies^{xxiii} and ensure that all staff receive training on and adhere to the procedures regarding this.

Procedures must be followed to ensure that all patient information is securely stored with access limited to authorised personnel only. Staff should be trained in the legal framework covering the disclosure of confidential patient information. They should also be provided with the procedures for obtaining explicit consent and guidance on where to seek advice if they are unsure whether they should disclose such information.

Consideration must be given to the security measures required for databases of information gathered by schemes, the use of computer equipment away from secure bases, for example the use of lap tops in outreach settings, and the secure storage of patient information by outreach instructors.

No members of staff employed by leisure providers or the exercise professionals working on the scheme should discuss individual patient details with other customers or other staff members who are not trained or designated to work with exercise referral scheme patients.

^{xxiii} Further information on compliance with the Data Protection Act and Freedom of Information Act can be found at <u>www.ico.gov.uk</u>

6.1.6. Plan Evaluation

It is vital that evaluation is planned before any work starts, as this will avoid misunderstanding and false expectations. All stakeholders need to agree on the evaluation methods and it is imperative that the resources (people, finances) necessary for systematic evaluation are built in from the inception of schemes. Further information on how to evaluate exercise referral schemes is provided in Section 8: A guide to evaluating exercise referral schemes (to download a copy of this section return to: http://www.bhfnc-exercisereferral/downloads.html).

6.1.7. Engage Partners

An exercise referral scheme can only be delivered through partnerships between healthcare professionals and exercise providers. The scheme coordinator is likely to be responsible for engaging the delivery partners; therefore they will need to have good communication and influencing skills. The National Occupational Standard B17 sets out core competencies for working in partnership with organisations and professionals to promote physical activity and its benefits; it is worthwhile using these to prepare for meetings with prospective partners (see appendix 17).

• Engage referrers:

Healthcare professionals are the main access point for entry to an exercise referral scheme, thus securing their involvement will be a critical factor in setting up a scheme; without the referrers the scheme is a non-starter. As previously discussed in section 3, physical activity is not seen as a priority for many health professionals; therefore the way information about the exercise referral scheme and the associated operational procedures is presented at the primary care level may have implications for practitioners' involvement.¹⁶

Presenting information about how the scheme has been developed and shaped in partnership with other healthcare professionals may increase a prospective referrer's confidence in the efficacy of the scheme for them and their patients. Section 4 of the toolkit provides guidance for referring healthcare professionals which can be used in preparation for meetings with potential referrers. In addition, a quick reference guide to exercise referral schemes has been developed for healthcare professionals; this guide can be modified to incorporate local protocols (refer to section 4).

Once onboard, a practitioner's confidence to make referrals will be increased when they have a greater understanding of the processes, aims, objectives and benefits of the scheme.¹⁶ Training sessions and practical resources to assist healthcare professionals will need to be provided. The exercise referral coordinator will need to:

- Explain the scheme protocols and relevant paperwork.
- Ensure all referring health professionals understand the terms and conditions of their involvement.
- Verify that all referring practitioners have signed the declaration of commitment form which ratifies their adherence to the scheme protocols and operational procedures (sample sign-up forms for GPs and allied healthcare professionals are presented in appendix 18. and 19 respectively).
- Arrange training for all designated referrers.
- Provide copies of all relevant promotional and administrative resources.

- Provide regular monitoring and evaluation reports.
- Manage any problems which arise and respond to correspondence in a timely manner.
- Be accessible as a source of support and information.

Sharing Practice:

- Insisting referrers attend training as a pre-condition to involvement in the exercise referral scheme has been shown to improve the quality of referrals and the whole system.
- Identifying which patient groups are more likely to take up the referral offer and which patient groups are more likely to drop out enables referrers to make more informed decisions on the appropriateness of a referral for different patients and increases the likelihood of programme compliance.

Tips for engaging referrers:

- 1. Develop a Referral Champion in each Practice Based Commissioning group to promote the scheme and discuss the merits of the scheme from a medical perspective.
- 2. Make contact with the practice managers in the surgeries and offer to provide a brief session on the scheme at a future practice meeting.
- 3. Develop a referrers' newsletter/briefing to keep them up to date on the scheme's progress, use case studies of patients etc to give real life examples of the difference the scheme has made to individuals and include brief interviews with referrers who regularly refer to the scheme.
- 4. Ask specialist referrers such as Physiotherapists, Mental Health Specialists etc to support staff on the scheme by providing an annual training session relevant to the patients that they will be referring through to the exercise professionals.
- 5. Offer to set up outreach sessions at appropriate surgeries such as chair based sessions and health walks

• Engage service providers:

The exercise referral scheme concept may have to be sold to some prospective leisure and fitness service providers who cannot see the benefits of investing time and staff to a scheme which may appear unlikely to make a profit. The advantages of a scheme should be highlighted, these include: attracting a previously 'untapped' market into centres during predominantly off-peak hours; attracting increased occasional use of a facility during other times by referred patients and their friends and family; the possibility of referred patients taking up centre membership after the referral period and providing a good public relations opportunity.

Once the leisure and fitness providers have agreed to be involved in the scheme, the exercise referral coordinator will need to agree business plans for the particular services for which each provider is responsible. The coordinator will be responsible for ensuring these plans align with the scheme protocols and operating procedures.

The exercise referral coordinator will need to provide regular training for the service providers and the exercise referral instructors regarding:

- Scheme protocols and their role in receiving referred clients.
- Procedures for ensuring confidentiality of patient data.
- Legal responsibilities.
- Monitoring patient attendance;.
- Recording and analysing activity data.
- Health and safety requirements at facilities receiving referred clients.

In addition, the exercise referral coordinator will be responsible for ensuring the leisure providers understand the arrangements for recruiting and selecting appropriately qualified exercise and fitness staff to work with referred clients at their facilities. The exercise referral coordinator needs to be accessible as a source of support and information for all providers engaged in the delivery of the referral programme.

Good links with the leisure providers and exercise instructors are important if suitable, attractive and high-quality activity sessions are to be timetabled within leisure facilities at convenient times for referred patients.

6.1.8. Implement the Scheme

Putting the scheme into action is the most exciting part and it is always worth making a final check to ensure that no significant changes have occurred during the development process. For example, if the only qualified level 4 cardiac rehabilitation exercise instructor has decided to take up a new appointment, then a plan to provide an integrated phase IV cardiac rehabilitation service as part of the scheme will need to be reviewed. It is likely that a lot of effort will have gone into the development of the scheme and it may be difficult to redesign parts or all of it, however the need to adapt and be flexible is essential even after the scheme has been developed. If evaluation is built into each step of the scheme then changes can be integrated and the scheme revised.

6.1.9. Monitor and Evaluate the Scheme

According the National Quality Assurance Framework:

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

p.46 NQAF (2001)

Previous reviews have identified a lack of systematic evaluation of exercise referral schemes.¹⁷ In order to ensure that schemes are sustainable all exercise referral schemes should have procedures and resources in place to evaluate and demonstrate the efficacy of their scheme. Further information on how to evaluate exercise referral schemes is provided in Section 8: A guide to evaluating exercise referral schemes.

Sharing Practice: activeSTART – Central and East Cheshire PCT

Leisure Providers / Exercise and Activity Professionals

Quality Standards

- All leisure providers, activity and exercise professionals involved with the *activeSTART* scheme will have access to the Operational Procedures Manual and a commitment to comply with the scheme guidelines and protocols.
- All leisure providers, or a representative on behalf of a leisure provider, and exercise and activity professionals will have read and signed the Declaration of Commitment form confirming their adherence to the protocols of the *activeSTART* scheme.
- Identified leisure providers, activity and exercise professionals will be sensitive to the needs of the *activeSTART* patients and will provide appropriate support and advice if and when needed.
- All leisure providers, activity and exercise professionals who have agreed to accept *activeSTART* patients will do so at the discounted rate upon presentation of the *activeSTART* ID card.
- All leisure providers, activity and exercise professionals will assist in the recording and provision of information to the *activeSTART* scheme co-ordinator of *activeSTART* patient attendance to activities or facilities.
- All activity and exercise professionals employed by leisure providers, and especially those with direct contact with *activeSTART* patients will be encouraged to join the National Register of Exercise Professionals and work towards achieving Level 3 Advanced Instructor status, as well as attending local training and information events organised by the *activeSTART* scheme coordinator.
- It will be the responsibility of the leisure providers to inform the *activeSTART* co-ordinator of any training requirements or service problems that may arise through staff turnover, leave or sickness. New members of staff should not be involved in the *activeSTART* scheme unless they have the necessary qualifications and access to the appropriate information.
- If attending the fitness suite facilities, all *activeSTART* patients will receive a fitness suite induction with identified and appropriately qualified instructors (GP referral), and follow recommended amendments for individual patients and their condition(s) provided by the *activeSTART* scheme advisors / co-ordinators. It is recognised by the *activeSTART* scheme that the supervision of a patient during their attendance to the facility and during their programme may not always be done by the identified instructors. During such times, patients should be able to have access to staff, although not exclusive access, who are trained to a minimum standard of emergency first aid and with a recognised gym instructors qualification denoting competence in the operation of fitness equipment and client safety.
- At the fitness suite induction and / or class attendance the leisure centre staff will inform the activeSTART patient of any facility protocol (such as evacuation procedures, dress code etc) and make them aware of safe use of the equipment and facility.
- All activity and exercise professionals in the recommended facilities used by *activeSTART* patients will be first aid trained.
- **Confidentiality:** All *activeSTART* patient information provided by the scheme co-ordinator and advisors or by the patient will be kept secured, with access limited to staff working with the *activeSTART* scheme and *activeSTART* patients.
- Confidentiality: No members of staff employed by leisure providers or exercise and activity professionals should discuss individual patient's details with other customers or other staff members not trained or designated to work with *activeSTART* patients.

Summary:

The information above aimed to provide background guidance on the roles and responsibilities of the exercise referral coordinator in developing and implementing a new exercise referral scheme. It also provides a mechanism for exercise referral coordinators to review the design and delivery of existing schemes.

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6.2. <u>Recommendations for Exercise Referral Coordinators</u>

Based on the information above, this section makes a number of recommendations for exercise referral co-ordinators to strengthen the development and delivery of schemes in the U.K.:

- Establish closer working relationships with primary care & other referring health professionals.
- Where possible, engage referring health professionals in the development of scheme protocols and operating procedures and consult with them regarding any proposed changes.
- Provide clear scheme protocols outlining roles and responsibilities of all partners engaged in the delivery and evaluation of the scheme.
- Map the characteristics of the local patient population against the competencies of local exercise professionals and local exercise opportunities to develop clear criteria regarding which patients the scheme can safely accommodate.
- Work with referrers to identify their training needs provide specific training about the scheme - aims, protocols, operating procedures etc and the benefits of the scheme to them and their patients, where necessary provide additional training about the benefits of physical activity for health.
- Work with referring practitioners to develop a more systematic approach to identifying suitable patients for referral, for example, targeting specific 'at risk' or underrepresented groups or link to other initiatives such as the NHS Health Checks and the "Let's Get Moving" Physical Activity Care Pathway (go to the useful links and resources page to obtain further information on these initiatives).
- Develop criteria for referral which takes account of the patient's health status, activity status and readiness to change.
- Provide referring health professionals with access to appropriate risk stratification tools e.g. see Irwin and Morgan sample risk stratification tool in appendix 6.4.5.
- Where possible provide opportunities for patients to sample a diverse range of activities which are facility and non-facility based and at convenient times.
- Ensure that monitoring and evaluation processes for the scheme are developed, implemented and utilised to determine further developments to the scheme.
- Develop appropriate exit strategies, which:
 - Establish links with other local exercise providers and identify other suitable exercise opportunities for patients to explore after the referral period.
 - Develop local exercise referral networks to offer support and opportunities for interaction during and beyond the referral programme.
 - Consider opportunities to provide subsidised physical activity options.
- Explore opportunities to develop a referral programme which is not time limited.

- Develop more thorough patient monitoring procedures which track patients from the point of referral and at each stage of the scheme to determine the profile of patients: i.e. who does/does not take up the offer of referral; who drops-out through the referral period, who completes the scheme and who continues to be active.
- Where possible introduce more systematic monitoring procedures to record the number of sessions patients attend.
- Agree the purpose of, and methods for, evaluation with all stakeholders and agree budgets for conducting the evaluation.
- Provide regular feedback to referring health professionals about the benefits of the scheme for their patients via newsletters, e-bulletins.
- Regularly verify the qualifications and training of existing and new exercise professionals.

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Section 7: Guidance for Exercise Referral Scheme Commissioners





Section 7: Executive Summary

Commissioners have a crucial role to play in ensuring that high quality services are commissioned to meet local needs and priorities and verifying that these services are delivered efficiently and effectively. The purpose of this section is to guide commissioners through the key steps of commissioning exercise referral schemes. A four stage model of commissioning is suggested as a logical approach for commissioners to improve the quality and outcomes of exercise referral schemes.

This four stage model focuses on:

- Assessing individual and community needs.
- Designing the service and establishing operational standards in partnership with service users and stakeholders.
- Commissioning services to meet local needs and agreed standards.
- Managing and evaluating the service provider's performance.

A series of questions are raised under each stage of the commissioning cycle which are drawn from existing exercise referral policy, national guidance for world class commissioning and local commissioners' experiences with the goal of improving the effectiveness of exercise referral schemes.

Section 7: Guidance for ERS Commissioners

The aim of this section is to provide commissioners with an overview of the protocol issues and national guidance for developing and improving the commissioning of local exercise referral schemes. The guidance takes account of, and supports the Government's intent for *World-Class Commissioning*^{2,xxiv} To this end, this section will highlight the key steps advised for commissioning exercise referral schemes in order to demonstrate world class commissioning competencies. However this guidance recognises that, although in many cases the commissioning will be carried out by a PCT or Local Health Board, there may also be joint commissioning arrangements, other single commissioning organisations, and in some circumstances the commissioners and providers may exist within the same organisation, for example as in the case of a charitable trust.

This advice for commissioners has been identified from a review of national guidance and from consultation and discussion with a number of healthcare professionals engaged in exercise referral schemes. In addition to the steps outlined in this section, it is recommended that commissioners familiarise themselves with the whole of the toolkit and do not just read this section, there are implications for commissioning of schemes across all of the guidance chapters which will aid commissioners in developing a high quality scheme.

7.1. Towards World Class Commissioning of ERS

Improving the commissioning of exercise referral schemes is at the heart of improving the quality and effectiveness of such interventions. World class commissioning is a statement of intent to invest public funds:

"To secure the maximum improvement in health and well-being outcomes from the available resources" p.2 Department of Health/Commissioning (2007)¹

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The emphasis of world class commissioning is to achieve better outcomes through:

- Better health and well-being for all
 - People live healthier and longer lives.
 - Health inequalities are dramatically reduced.
- Better care for all
 - Services are evidence-based, and of the best quality.
 - People have choice and control over the services that they use, so they become more personalised.
- Better value for all
 - Investment decisions are made in an informed and considered way, ensuring that improvements are delivered within available resources.
 - PCTs work with others to optimise effective care.

p4. Department of Health/Commissioning (2007)¹

^{xxiv} Further information on world class commissioning and the competencies described above is available at <u>www.dh.gov.uk/commissioning</u>

The eleven organisational competencies require world class commissioning PCTs to:

- Locally lead the NHS.
- Work with community partners.
- Engage with the public and patients.
- Collaborate with clinicians.
- Manage knowledge and assess needs.
- Prioritise investment.
- Stimulate the market.
- Promote improvement and innovation.
- Secure procurement skills.
- Manage the local health system.
- Make sound financial investments.

p.2 Department of Health/Commissioning (2007a)²

The Scottish Government's strategy for a healthier Scotland 'Better Health, Better Care: Action Plan' has central aims to improve:

- Patient participation.
- Healthcare Access.
- Scotland's Public Health.
- Health Inequalities.³

In Northern Ireland one of the key aims of the 'Health and Social Care reform' process, being led by the Department of Health, Social Services and Public Safety is to ensure commissioning is constantly improving to meet priorities to deliver the services people need. Focusing on a quality approach to public health commissioning including for example, the commissioning of high quality exercise referral schemes, is key to achieving these strategic aims.

'Our Healthy Future' is the first strategic framework for public health in Wales, it aims to:

Improve the quality and length of life.

Achieve fairer health outcomes for people in Wales.⁴

'Our Healthy Future' is a platform for strategic planning and delivery. Work is underway to embed it into an integrated planning system with the NHS and partners. There is an emphasis on prevention and early intervention and increasing physical activity is one of the 10 priorities identified. The physical activity action plan 'Creating an Active Wales' lists some of the actions the Welsh Assembly Government and key stakeholders will be taking to achieve this aim. In Wales the Welsh Assembly Government provides funding for the delivery of a national exercise referral scheme.

7.2. Commissioning Steps

This guidance brings together the Department of Health commissioning cycle with the world class commissioning competencies in the context of improving the outcomes of exercise referral schemes. In the Department of Health and the Department of Children Schools and Families 'Guide to Commissioning Weight Management Services' a four step planning and commissioning model is recommended.⁵

The core elements of any commissioning process are fundamentally the same, thus the Guide to Commissioning Weight Management Services provides a logical approach for commissioning exercise referral schemes. The four step commissioning cycle puts people at the centre of the intervention and provides commissioners with a process to ensure that commissioning contributes to meeting the organisation competencies for world class commissioning. The following guidance is drawn and adapted from tool 1 in the Guide to Commissioning Weight Management Services and outlines the four key steps of the commissioning cycle:



The questions outlined in the subsequent sections are intended to alert commissioners to the key areas for consideration when commissioning exercise referral schemes.

7.2.1. Step 1: Analyse

Taking account of the NICE guidance⁶ on exercise referral schemes and the Department of Health positional statement⁷ for the focus of exercise referral schemes, world class commissioners need to set up systematic frameworks to guide the development of local schemes. Commissioners must consider:

Assessing Need:

Guideline 1 of the National Quality Assurance Framework⁸ recommends that exercise referral schemes must address:

"Issues of the individual's health need as well as the health needs of the local community..."

p.18 NQAF (2001)

The needs analysis should take account of existing and potential needs of target groups, both from the client's perspective and from health professionals and exercise professionals in contact with the target groups.

- What is the size of the problem?
- Who is affected, are some groups/localities more affected than others?
- Which groups are most sedentary?
- How do we capture the views of those most hard to reach?
- How does local need compare to other areas?
- Contextual issues what are local issues, socio-economic and geographical, that impact on the problem?
- How will individuals/target groups benefit?

Identifying Outcomes:

- How is success measured?
 - Short term (interim measures for the duration of the scheme).
 - Long term (one year post-scheme completion).
- What are the benefits to specific target groups?
- What are the wider population health gains?

Establishing Levers and Priorities:

- What are the national/strategic priorities and levers for physical activity and health?
- What are the local/ward priorities and indicators? For example, LAA/HEAT^{xxv} targets.
- What national, regional and local strategies or preventative services can be employed to incentivise GPs to refer into exercise referral schemes? For example, Quality and Outcomes Framework,⁹ Practice Based Commissioning,¹⁰ NHS health checks.¹¹
- What are the targets/priorities of existing local physical activity strategic plans/interventions?

^{xxv} HEAT targets are a core set of Ministerial objectives, targets and measures for NHS Scotland. HEAT targets are set for a three year period and progress towards them is measured through the local delivery plan process.

Mapping and Analysing Exercise Referral Scheme Provision:

- What ERS are operating locally?
- Who are the existing local providers?
- What is the geographical coverage of the schemes?
- How do they operate?
- What data exists on uptake and impact of current provision?
- Are schemes meeting the NQAF standards?
- How effective are existing schemes?
- What improvements are needed?
- Are there gaps in current provision?
- Are there new potential local providers?

Resource analysis:

- What resources are currently invested in ERS, public, private, community, individual?
- What data exists on cost effectiveness of schemes?
- Is there a framework for ensuring best value for investments?
- What resources are available for future investments?
- What resources are committed to monitoring and evaluation?

Assess evidence for effective interventions:

- What should be done differently in light of existing studies and reviews?
- What can be drawn about the effectiveness of local schemes from the local monitoring and evaluation data?
- What evidence of good practice is available from other areas?

7.2.2. Step 2: Planning

The planning stage of commissioning concentrates on quality issues to shape the service in line with the findings of the analysis undertaken in step one. Five key issues have been identified for commissioners to consider in the planning stage these include: the design of the exercise referral scheme; engaging with service users; working with partners; managing demand and establishing operational quality standards. A series of questions relating to these five issues are presented below to guide commissioners in the planning process.

The design of the exercise referral scheme:

- Who are the champions to drive the intervention forward?
- Who is responsible for co-ordinating the planning and design of the scheme?
- How will the scheme design take account of the findings of the needs analysis?
- Are health equalities addressed in the scheme design?
- Does the service scheme meet the needs of those most hard to reach?
- What measures are included to motivate service users reluctant to be more active related to socio-economic issues?
- Who will refer into the scheme?
- What are the agreed referral routes for the scheme?

- What mechanisms are in place to ensure that exercise professionals have appropriate skills and qualifications as recommended by NQAF?
- What procedures are in place to ensure effective communication between service co-ordinators, clients, referrers and providers?
- Is there a comprehensive and clear agreement about inclusion and exclusion criteria for the scheme?
- Does the referral pathway provide the target group with choice and control for a personalised service?
- How does the exercise referral scheme fit with other activities within local strategic plans to increase uptake of physical activity?

Engaging with service users:

- Who will commissioners need to engage with?
- What mechanisms/ community links exist to engage with target groups?
- What resources are required to facilitate the target groups' involvement in the planning process?
- What procedures are in place to agree options for achieving outcomes with users?
- What steps are in place to agree delivery standards and specifications with users?

Working with partners:

- Who are the stakeholders?
- What strategic planning arrangements are in place to facilitate partnership approaches to planning and service design?
- What resources are required to facilitate partners' involvement in the planning process?
- What procedures are in place to agree options for achieving outcomes with partners/providers?
- What steps are in place to agree delivery standards and specifications with users and providers?
- Have all potential providers from the public, private and voluntary sectors been considered?

Managing Demand:

- What level, nature and sources of resource will be committed to the scheme? Long term, short term, recurring, mainstream, specialist?
- What level of investment is needed to ensure maximum outcomes from available resources?
- What options are to be offered for people not targeted, or appropriate for referral into the scheme?
- What systems are in place to ensure the scheme is accessible to users to motivate uptake and adherence levels?
- What are the justifications for de-commissioning a scheme?

Establishing Operational Quality Standards:

- What standards are in place to demonstrate quality assurance? For example, does the scheme meet the NQAF guidelines in the planning and delivery of the scheme? Do operators meet industry quality assurance standards such as <u>QUEST</u>, <u>FIA Code</u> <u>of Practice</u> and <u>Inclusive Fitness Initiative</u> standards?
- What mechanisms are in place to ensure that the staff employed by providers and operators meet national guidelines for levels of competency for delivering exercise referral schemes? (Refer to section 9 for further information on qualifications and training for professionals working with referred clients: to download return to http://www.bhfnc-exercisereferral\downloads.html).
- What standards are in place to ensure commissioners meet world class commissioning competencies?

SHARING PRACTICE: Community Health Wise ERS, Sheffield

Community Healthwise is a local authority physical activity referral scheme, funded by NHS Sheffield and operates on a citywide basis. Healthwise staff are based in GP surgeries around the city where they see referred patients for their initial consultation to discuss their activity and exercise options. These options may be based in the local leisure centre, home based, walking programmes swimming or any activity that the patient and referral officer decide is appropriate. The scheme has a coordinator whose role is to manage the service and ensure good practice in other stand alone external referral schemes that exist across Sheffield.

In Sheffield a physical activity referral accreditation system has been developed to maintain quality across the stand alone schemes. Providers are required to meet a number of quality standards to be an accredited provider.

There are also plans to develop these standards to include quality assurance of the exercise and activity sessions patients are signposted to. The aim is to provide appropriate physical activity for patients in their local area that is convenient for them rather than just being fed straight into a gym in the hope that they may one day sign up as a member.

Experiences in Sheffield suggest that local authorities retain control of a city-wide referral scheme, create partnerships with leisure and sports facilities across the region to provide appropriate physical activity provision in the area and employ referral officers to be based in GP Surgeries to assess and refer patients.

Aimee Pearce, Physical Activity Referral Co-ordinator, Community Healthwise, Active Sheffield. Email <u>aimee.pearce@sheffield.gov.uk</u>

7.2.3. <u>Step 3: Delivery</u>

The third step in the commissioning cycle focuses on the contractual arrangements for the delivery and management of the exercise referral scheme. This involves 4 key elements:

Conducting procurement:

Commissioners should consult within their own organisations, to ensure they comply with their internal procurement processes and procedures.

Compliance with a procurement process is necessary because it:

- Ensures best value for money.
- Meets world class commissioning competencies.
- Allows commissioners to evaluate a range of market providers and ensures the 'best fit' for the service specification.
- Reviews current contracts towards performance improvement.
- Fulfils legal obligations under European Union procurement rules.

Consequences that may arise if commissioners do not follow a procurement process might be a challenge and/or complaint from other parties; this could then lead to a delay in the commissioning of services and potential litigation.

The following table offers an example timeline of a procurement process for an exercise referral scheme. These practical actions will fall across steps 2 and 3 of the commissioning steps.

Cost envelope for proposed exercise referral scheme: £500,000 per annum			
Action	Timeframe		
<u>Convene procurement panel</u> – to develop local process including assessment of the tenders			
Suggested representatives locally:			
Commissioning			
Finance			
Procurement			
Public Health			
Primary Care Clinician with special interest/ clinical champion			
Leisure sector			
Potential Service user			
Panel agree end date for the start of the new contract and "work back" to develop the procurement timetable			
Panel prepare and issue invitation for Expressions of Interest	Allow 4		
Advert to be issued in publications as advised by procurement guidelines and for issue through local networks as appropriate	weeks for potential bidders, e.g. leisure providers, to complete		
Panel arrange and hold potential provider forum	1 day		
Panel issue pre-qualification questionnaire (PQQ)	Allow 4 weeks for bidders to complete		

Panel evaluate PQQ	1-3 weeks depending on number of responses
Panel shortlist to Invitation to Tender (ITT)	Allow 3 days to complete
Panel issue ITT to shortlisted providers	Allow 4 weeks to complete
Panel evaluate ITT	Allow 2 weeks to complete (depending on the no. of responses)
Panel shortlist to presentation stage	Allow 3 days
Presentations to Panel	1 – 3 days dependent on number
Panel make final evaluation and award decision	1 week to complete
Prepare recommendation for appropriate "Board" approval	1 week to complete
Award and sign contract	4 - 8 weeks to complete

Developing the Service Level Agreement:

In developing the Service Level Agreement (SLA), commissioners will need to consider the following issues:

- What are the key local issues that need to be included in the SLA?
- Are partnership roles and responsibilities clearly defined?
- Is the purpose and period of the agreement stated?
- Are locally agreed quality standards listed?
- Do local standards reflect NQAF performance indicators?
- Are the provider's responsibilities to manage, run and evaluate the scheme to meet agreed quality standards clearly defined?
- Are the expectations for ensuring suitably qualified staff are recruited and trained clearly stated?
- Are the medical liability issues explained?
- What are the funding arrangements?
- What are the formal monitoring and evaluation procedures and responsibilities?
- Which organisations will be represented on the scheme management committee?
- What are the responsibilities of the management committee?
- Does the agreement address important organisation issues such as public liability insurance, complaints procedures, equal opportunities, health and safety and confidentiality?

Developing the Service Specification:

The Service Specification should answer the following questions:

- What is the purpose and objectives of the scheme?
- What are the quality standards of the scheme?
- How will the scheme be managed?
- How will the scheme operate?
- What are the staffing arrangements for the scheme?
- Who will be referrers to the scheme?
- How will referrals be made and received?
- What are the inclusion and exclusion criteria?
- How will clients be assessed to ensure an appropriate motivational behaviour change model is employed?
- What support will be provided and for how long?
- Is the cost of participating in the scheme affordable for the target group?
- What physical activity opportunities are available to offer choice and flexibility for service users?
- What actions are in place to develop sustainability of the scheme?
- What steps are in place to ensure service users are encouraged to be more responsible for their commitment to be more active in the longer term?
- How will the service encourage continued improvement in physical activity post intervention?
- What monitoring information will be recorded for the scheme database?
- What evaluation procedures are in place to measure outputs and impact of the scheme?

Contract Management:

Whilst deliberating contractual management arrangements, commissioners will need to consider:

- Who has responsibility for managing the contract?
- Are providers aware of who is the main commissioning contact?
- Are systems in place to enable regular and open communication between the service provider and commissioners?
- Are opportunities for ad-hoc communication as well as formal meetings encouraged?
- Are providers given the opportunity to share experience/practice?
- What mechanisms are in place to facilitate timely problem solving?
- Are the quality standards and specifications of the service agreement being met?
- What action will be taken if standards and specifications are not upheld?
- What procedures are in place to make improvements/adjustments to the agreement?
- How will service users be involved in contract management?
- What are the consequences if the provider exceeds the contract?
- What are the opportunities for developing capacity/variety to meet consumer demand?

SHARING PRACTICE: Dudley Exercise Referral Programme

The Dudley Exercise Referral Scheme is designed to offer 4 tiers of referral for adults according to identified need.

Tier 1: Brief Intervention Leaflet

The brief intervention leaflet has been designed to be used as a tool by GPs and other healthcare professionals to promote physical activity as part of routine consultations. The leaflet is also available in waiting areas for motivated/interested patients to pick up. The leaflet contains information about the recommended levels of activity, the benefits of an active lifestyle, and all the activity opportunities available in Dudley.

Tier 2: Self Referral 'Pink Letter' / referral to 'Green exercise'

- Tier 2 Interventions are targeted at patients with low risk conditions, who do not require supervised exercise but do not meet the Department of Health recommendation of 5x30.
- The Self Referral 'Pink Letter' offers a 50% subsidy at any of the Dudley Council Leisure Centres for a one off period of 3 months. This allows the patient to do activities including swimming, yoga and aerobics classes, and use of the gym or playing sports such as badminton and squash.
- The 'Green Exercise' referral is a signposting service to outdoor activities such as walking, cycling and exercise sessions in the parks. The majority of the activities offered through the 'Green Exercise' referral are free of charge.

Tier 3: Exercise Referral Service – moderate risk

 Patients with moderate risk conditions are referred to one of three Dudley Council leisure centres that deliver the exercise referral service. These patients are given a 12 week, supervised programme of exercise that is tailored to their individual needs. The patient is given a 50% subsidy during this period.

Tier 4: Exercise Referral Service – high risk

 Patients with high risk conditions are referred to the Action Heart Cardiac Rehabilitation Centre. These patients are given a 12 week, supervised programme of exercise that is tailored to their individual needs. Referrals to Action Heart are free of charge.

Balraj Johal, Dudley Exercise Referral Service, Email: <u>Balraj.Johal@dudley.nhs.uk</u>

7.2.4. Step 4: Review

The purpose of the review stage is to assess the impact of the scheme and measure to what extent planned outcomes have been achieved. A number of questions have been identified for commissioners to bring up in the review stage; these have been grouped under the following three headings:

Impact evaluation and outcome monitoring:^{xxvi}

- What systems are in place to assess if targets and expected outcomes have been achieved?
- What measures are in place to assess long term adherence levels?
- What is the accuracy and efficiency of the data collection processes?
- Does the database provide the information required to assess the effectiveness of the scheme?
- Does the monitoring and evaluation data provide enough detail to assess the value of investment?
- How will service users be involved in the review process?
- Does the performance of the scheme meet the expectations of the commissioners?

Future Developments:

- What are the strengths/examples of good practice of the scheme?
- What are the weaknesses/gaps?
- What opportunities will support development of the scheme?
- What threats may affect future development of the scheme?
- What service changes are needed to make improvements?
- How will the challenge of improving long term adherence levels be best met?
- What steps are needed to ensure that the scheme can be adapted for future requirements?
- What are future training needs of all parties engaged in the exercise referral scheme to ensure the scheme continues to meet national and local quality standards?
- How will service users be enabled to comment on the commissioning process?
- Where necessary, how will de-commissioning decisions be implemented?

Sharing Good Practice:

- What mechanisms are in place to share impact evaluation and outcome monitoring data to inform local and national practice?
- What opportunities are provided for service users to comment on evaluation findings?
- What opportunities are provided for service providers to comment on evaluation findings?
- Has due concern been given to how data is collected, stored and shared to ensure personal information is secure and protected according to national and local standards?

^{xxvi} Refer to section 8 for further information on evaluation design, managing evaluation expectations and essential process and outcome evaluation indicators.

SHARING PRACTICE: Greater Glasgow and Clyde Live Active Referral Scheme

The Live Active Referral Scheme was established in 1997. This scheme was created, developed and is continually managed utilising a **partnership approach**. The key partners being NHS Greater Glasgow and Clyde and all partner Local Authorities/Trusts. Within each partner organisation various departments were and are still involved. Initially the Scheme was only developed within Glasgow City Council. After a positive evaluation in 1999 the scheme has gradually expanded to include other Local Authority areas, namely, East Dunbartonshire, South Lanarkshire, West Dunbartonshire, East Renfrewshire, Renfrewshire and Inverclyde. One of Glasgow city's Universities also delivered the scheme (Glasgow Caledonian).

The scheme is a behavioural intervention based on evidence-based tools and techniques combined with counselling skills to support patients in their physical activity behaviours for a period of 12 months. It currently employs 24 full time exercise/health counsellors and also links into other local health behaviour services – smoking cessation, healthy eating groups etc. Cross referral pathways between services have been established.

The Live Active Referral Scheme continually undergoes monitoring and evaluation and is developed accordingly. For example an external research company completed a full evaluation in 2002, which produced various recommendations and developments. Yearly the scheme is audited and statistics are produced at a local and NHS wide level. This is made possible by having created and developed a **Live Active patient database** storing all patients and referral details, consultation information and outcomes and appointment attendance records.

NHS GG&C fund the scheme by paying for the employment of the exercise counsellors and the scheme is delivered by the Local Authorities/Trusts. **Service Level Agreements**, which follow NHS GG&C procurement policy, are in place for all service providers detailing roles and responsibilities, service provision specifications, quality standards and auditing and monitoring guidelines ensuring quality assurance and performance guidelines are adhered to. Senior managers from all partner agencies meet on a regular basis to ensure that exercise referral and related topics are discussed strategically.

The Local Authorities/Trusts deliver and provide the scheme ensuring that exercise counsellors are integrated within their local health and fitness teams; have appropriate space to provide exercise consultations and there is a wide range of physical activity options available for people. They also pay for all resources, materials, administration requirements and activity passes for the scheme (discounted rates for patients for the 12months).

NHS GG&C centrally directs and manages the scheme ensuring quality and consistency across all areas. NHS GG&C:

- Provide leadership and expertise ensuring appropriate and evidence-based guidelines and quality assurance is maintained.
- Provide a full induction programme and update training for exercise counsellors in partnership with service providers and support exercise counsellors to access relevant training opportunities.
- Ensure strong links are made and maintained with primary care and acute services.
- Develop protocols and processes to ensure consistency of access across the scheme and to ensure all aspects of the patient pathway are considered.
- Provide access to a medical screener if staff are unsure about a client's medical suitability for the scheme and screen/risk stratify patients if need be e.g. if patient cannot complete an ETT.

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Summary:

The information above provides guidance for professionals responsible for the commissioning of exercise referral schemes. It draws upon evidence from national exercise referral policy and world class commissioning guidance. It includes a number of questions for consideration before commissioning an exercise referral scheme or when reviewing existing service level agreements.

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Section 8: A Guide to Evaluating Exercise Referral Schemes





Section 8: Executive Summary

A well-planned and carefully executed evaluation will reap more benefits for all stakeholders than an evaluation that is thrown together hastily and retrospectively.

In light of the NICE guidance and the current political and economic climate the importance of evaluation cannot be underestimated, exercise referral schemes must be able demonstrate whether they are both effective and cost-effective to justify their existence.

All parties involved in exercise referral schemes, regardless of what role they play, have a responsibility to consider whether the scheme achieved what it set out to do and whether it is a worthwhile investment. It is recommended that schemes undertake both process and outcome evaluation to build a more comprehensive and robust evidence base on this popular public health intervention.

Checklist for evaluating schemes:

- Ensure the scheme has clearly defined aims and objectives.
- Develop a logic model to demonstrate how the scheme will contribute to achieving the aims and objectives.
- Develop clear evaluation questions what do you want to know about your scheme?
- Identify the resources available for evaluation and select an appropriate evaluation design.
- Consider the evaluation framework and identify what will be included in your evaluation?
- Ensure you have set realistic timelines to observe changes in your selected outcome indicators.
- Decide how outcome indicators will be assessed the 'tools' section of this toolkit will help.
- Decide who the most appropriate person to collect the evaluation data is.
- Ensure you have appropriate expertise to be able to analyse data.
- Write up the results of the evaluation in a report.
- Use the evaluation findings to help review and develop your scheme.

Evaluation is only worthwhile if it will make a difference, it is therefore, important that evaluation results are interpreted and findings are disseminated to key stakeholders and other relevant audiences.

Section 8: A Guide to Evaluating ERS

This section of the toolkit briefly outlines the value of evaluating exercise referral schemes and the importance of selecting an appropriate evaluation design and provides guidance on how best to evaluate an exercise referral scheme.

It aims to identify how process and outcome evaluation can be utilised in the context of exercise referral schemes. It outlines those indicators that are likely to change during the course of an exercise referral scheme (in the short term), and those indicators which may require longer-term evaluation to detect changes and demonstrate effectiveness.

An evaluation framework is provided to help professionals consider what are the appropriate data collection methods, as well as timelines, for the evaluation of an exercise referral scheme.

8.1. The Importance of Evaluation

The snapshot of current practice (reported in section 2) has shown that most exercise referral schemes in England, Scotland and Northern Ireland carry out relatively limited evaluation. Furthermore, where more extensive or robust evaluation has taken place this has offered little scope for comparisons between schemes due to the differences in the evaluation methods adopted. The need for more rigorous evaluation of exercise referral schemes was highlighted by the NICE public health intervention guidance¹ on four commonly used methods to increase physical activity: brief interventions in primary care, exercise referral schemes, pedometers and community based exercise programmes for walking and cycling.

The NICE review of the effectiveness of exercise referral schemes stated that:

"The evidence from two randomised controlled trials suggest that exercise referral schemes, involving a referral, either from or within primary care, can have positive effects on physical activity levels in the short-term (6-12 weeks)."

Evidence Statement ER1 p.23 NICE (2006)¹

"However, evidence from four trials indicates that such referral schemes are ineffective in increasing physical activity levels in the longer-term (over 12 weeks) or over a very long timeframe (over 1 year)."

Evidence Statement ER2 p.23 NICE (2006)¹

Based on this evidence the NICE Public Health Interventions Advisory Committee subsequently concluded that there was **insufficient** evidence to recommend the use of exercise referral schemes to promote physical activity, other than as part of research studies where their effectiveness can be evaluated and recommended that:

"Practitioners, policy makers and commissioners should only endorse exercise referral schemes to promote physical activity that are part of a properly designed and controlled research study to determine effectiveness."

p.6 NICE (2006)¹

This recommendation and the overall lack of evidence on the impact and outcomes of exercise referral schemes has put increasing focus on schemes to undertake more robust evaluation to demonstrate their effectiveness. The NICE guidance has signalled the need to build a national evidence base on the long-term effectiveness of exercise referral schemes for increasing physical activity.

All parties involved in exercise referral schemes, regardless of what role they play, have a responsibility to consider whether the scheme achieved what it set out to do and whether it is a worthwhile investment. There are several important reasons for undertaking an evaluation of an intervention; a few are presented below with examples of the types of questions that any evaluation should be able to answer.

Contribute to understanding what was delivered:

- Who made referrals to the scheme?
- What was the content of patient consultations?
- What physical activity opportunities were available?
- What activities did patients participate in?
- Assess whether aims and objectives have been achieved:
 - Did the scheme achieve the desired outcomes?
 - Where there any unexpected outcomes of the scheme?
- Help judge the value of a programme:
 - What benefits (if any) did patients get from the scheme?
 - How do the benefits of this scheme compare to other activities which you invest time and resources into?

Identify best practice:

- What is working well within the scheme?
- What aspects of the scheme could be improved?
- Assist in planning:
 - What processes can be put in place to improve the delivery of the scheme?
 - What actions are necessary to develop the long-term sustainability of the scheme?

In the past, evaluation has been side-lined or in some instances totally forgotten as the focus has centred on running the exercise referral scheme, however in light of the NICE guidance and the current political/economic climate the importance of evaluation cannot be underestimated, schemes must be able demonstrate whether they are both effective and cost-effective to justify their existence.

8.2. Evaluation Design

Evaluation can be a mysterious process for the uninitiated and often even for those with extensive experience. To decide upon an appropriate evaluation design, professionals need to be clear about the main focus of the evaluation, the specific questions to be addressed and the resources available. Once the focus and scope of the evaluation have been decided, the next step is to identify what type of data to collect and how to collect those data.

In general, a stronger evaluation design increases the confidence with which conclusions can be drawn from the findings. In particular, a strong evaluation design can indicate that the outcomes were caused by the intervention itself rather than by chance. In the hierarchy of evidence that influences healthcare policy and practice, it is generally acknowledged that the strongest scientific evidence comes from experimental designs. Randomised Controlled Trials (RCTs) are considered by most to be the 'gold standard'. Whilst it is accepted that a randomised controlled trial will provide the most robust scientific evidence of effectiveness it may not always be feasible to use an optimal scientific design with public health interventions, such as exercise referral schemes due to the multiple stakeholders and the different elements of the intervention.² Furthermore, given the almost universal provision of exercise referral schemes across the UK the feasibility of undertaking a randomised controlled trial is likely to preclude a satisfactory or impartial outcome.

The context within which exercise referral schemes operate, the multi-sector partnerships, the diverse populations engaged and the range of services utilised may be more important elements in some exercise referral scheme evaluations' than the need to generate scientific proof that any increase in physical activity is attributable to the scheme.

Health professionals involved in delivering exercise referral schemes are generally not experienced in rigorous evaluation and may therefore not be equipped to undertake complex and highly controlled research methodology. Furthermore, they are often required to take a flexible and pragmatic approach to evaluation due to constraints around budget and staff time. These factors need to be taken into account when selecting the evaluation design.

Historically, non-experimental evaluation designs have been adopted by exercise referral schemes; however this is the least scientific approach to evaluation and provides the weakest evidence and is often not considered as acceptable evidence for inclusion in systematic reviews of effectiveness. Exercise referral schemes should assess what resources they have for evaluation and strive to undertake the most rigorous evaluation which resources and capacity permit.

To improve the quality of evaluations it may be worthwhile schemes investing the time and money to increase the evaluation expertise of those delivering the scheme or employing a specialist evaluation team for more robust evaluation.

Refer to appendix 20 for further information on evaluation designs.

8.3. Evaluation Expectations

Evaluation is an important aspect of all exercise referral schemes. However, schemes are often under pressure to adopt unrealistic measures of success, such as reduced mortality rates or demonstrable cost benefits. It is therefore, essential to establish practical and feasible expectations for the scale and scope of the evaluation activities.

Commissioners should communicate their expectations for both the scheme and the evaluation of the scheme. Ideally evaluation frameworks should be developed in partnership with key stakeholders, e.g. commissioners, leisure providers, referrers, programme staff, services users, and where feasible and appropriate, an evaluation expert. Furthermore, the evaluation framework should be agreed when developing and planning the scheme.

It is important to have a clear statement of what aspects of the scheme the evaluation should focus on and what outcomes are of importance to commissioners and other stakeholders at the outset. These expectations should be matched with the necessary resources and staff with the appropriate skills and training.

The World Health Organisation (WHO) guidelines³ for the evaluation of health promotion interventions provide some useful guidelines on the allocation of resources for evaluation. These guidelines recommend that at least 10% of the total budget for an intervention or programme should be allocated to evaluation activities. Ideally, 15-20% of total budget should be allocated to evaluation.

It is recognised that many exercise referral schemes are operating on limited budgets and resources; however, it is essential to understand whether these resources are being used to maximum and best effect. Without undertaking evaluation it will remain unclear whether exercise referral schemes are a worthwhile investment or whether it may be appropriate to invest these resources in alternative interventions.

The WHO guidelines recommend that policy makers ensure that an appropriate mix of both process and outcome information is used to assess programme implementation as well as impact on desired outcomes.

The remainder of this section adopts the WHO guidelines regarding process and outcome evaluation and aims to identify how process and outcome evaluation can be used in the context of exercise referral schemes. It outlines those indicators that are likely to change during the course of an exercise referral scheme (in the short term), and those indicators which may require longer-term evaluation to detect changes and demonstrate effectiveness. An evaluation framework is provided to help professionals consider what are the appropriate data collection methods as well as timelines for the evaluation of an exercise referral scheme.

8.4. Evaluation Planning

Evaluation should be considered an integral part of programme design and implementation. It is important to think about evaluation at the start and during the planning of a programme and not view the evaluation as something to be 'added on' at the end. Programme evaluation is a continuous process and thus, it is important to ensure that evaluation occurs during all phases of an exercise referral scheme.

A well-planned and carefully executed evaluation will reap more benefits for all stakeholders than an evaluation that is thrown together hastily and retrospectively.

Section 6 of the toolkit: 'Guidance for Exercise Referral Scheme Coordinators' outlines the importance of planning and setting clear objectives for the scheme. When developing objectives it is important to consider the SMART acronym. SMART stands for:

Specific – Do the objectives clearly state exactly what you are trying to achieve?

Measurable – Can you measure the extent to which you have achieved the objectives?

Achievable – Are the objectives attainable?

Realistic – Can the objectives realistically be achieved with the available resources?

Time – Have you set clear timelines in which to achieve the objectives?

Developing objectives which are SMART helps to ensure the objectives are measureable and that the evaluation is able to determine the extent to which each objective has been achieved.

The Yew Tree example, featured in section 6 has the following objectives:

- Screen the practice populations to identify all patients with a Framingham 10 year predicted CHD risk of 20% or more.
- Invite 15% of all 'at risk' patients to take part in the exercise referral scheme within 6 months of being identified.
- Increase the physical activity levels of all patients attending the exercise referral scheme by 50% at the end of the 12 week scheme.

These objectives clearly state what the scheme aims to achieve, by how much, and over what time period. The specificity of the objectives makes it easier to consider how each objective will be measured and evaluated to determine the success of the scheme. Issues such as how and when the data might be collected, by whom, and how it will be used, are also issues that should be addressed at the developmental stages of an exercise referral scheme.

8.4.1. Introducing a Programme Logic Model for ERS

Considering what outcomes are of interest, and how they are expected to be met can help inform and improve the design and delivery of a scheme. Programme logic models provide a graphic overview of the components of a health promotion programme, how various components are linked, and how the programme activities will contribute to achieving the intended outcomes. Using a logic model can help to identify an appropriate set of measures and data collection methods to provide an evaluation of the scheme against the stated aims and objectives. Planning the evaluation using a logic model can help to ensure that each outcome indicator is measurable, as well as highlight which elements of the programme may be most likely to yield useful evaluation data. In all evaluations involving before and after data collection, timing of the measurements is critical. This is particularly important for exercise referral schemes, as the short duration of the scheme may not allow for changes in outcome measures to be observed. A logic model can assist in identifying appropriate timelines for evaluation.

A logic model usually consists of 4 main components:

- Inputs.
- Activities.
- Outputs.
- Outcomes.

Inputs reflect the things that are invested in a scheme, for example staff time, money, facilities and equipment.

Activities include anything that is delivered by the scheme, including training of health professionals and delivering exercise sessions.

Outputs relate to the number of people who are reached by the scheme, including the number of health professionals recruited and trained, the number of patients referred to the scheme. Outputs also include patient satisfaction with the scheme.

Outcomes are usually expressed in terms of short-term, medium-term, and long-term outcomes. Short-term outcomes are likely to occur over the course of an exercise referral scheme and might include changes in awareness, knowledge and attitudes. While physical activity levels may change over the course of the referral period, in many cases it will take longer than the typical 12 week referral period to influence longer term changes. Evaluating sustained increases in physical activity in the medium- and long-term requires the re-assessment of participants' physical activity levels approximately 6 or 12 months after completion of the scheme. Assessing physical activity at 12 months may be important for capturing data in the same or comparable season since changes in season have been shown to influence physical activity levels, making comparisons across seasons (e.g. using a 6 month timescale) problematic.

Changes in physiological and psychological indicators will follow changes in physical activity levels. As a result, it may take between 6 and 12 months to observe changes in these indicators. Long-term outcomes are the overarching outcomes of a scheme, and are likely to follow sustained increases in physical activity. The long-term outcome of exercise referral schemes is a change in disease risk, which may take a minimum of a year to observe.

An example logic model is presented in Figure 1 below and a template logic model is included in appendix 21. To obtain a word version of the logic model return to the downloads page.



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8.5. <u>Essential Data Collection: Process and Outcome</u> <u>Evaluation</u>

Many evaluations of behavioural change programmes, including exercise referral schemes, have tended to focus on outcome evaluation, which measures the effects of a programme in the short, medium and long-term, and is useful to determine whether the scheme met its stated aims and objectives.

Process evaluation, which is often over-looked, provides an insight into the process of implementation and provides information on what went on during a scheme. Process evaluation can help in identifying factors contributing to the success or failure of a programme.

8.5.1. Process Evaluation

It is recommended that every exercise referral scheme should undertake process evaluation. Process evaluation is concerned with the extent to which a programme is delivered as intended and should be on-going throughout the duration of the exercise referral scheme. Process evaluation helps us to understand the reasons underlying whether or not a programme was successful, which is important for policy development and implementation.

Three main components of process evaluation include: 1) the extent to which the programme was delivered as planned, 2) the extent to which the scheme reached the target population and 3) participant satisfaction with the scheme.

8.5.1.1. The extent to which the scheme was delivered as planned

An exercise referral scheme often involves many staff and exercise facilities, which is likely to result in variations in the way the scheme is delivered. It is important to record these differences in delivery to determine their potential impact on the effectiveness of the scheme. This might include monitoring the number and content of one-to-one consultations with patients, the consistency in delivery of exercise sessions across centres, or the amount of support provided to patients in the scheme.

8.5.1.2. The extent to which the scheme reached the target population

At this point, in time it may be useful to look at the difference between monitoring and evaluation. Monitoring describes the collection of routine information, such as attendance figures and drop-out rates, to check the extent to which a project is proceeding according to plan. Monitoring is, therefore part of the evaluation process: it is not a substitute for evaluation.²

Participant characteristics:

Recording the demographic characteristics of participants (gender, age, ethnicity, socio-economic status), as well as the reason for referral, will give an indication of whether the scheme is reaching its target population. This information will also be useful to determine which members of the population exercise referral schemes are most appropriate for. Demographic data should be systematically collected from all participants who are referred to the scheme. To ensure demographic data is consistent across schemes, to facilitate comparability, exercise referral schemes

may wish to utilise the age and ethnicity categories which are utilised in the Outdoor Health Questionnaire, developed by Natural England (See appendix 22). The Outdoor Health Questionnaire also includes the Single-Item Measure, developed by the BHFNC in collaboration with a number of key agencies,^{xxvii} which can be utilised for assessing patients' baseline physical activity levels, helping to determine whether the scheme is attracting inactive participants, and also facilitating comparability of patients' baseline physical activity levels across schemes.

Participant demographics can be used to explore patterns between who is offered a referral, who takes up the offer of referral, who attends the exercise sessions, who completes the referral programme and who drops out of a scheme. This data can be used to determine who the scheme is most appropriate for.

• Service utilisation:

Programme reach is concerned with take up and adherence to a scheme. Exercise referral schemes should monitor:

- The total number of referrals made to the scheme.
- Patient 'uptake' of the scheme i.e. number of patients attending at least one session.
- The number of patients who attend or do not attend scheduled consultations.
- Attendance rates at exercise sessions.
- Adherence and drop-out rates.

Exercise referral schemes need to clearly define what they mean by adherence, completion and drop-out as this will provide more accurate and meaningful evaluation data. In addition, careful monitoring of the number of patients who attend, or do not attend, scheduled consultations; the number of exercise sessions patients' attend and the number of patients' who cease attending sessions would allow for the correct classification of patients as either adherers, completers or drop-outs.

Registers of attendance should be completed by exercise professionals involved in the scheme, in order to monitor levels of attendance as well as the activities that participants undertake. Activity diaries may be an appropriate method of collecting data from participants who attend less structured activities, or to capture physical activity that participants undertake in addition to attending the structured exercise referral sessions. It would be ideal if monitoring of attendance was done by swipe cards rather than human entry to allow for easy and reliable data collection and monitoring.

8.5.1.3. Participant satisfaction with the scheme

The effectiveness of schemes will be influenced by the characteristics of participants and whether the characteristics of the scheme are appropriate for them. It is therefore important to gain feedback on participants' experiences of the scheme to help

^{xxvii} Big Lottery Fund, Cycling England, Department of Health, Natural England, NHS Health Scotland, Scottish Government, Sports Council Wales, Sport England, Sustrans, Walk England and Welsh Assembly Government

understand factors influencing adherence and drop out, and to inform developments to the implementation of the scheme.

The REFERQUAL⁴ is a 35 item self-report tool, developed to assess the service quality of general practice exercise referral schemes. Qualitative data collection, for example interviews and focus groups, can provide a useful insight into participants' experiences of a scheme and why some groups are more suited to a particular intervention than others (See appendix 23).

Exploring participant satisfaction with people who drop out of the scheme, as well as people who complete the scheme, will enable the scheme to understand the barriers as well as the facilitators to participation, and assist in planning appropriate developments to reduce the number of participants who fail to complete the scheme.

It is possible that participation in an exercise referral schemes has given participants the confidence to access mainstream physical activity opportunities, however if these patients do not complete the exercise referral scheme they are usually considered a 'drop out'. Following up participants who drop out of a scheme can be useful for capturing data on whether these participants have continued to be active outside of the scheme.

Capturing information about how the scheme has been implemented, who has utilised it, together with views of the service users can facilitate interpretation of outcome effects.

8.5.2. Outcome Evaluation

Outcome evaluation is useful to determine what the scheme accomplished and whether the scheme met its aims and objectives. Assessments are taken before and after a scheme to detect change. Short-term outcomes such as changes in attitudes are the most likely indicators to change over the course of an exercise referral scheme. Long-term tracking of participants is required to determine whether schemes are meeting long-term outcomes, for example a change in disease risk. Any outcome indicators which are to be assessed will need to be measured at the beginning of the scheme (baseline) in order to detect any changes.

8.5.2.1. Knowledge, Attitudes & Skills

NICE¹ recommend that evaluation measures should include intermediate outcomes such as knowledge, attitudes and skills, as these are the most likely indicators to change over the course of an exercise referral scheme. These indicators may be useful for determining future intentions to change physical activity behaviour.

• The Stages of Change Questionnaire:

The 'stages of change' model of behaviour change suggests that people go through 5 stages on route to changing their behaviour; pre-contemplation, contemplation, preparation, action, and maintenance. The Stages of Change Questionnaire⁵ consists of 4 questions designed to categorise respondents into one of the 5 stages. This model may be appropriate for helping to demonstrate changes in attitude and motivation which are likely to lead to increased, and potentially sustained, physical activity behaviour (see appendix 24).

• The Self-Efficacy for Exercise Scale:

Self-efficacy is defined as 'a person's belief about their ability to succeed in specific situations.' Increases in knowledge and skills, attained through participation in an exercise referral scheme, are likely to increase participants' self-efficacy levels, which in turn, will increase the likelihood of participants continuing to take part in physical activity.

The Self-Efficacy for Exercise scale⁶ (SEE) consists of nine situations that might influence participation in physical activity (see appendix 25). Respondents are asked to rate their confidence (on a scale of 0-10) at exercising 3 times a week for 20 minutes in relation to each scenario. Although the SEE scale was developed to assess confidence to exercise 3 x a week for 20 minutes, which is not aligned with the current UK physical activity recommendations, the SEE scale has been shown to be a significant predictor of physical activity, and may therefore be a useful tool for determining participants future physical activity intentions.⁶

8.5.2.2. Physical Activity Levels

The primary aim of exercise referral schemes is to increase participants' physical activity levels and therefore measuring changes in physical activity should be a central focus of the evaluation. Physical activity levels may change over the course of an exercise referral scheme; however in many cases it may take longer than the typical referral period to detect marked changes in physical activity (e.g. 6 months). Evaluating sustained increases in physical activity in the long-term requires the reassessment of participants' physical activity levels approximately 6, 9 or 12 months after completion of the scheme.

Physical activity is a complex behaviour and poses some difficulty for measurement and the assessment of change. An accurate assessment of a person's physical activity requires an understanding of type frequency, intensity, and duration of exercise.

The development of objective physical activity measurement tools such as pedometers and accelerometers has lead to more accurate measurement of physical activity levels. These types of measurement tools can be expensive, and require specific expertise to analyse and interpret data. The limited time and resources, as well as limited evaluation skills in exercise referral schemes narrows the choice of data collection methods.

A less accurate, but more feasible method of assessing physical activity is via self-report. Self-report measurement tools are a cheap and simple method of collecting physical activity data, however the choice of which measurement tool to utilise is not straight forward. The majority of self-report physical activity tools have been designed for surveillance and population level monitoring of physical activity levels. Physical activity tools designed to detect change over time are far less established. Although the selection of appropriate physical activity measurement tools is limited, this section aims to identify some tools which may be appropriate for use in exercise referral schemes. For a more detailed review of physical activity measurement tools see Hillsdon.^{xxviii}

xxviii http://www.noo.org.uk/uploads/doc721_2_PA_measurement_tools_review.pdf

Seven-Day Physical Activity Recall:

The Seven-Day Physical Activity Recall⁷ (PAR) estimates the amount of time spent undertaking physical activity, strength, and flexibility activities in the past 7 days (see appendix 26). The PAR includes a variety of physical activities including aerobic exercise, work related activity, gardening, and walking, however only activities of at least moderate intensity are utilised when estimating total calorie expenditure. The detailed breakdown of participants' physical activity levels, which is provided by the seven-day PAR, may be particularly useful for understanding changes in participants' physical activity behaviour. The PAR protocols highlight the importance of developing good interview methods and skills, which should be taken into consideration before utilising this tool.

The Godin Leisure Time Exercise Questionnaire:

The Godin Leisure Time Exercise Questionnaire⁸ (GLTEQ) is a 3-item self-report measure that assesses the frequency of mild, moderate, and vigorous exercise done for at least 20 minutes per session during a typical week (see appendix 27). The GLTEQ is considered one of the most reliable measures of self-report physical activity, is easy to understand and has been shown to be responsive to changes in behaviour.⁹ Disadvantages of the GLTEQ is that it does not provide information on the types of activities which respondents undertake, nor does it allow the assessment of physical activity levels against the CMO's recommendation of 30 minutes of moderate intensity activity on at least five days of the week.¹⁰

8.6. Desirable Data Collection: Outcome Evaluation

Given the scientific evidence on the health benefits of regular physical activity¹⁰ it can be inferred that an increase in physical activity levels will lead to a range of outcomes, including improved physical and psychological health. These changes will generally not be observed over the course of a 12 week exercise referral scheme, but are likely to occur over time, if physical activity levels are sustained. Depending on available resources and expertise, schemes may wish to evaluate changes in physiological and psychological indicators to help demonstrate the outcomes of the scheme.

8.6.1. Physiological Outcomes:

Physiological measurement requires appropriate equipment and staff expertise and is often more intrusive than self-report data collection methods. Exercise referral schemes have tended to focus on blood pressure and body composition measures, which are relatively non-invasive.

Blood Pressure:

Regular physical activity can help to lower blood pressure. A small reduction in blood pressure is likely to be observed within the first ten weeks of increased physical activity, however significant changes in blood pressure are likely to take traditionally longer. Blood pressure has been assessed usina а sphygmomanometer, although there are also a wide range of automatic machines available for assessing blood pressure. Where exercise professionals are expected to take blood pressure readings as part of the evaluation it is recommended that they undergo appropriate training to ensure the accuracy of readings.

Body Composition:

There are a number of methods for assessing body composition, the most common of which is skin fold measurements. Skin fold measurements are an inexpensive method of estimating body fat percentage, however the use of callipers requires a level of skill. The use of callipers may also be perceived as intrusive, and is not ideal for people who are obese. The introduction of automatic machines has led to easier and less intrusive data collection of body composition, although the accuracy of such machines is uncertain. These types of machines involve an electrical signal being sent through the body to determine the percentage of different kinds of tissues. Disadvantages of these machines are that they are affected by hydration, food intake and skin temperature.

It is important to remember that although some improvement in physiological indicators may be observed over the course of an exercise referral scheme; these changes are likely to be small in scale. Tracking participants in the longer-term may be necessary to demonstrate significant improvements in these indicators.

8.6.2. Psychological Outcomes:

Physical activity is associated with improved mood and reduced anxiety and depression.¹⁰ Schemes which specifically target patients with mental ill-health may be particularly interested in evaluating psychological indicators, however other exercise referral schemes may be interested evaluating the overall psychological well being of referred patients. There are a number of self-report measures of perceived health and well-being.

• The SF12:

The SF12 Health Survey¹¹ is a 12-item survey, measuring eight dimensions of perceived health; physical functioning, role physical, bodily pain, general health, vitality, social functioning, role emotional, and mental health (see appendix 28). These scores are aggregated to produce a Physical Component Summary (PCS) and a Mental Component Summary (MCS), which have been shown to be sensitive to change.¹¹ There are 2 versions of the SF12, a standard 4 week recall version and an acute one-week recall version.

An information request must be submitted to Quality Metric seeking permission to use the SF12 and there is a financial charge associated with using this survey. There is a manual available to support the SF12, which explains how responses should be scored; however, there is also a charge to obtain a copy of this resource.

• The EQ-5D:

EQ-5D¹² is a standardised instrument for use as a measure of health outcome, it comprises five questions relating to mobility, self care; pain, usual activities, and psychological status (see appendix 29). Respondents are requested to rate the extent of problems they have in relation to each of these factors (response scale 1=no problem, 2=moderate problem, 3=severe problem). In addition, there is a Visual Analogue Scale (VAS) which provides a single index value for health status. The EQ-5D is a simple tool to complete, however it is unclear how sensitive the tool is to detect change over time. As with the SF12, permission is required to utilise the EQ-5D.

• The WHOQOL-BREF:

The WHOQOL-BREF¹³ is an abbreviated version of the WHOQOL-100 which has been developed to provide a short form quality of life assessment (see appendix 30). The WHOQOL-BREF contains a total of 26 items, which measure the following broad domains: physical health, psychological health, social relationships, and environment. The WHOQOL-BREF is relatively short and easy to complete and can be utilised to assess changes in quality of life as a result of an intervention. The WHOQOL-BREF and accompanying user manual are available to download from the World Health Organisation website.

8.6.3. Changes in Disease Risk

Exercise referral schemes which have a large capacity for evaluation may choose to track participants in the long-term to demonstrate that they are achieving their overarching aim – to reduce the risk of disease amongst participants, which will follow sustained increases in physical activity in the long-term.

• The Framingham Disease Risk Calculator and the QRISK:

The Framingham Disease Risk Calculator and the QRISK incorporate age, sex, total cholesterol, HDL cholesterol, systolic blood pressure, and smoking to provide a prediction of an individual's risk of cardiovascular disease (CVD). There has been on-going debate by NICE over which tool should be recommended for use in England and Wales. Meanwhile Scotland is adopting an alternative tool called ASSIGN, which also incorporates social deprivation.

Schemes' wishing to assess longer term health outcomes, such as cardiovascular disease risk should check which tool is being used at a local level to ensure compatibility.

8.7. An evaluation framework for exercise referral schemes

As previously noted, health professionals involved in delivering exercise referral schemes are often required to take a flexible and pragmatic approach to evaluation due to constraints around budget, staff time and the evaluation skills of those involved. The evaluation framework, shown in Figure 2 illustrates a pragmatic approach to process and outcome evaluation for exercise referral schemes.

This framework has been developed to reflect what might be realistic in terms of what to measure, as well as the likelihood of observing changes in outcome indicators over the course of an exercise referral scheme. The approach outlines what essential and desirable process and outcome data should be collected, taking into account the capacity of the scheme. The framework reflects the timelines that are likely to be required to observe changes in various indicators..

It is recommended that every scheme should undertake essential process and outcome evaluation at baseline, during and at the end of the referral period and collect essential outcome data at appropriate follow-up periods after the referral period. The amount of follow-up included in the outcome evaluation should reflect the scheme's available budget and resources; however, in order to build the evidence base for exercise referral, it is strongly recommended that schemes incorporate at least 6 monthly follow-up data collection. Figure 2: An evaluation framework for exercise referral schemes.

BASELINE	DURING THE SCHEME	12 WEEKS	6 MONTHS	12 MONTHS		
ESSENTIAL : PROCESS + OUTCOME EVALUATION						
Process						
Participant characteristics	Service utilisation	Participant satisfaction				
 Age Gender Ethnicity SES 	 Scheme uptake Attendance rates Adherence/drop-out 					
Outcome						
Knowledge, attitude and skills		Knowledge, attitude and skills				
Physical activity levels		Physical activity levels	Physical activity levels	Physical activity levels		
DESIRABLE : OUTCOME EVALUATION						
Physiological outcomes			Physiological outcomes	Physiological outcomes		
Psychological well-being			Psychological well-being	Psychological well-being		
Disease risk				Disease risk		

In addition to the good practice recommendations outlined above, exercise referral schemes must also take into consideration the key monitoring and evaluation recommendations outlined in the National Quality Assurance Framework (NQAF).¹⁴

- Guideline 2: all exercise referral schemes should have an integral auditing system.
- Guideline 3: audited measures should include physiological factors (fitness, body fat), lifestyle behaviour (smoking and drinking habits), health professional behaviours (medication use) and psychological and social outcomes (depression, social networks); the prime focus should be on the measurement of physical activity levels (behavioural change).
- Guideline 4: exercise professionals should be trained to carry out the above auditing process and ensure continuing professional development for the practitioner.
- Guideline 5: measures should be participant-centred and used to motivate participants to change behaviour.
- Guideline 6: audited measures should be easy to obtain during normal working practice (and with minimal additional expense) and should track long-term change (over 9 months).
- Guideline 7: data should be used to identify specific determinants of adherence and long-term behaviour change.
Summary:

It is essential for exercise referral schemes to keep accurate and up-to-date records regarding scheme reach and service utilisation, for example who is attending (name, address, date of birth, gender, ethnicity, and other vital information), why they are attending (i.e. reason for referral), how often they are attending, and, ideally, what they are attending (gym, exercise classes, community activities). It is also essential that schemes capture data on service delivery, for example who has referred the patient, when they were referred, when they were accepted on the scheme, when they started the scheme, and other similarly significant dates.

Wherever possible this process should be automated (e.g. with membership swipe cards) to reduce demands on exercise professionals and regularly extracted (e.g. monthly) to a useable format (e.g. spreadsheet, report). Personal information, current status within the scheme, answer to questionnaires, results of any physiological measures such as height, weight, blood pressure, fitness tests and other vital information should be recorded on a database, with each person identifiable by a unique ID, which should also be the primary key on the corresponding database. Data should be recorded following each major consultation with the patient to allow progress to be tracked.

In addition outcome evaluation should be undertaken to determine what the scheme accomplished and whether the scheme met its aims and objectives. Any outcome assessments should be taken before and after a scheme to detect change. Short-term outcomes such as changes in attitudes are the most likely indicators to change over the course of an exercise referral scheme. Long-term tracking of participants is required to determine whether schemes are meeting long-term outcomes, for example a change in disease risk.

8.8. Evaluation Recommendations

- Ensure the scheme has clearly defined aims and objectives.
- Develop a logic model to demonstrate how the scheme will contribute to achieving the aims and objectives.
- Develop clear evaluation questions what do you want to know about your scheme?
- Identify the resources available for evaluation and select an appropriate evaluation design.
- Consider the evaluation framework and identify what will be included in your evaluation?
- Ensure you have set realistic timelines to observe changes in your selected outcome indicators.
- Decide how outcome indicators will be assessed the 'tools' section of this toolkit will help.
- Decide who the most appropriate person to collect the evaluation data is.
- Ensure you have appropriate expertise to be able to analyse data.
- Write up the results of the evaluation in a report.
- Use the evaluation findings to help review and develop your scheme.

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Section 9: A Guide to Qualifications and Training





- Exercise referral schemes MUST NOT operate without qualified instructors who are registered on the Register of Exercise Professionals (REPs)^{xxix} with the Level 3 exercise referral category of registration.
- The use of exercise instructors who are not Level 3 exercise referral qualified and not registered on REPs DOES NOT represent national policy and ONLY applies to those schemes which have an appropriately qualified and registered Level 3 exercise referral professional designing, agreeing, adapting and reviewing the client's physical activity programme. Schemes MUST NOT use only Level 2 qualified exercise instructors.
- Exercise referral schemes operating with 'other instructors' who are not registered with REPs with the Level 3 exercise referral category of registration should look at the legal implications of this model.
- Where a scheme offers physical activities specialist whole classes for clients with any of the conditions covered by the Level 4 fitness National Occupational Standards they should ensure that the instructors designing, agreeing, adapting and reviewing programmes for these clients are registered with REPs at Level 4 with the relevant Level 4 category of registration (e.g. cardiac rehabilitation).
- Exercise referral coordinators/managers need to ensure that ALL exercise referral instructors have a clear understanding of how to risk stratify clients using accepted models and what factors indicate that a client is 'MEDIUM RISK' and should NOT BE REFERRED ON to 'other instructors' during their referral period.
- Exercise referral instructors referring on to 'other instructors' must define and document an individually determined risk stratification category for every client referred on to satisfy themselves that clients are 'LOW RISK'.
- Exercise referral commissioners should include the requirement for instructors designing, agreeing, adapting and reviewing programmes to be members of REPs with a Level 3 exercise referral category of registration within Service Level Agreements and service specifications.
- Relevant training/CPD should be provided as an add-on to the Level 3 exercise referral qualification and should reflect the latest and emerging guidelines on physical activity for the prevention, treatment and management of medical conditions.¹
- Training providers offering CPD relevant to exercise referral instructors (e.g. in the areas
 of behaviour change, monitoring and evaluation, prevention, treatment and management
 of medical conditions) are encouraged to seek SkillsActive endorsement to enable
 instructors to apply for REPs CPD points to maintain their status on the register.
- Training providers and relevant national agencies should conduct learning needs analysis with exercise referral schemes/exercise referral professionals in order to identify knowledge and skills gaps and develop training/CPD opportunities accordingly.

^{xxix}REPs is an independent public register which recognises the qualifications of exercise and fitness professionals in the UK. REPs provides a system of regulation for instructors and trainers to ensure that they meet the health and fitness industry agreed National Occupational Standards

- Training providers should offer learning and professional development opportunities for exercise referral scheme coordinators/managers.
- From April 1st 2010 a new REPs framework and new National Occupational Standards for exercise referral will be in place.

Section 9: A Guide to Qualifications and Training

The aim of this section is to provide clear guidance on qualifications and training for professionals involved in the delivery, coordination and commissioning of exercise referral schemes.

9.1. Professional Competencies

According to the National Quality Assurance Framework (NQAF)² and the Register of Exercise Professionals (REPs)³ exercise professionals^{xxx} involved in the delivery of physical activity as part of an exercise referral scheme should hold appropriate qualifications and insurance, be a member of the register and should:

"Confine themselves to practice only those activities for which their training and competence is recognised by the Register."

p.1 REPs (2006)

For the exercise professional working within an exercise referral scheme their role includes designing, monitoring, adapting and implementing physical activity programmes for individual clients with a range of medical conditions. They collect and analyse information to ensure the safety and effectiveness of physical activity programmes and actively encourage clients to adhere to regular physical activity programmes, employing appropriate motivational strategies to achieve this.

Exercise professionals working with referred clients should work within their professional role boundaries (e.g. REPs' registered Level 3 exercise referral instructor or REPs' registered Level 4 specialist instructor) or refer back to the referring healthcare professional in cases where there are any objectives, physical activities or risks that fall outside their professional boundaries or that they do not feel competent to deal with.

Exercise referral instructors give guidance to encourage referred clients to follow the evidence-based key safety guidelines for their medical conditions during exercise and physical activity and discourage them from any activity deemed to be potentially hazardous/contraindicated, to enable them to participate safely and effectively.

In the absence of any further training and CPD they may have undertaken, exercise referral qualified instructors have the knowledge, understanding and skills to work with referred clients with the following medical conditions:

- Cardiovascular: Hypertension; Hypercholesterolemia.
- **Respiratory:** Asthma; Chronic Obstructive Pulmonary Disease (COPD).
- Musculoskeletal: Osteoarthritis; Rheumatoid arthritis; Joint replacement; Simple mechanical back pain; Osteoporosis.
- **Psychological/Mental Health Problems**: Depression; Stress; Anxiety.
- **Metabolic/Immunological:** Diabetes Type I and Type 2; Obesity.

9.2. **Qualifications**

^{xxx} In this context the exercise professional is identified as the person responsible for developing the exercise/physical activity programme for a referred patient

According to the NQAF the minimum level of qualification recommended for exercise professionals devising programmes for clients engaged in exercise referral schemes is a Level 3 advanced instructor with a recognised exercise referral qualification and a relevant CPR qualification. The exercise referral qualification must meet unit D449 National Occupational Standard⁴ in exercise referral developed by the sector skills council, Skills Active.^{xxxi}

It is recognised that due to the current shortage of appropriately qualified staff some schemes may offer referred clients the opportunity to participate in physical activities that are led by instructors who do not hold a recognised exercise referral qualification. For example, many schemes offer yoga, tai chi, dance, swimming, walking, which are delivered by instructors who may or may not be qualified in exercise referral. Given that clients' physical activity needs and preferences are diverse, such activities are a valuable part of the menu of physical activity options available within schemes. There is a greater likelihood of clients adhering to a physical activity programme when activities are enjoyable and there are variations in the types of activities on offer; indeed, clients may actively seek out such alternative physical activities during their referral period.⁵

However, the diverse range of activities being offered by exercise referral schemes raises questions about client safety and quality assurance, as not all instructors delivering the wider range of activities will hold the appropriate qualifications for working with referred clients. It must also be acknowledged that the supervision of a client during their exercise programme may not always be undertaken by the qualified exercise referral instructor due to shift patterns, annual leave or sickness absence or due to the attendance preferences of individual clients.

The REPs' Registered Level 3 exercise referral instructor should be responsible for designing, agreeing, adapting and reviewing the client's physical activity programme and should retain overall responsibility for the client whilst participating in the scheme. However, in some circumstances, the REPs' registered Level 3 exercise referral instructor might deem it is safe and appropriate to delegate to another exercise instructor to supervise or deliver part of the client's exercise programme.

In these circumstances, the qualified exercise referral professional must:

- Define and document an individually determined risk stratification category for every client referred on to satisfy themselves that clients are at 'low risk' of an adverse event occurring during exercise. N.B. According to their condition, 'medium risk' clients should be supervised by either a REPs' registered Level 3 exercise referral instructor or REPs' registered Level 4 qualified instructor (as appropriate) AT ALL TIMES.
- Ensure that the exercise instructor holds the qualification/s relevant to the mode of activity they are instructing.
- Ensure clients are able to make an informed choice about the exercise/physical activity they are to participate in based on an understanding of their condition/s and <u>the exercise</u> <u>instructors qualifications to design</u>, agree, adapt and review a programme according to <u>their individual needs</u>.
- Inform clients if an instructor to whom they are referred on to does not hold a recognised exercise referral qualification.

^{xxxi} This recommendation reflects the position at the time the National Quality Assurance Framework was written and will change from April 1st 2010 – refer to part 6 for further details

• Be confident that the client can safely follow the exercise programme and is able to accurately monitor their exercise intensity.

Where exercise referral schemes deem it is safe to use 'other instructors' who are not REPs' registered Level 3 exercise referral instructors, it is strongly recommended that these schemes ensure all parties have:

- A clear understanding of the boundaries of their role i.e. what they can and cannot do with the referred client.
- A clear understanding of the absolute contraindications to exercise and factors that indicate that a client is at 'low, medium or high risk' of an adverse event occurring during exercise.
- REPs membership with the appropriate qualifications for the mode of exercise they are supervising.
- A minimum standard of emergency first aid.
- Appropriate insurance cover.
- Clear instructions and reporting mechanisms, e.g. what to do in an emergency;
- Necessary information about the client's condition.
- Records of any exercise programme the client is to follow and advice given.
- The knowledge and skills to recognise the signs and symptoms of any adverse events associated with a range of common medical conditions, i.e. hypoglycaemic event, asthma attack, epileptic fit etc.

The use of exercise instructors who are not Level 3 exercise referral qualified and not registered on REPs <u>DOES NOT</u> represent national policy and ONLY applies to those schemes which have an appropriately qualified and registered Level 3 exercise referral professional designing, agreeing, adapting and reviewing the client's physical activity programme. Schemes <u>MUST NOT</u> use only Level 2 qualified exercise instructors.

Exercise referral schemes operating with additional instructors who are not Level 3 exercise referral qualified and not registered on REPs should look at the legal implications of this model.

Many schemes are now providing enhanced services in the form of phase IV cardiac rehabilitation or falls prevention programmes. Guideline 7 of the National Quality Assurance Framework states that 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.

Where a scheme offers specialist whole classes for clients with any of the conditions covered by the Level 4 National Occupational Standards for Exercise Professionals, these schemes must ensure that the exercise professionals designing, agreeing, adapting and reviewing programmes for these clients hold the relevant Level 4 qualification.

For example, an exercise professional working with cardiac patients (who may be individually stratified as being low, medium or high risk) must be registered on REPs with an appropriate Level 4 cardiac rehabilitation qualification.

The conditions covered by the Level 4 standards include:

- Cardiac Rehabilitation
- Falls Prevention
- Low Back Pain
- Stroke
- Obesity and/or Diabetes
- Mental Health

9.3. Training and Continuing Professional Development (CPD)

Exercise professionals working in exercise referral schemes are advised to regularly update their knowledge and skills on the latest guidelines for exercise testing and prescription for specific medical conditions.

Exercise professionals are also expected to undertake CPD to maintain their status on REPs. Consequently many undertake training simply to fulfil this obligation rather than reviewing where there are gaps in their existing skills, knowledge and competencies. Furthermore, opportunities for acquiring the appropriate CPD points are often restricted by what's available in the marketplace from local or national training providers.

Due to the increasing prevalence of long-term medical conditions⁶ it is likely that exercise referral professionals are now dealing with a wider range of medical conditions compared to when exercise referral schemes first began. Qualitative evidence from existing schemes has shown that patients would have liked instructors to be more knowledgeable about their specific condition and which exercises would be most suitable for them.⁷

Given these findings, exercise professionals need to be able to access more in-depth Level 3 training/CPD opportunities for the wider range of conditions which they encounter. Such courses should be provided as an add-on to the Level 3 exercise referral qualification and should reflect the latest and emerging guidelines on physical activity for the prevention, treatment and management of medical conditions.¹

As reported in section 2: A snapshot of current practice, exercise professionals are asked to gather data on a range of physiological, lifestyle and psycho-social indicators for monitoring and evaluation purposes. Specific knowledge and skills are required to conduct such measures and to capture reliable data. To minimise errors in gathering data it is important that exercise referral professionals are provided with adequate and standardised training in using these techniques. It is not known what level of detail is given on these indicators in existing training courses, however according the NQAF exercise professionals should be trained to assess specific health indicators such as blood pressure, heart rate, body composition and lung function.

NQAF recommends that:

"Exercise professionals should employ an acceptable model of behaviour change in their interaction with potential patients participating in the referral process"

p.19 NQAF (2001)

It is recognised that many of the behaviour change training courses are not approved and therefore do not carry CPD points with the Register of Exercise Professionals which can act as a disincentive for exercise professionals pursuing this type of training.

Whilst REPs may be able to award CPD points for such training on a case by case basis, ⁸ training providers offering CPD relevant to exercise referral instructors (e.g. in the areas of behaviour change, monitoring and evaluation, prevention, treatment and management of medical conditions) are strongly encouraged to seek SkillsActive endorsement to enable instructors to apply for REPs CPD points to maintain their status on the register.

As previously noted National Occupational Standards for the role of the exercise referral scheme coordinator do not exist, however as part of their ongoing professional development exercise referral coordinators are advised to update their qualifications and undertake training relevant to the delivery and management of the exercise referral scheme.

Coordinators are encouraged to look to existing regional physical activity networks and exercise referral forums for opportunities for continuing professional development.

It would be advantageous for exercise referral coordinators to work in partnership with existing training providers to systematically gather data about what gaps there are in the existing skills, knowledge and attitudes of qualified exercise referral instructors to best meet the needs of their local scheme. This would enable training providers to offer appropriate learning opportunities to fill the gaps identified and ensure that there is sufficient continuing professional development training relevant to the needs of qualified exercise referral professionals.

9.4. Risk Stratification

The significance of risk stratification in the exercise referral context warrants its consideration separately in this section; however the concept of risk stratification is applicable to referring health professionals and should be borne in mind when agreeing protocols with prospective referrers.

According to SkillsActive one of the key components of the current National Occupational Standard for Exercise Referral (D449) relates to the importance of risk stratification: the identification of morbidities in terms of low, medium and high risk and the need to risk stratify clients. However, there has never been a nationally agreed definition and understanding of risk stratification in the context of exercise referral in the UK.⁹

In developing this toolkit it has been evident that exercise professionals are struggling with the concept of risk stratification for referred clients. A range of approaches are being utilised by schemes: Some schemes are following the pyramid presented in the NQAF which aligns the patient's health characteristics with the required level of exercise professional expertise according to the National Occupational Standards; some schemes are using the American College of Sports Medicine (ACSM)¹⁰ risk stratification categories; others schemes are using guidelines developed at a local level in consultation with medical professionals and clinical

exercise physiologists; and finally, some schemes are unsystematically using a combination of one or more of the above approaches.

A single approach to risk stratification does not exist, however it is apparent that there is a significant need for a risk stratification tool which would enable exercise professionals to standardise their approach to risk stratifying referred patients.

Background work undertaken by SkillsActive in 2005/2006 recognised that there was a need to standardise the concept of risk stratification in the exercise referral context, unfortunately due to a lack of resources this project came to a standstill.

A project is currently underway to establish a national protocol for risk stratification that can be applied to exercise referral, however, in the absence of any national guidance presently, exercise professionals are advised to continue to use the pyramid presented in the NQAF (see section 9.8.1) as a guide for stratifying morbidities in terms of low, medium and high risk. In addition an alternative risk tool developed by Irwin and Morgan has been presented in the appendices; this tool uses a traffic light system to identify risk (see section 9.8.2).

9.5. Summary of responsibilities

All professionals involved in the delivery, coordination and commissioning of exercise referral schemes have key responsibilities with regards to qualifications, training and quality assurance.

9.5.1. Exercise Professionals

With regard to qualifications and training exercise professionals working within an exercise referral scheme should:

- Be registered with REPs with the Level 3 exercise referral category of registration necessary for working with referred clients. This confirms that the exercise professional:
 - Possess a nationally recognised exercise referral qualification that meets the relevant National Occupational Standards.
 - Maintains and develops their knowledge and skills through recognised CPD.
 - Accepts the REPs Code of Ethical Practice and has adequate insurance cover.
- Undertake training in relevant theory-led behaviour change techniques and monitoring and evaluation procedures.
- Regularly engage in relevant continuing professional development.

9.5.2. Exercise Referral Scheme Coordinators

With regard to qualifications, training and quality assurance exercise referral coordinators should:

- Ensure all instructors involved in delivering sessions as part of the exercise referral scheme are registered on REPs with the appropriate qualifications to carry out their role safely and effectively e.g. a Level 3 Exercise Referral Qualification that meets the relevant National Occupational Standards.
- Work to ensure that facilities offering exercise referral meet industry quality assurance standards such as QUEST, FIA Code of Practice or Inclusive Fitness Initiative Mark (see useful links and resources for further information about the different schemes).
- Work with referrers to identify their training needs provide specific training about the scheme - aims, protocols, operating procedures etc and the benefits of the scheme to them and their patients, where necessary provide additional training about the benefits of physical activity for health.
- Regularly verify the REPs membership of existing and new exercise referral instructors (i.e. to ensure that they undertake the required training/CPD to maintain registration and/or have the appropriate qualifications that meet the relevant National Occupational Standards).

9.5.3. Exercise Referral Scheme Commissioners

With regard to qualifications and training exercise referral scheme commissioners should:

- Put mechanisms in place as part of Service Level Agreements and service specifications to ensure that:
 - Exercise professionals responsible for designing, agreeing, adapting and reviewing programmes for exercise referral clients are REPs registered with the Level 3 exercise referral category of registration;
 - Where a scheme offers specialist whole classes for clients with any of the conditions covered by the Level 4 fitness National Occupational Standards, the instructors designing, agreeing, adapting and reviewing programmes for these clients are REPs registered at Level 4 with the relevant Level 4 category of registration (e.g. cardiac rehabilitation).
- Consider future training needs and resource implications to ensure providers continue to meet National Occupational Standards.
- Recommend that facilities offering exercise referral are QUEST or FIA Code of Practice accredited.

As previously noted, some exercise referral schemes are currently operating with professionals who are not on the Register of Exercise Professionals with the appropriate Level 3 exercise referral qualification.

These schemes must recognise they have a duty of care to the client and the law would expect reasonable care and skill to be shown in minimising any potential risks for referred patients participating in an exercise referral scheme. In the unlikelyevent that a referred patient should have an adverse event whilst participating in an exercise session which is part of the exercise referral scheme, the exercise instructor responsible for delivering the exercise session would be deemed to be working outside of their code of practice and beyond their training and competencies and could potentially be liable.

It is <u>essential that all instructors</u> responsible for designing, agreeing, adapting and reviewing a physical activity programme for referred patients are registered on the Register of Exercise Professionals with the exercise referral category of registration; this means they will hold an appropriate Level 3 qualification that meets the relevant industry agreed National Occupational Standards in the <u>area of exercise referral</u>.

9.6. The future of qualifications and training

From 1st April, 2010 a new REPs framework and new National Occupational Standards for exercise referral will be in place.

Under the new framework <u>ALL</u> Level 3 exercise referral qualifications will be required to cover the core Level 3 exercise instructor standards* and align to the new exercise referral standards (D463 Design, manage and adapt a physical activity programme with referred patients/clients and D464 Plan and instruct physical activities with referred patients/clients).

*The core Level 3 standards include: C22 Promote health, safety and welfare in active leisure and recreation; C317 Work with clients to help them to develop and maintain adherence strategies; A335 Reflect on and develop own practice in providing exercise and physical activity; D459 Evaluate exercise and physical activity programmes and the Level 3 knowledge requirements.

The additional core units/standards that will comprise a mandatory component of exercise referral qualifications from April 1st 2010 will be entirely relevant to the role of the exercise referral instructor (i.e. this is in recognition that the current requirement for instructors to first obtain the Level 3 advanced instructor qualification prior to progressing to Level 3 exercise referral is not appropriate).

9.7. <u>References</u>

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Section 10: Appendices





Section 1:

- Physical Activity Patterns of UK Adults
- East/West Midlands Exercise Referral Mapping Questionnaire
- BHFNC Exercise Referral Mapping Questionnaire
- Background Briefing Paper

Section 2:

- BHFNC Exercise Referral Mapping Questionnaire
- Background Briefing Paper
- Geographical distribution of schemes by region

Section 4:

- Physical Activity/Exercise Referral Transfer Form
- Irwin and Morgan Sample Risk Stratification Tool
- General Practice Physical Activity Questionnaire (GPPAQ)
- NQAF Patient Characteristics & Exercise Professional Expertise
 Pyramid

Section 5:

- Sample Courtesy letter to Patient's GP
- Sample content of a patient information sheet and pre-exercise assessment/screening consent form
- Physical Activity Readiness Questionnaire
- Sample Checklist for Initial ER Consultation Meeting

Section 6:

- NQAF Patient Characteristics & Exercise Professional Expertise Pyramid
- Physical Activity Readiness Questionnaire (PAR-Q)
- National Occupational Standard Unit B17
- Sample GP Practice Sign-up Form
- Sample Sign-up Form For Allied Health Professionals
- Irwin and Morgan Sample Risk Stratification Tool

Section 8:

- Evaluation Design
- Logic Model
- Natural England Outdoor Health Questionnaire
- The Stages of Change Questionnaire
- The Self-Efficacy for Exercise Scale
- Seven-Day Physical Activity Recall
- The Godin Leisure Time Exercise Questionnaire
- SF12
- EQ5D
- The WHOQOL-BREF
- REFERQUAL

Section 9:

- NQAF Patient Characteristics & Exercise Professional Expertise Pyramid
- Irwin and Morgan Sample Risk Stratification Tool

Appendix 1. Physical Activity Patterns of UK Adults

Percentage of adults, by age and sex, meeting the physical activity recommendations for England, Scotland, Wales and Northern Ireland

	All ages	16-24	25-34	35-44	45-54	55-64	65-74	75+
	%	%	%	%	%	%	%	%
ENGLAND								
Men	40	53	52	46	38	35	21	9
Women	28	33	36	35	34	27	16	4
SCOTLAND								
Men	42	59	57	45	40	35	23	13
Women	30	36	40	39	35	28	16	6
WALES								
Men	36	49	41	42	38	31	23	15
Women	23	29	29	29	27	21	17	6
NORTHERN IRELAND								
Men	33	33	40	39	29	28	26	17
Women	28	26	35	35	33	26	20	11

Notes: Recommended level of physical activity 30 minutes or more of moderate intensity physical activity at least 5 days a week Sources:

Health Survey for England (2008) http://www.ic.nhs.uk/statistics-and-dat-collections/health-and-lifestyles-related-surveys/health-survey-for-england/health-survey-for-england-2007-latest-trends-[ns]

Health Survey for Scotland (2003) http://www.scotland.gov.uk/Resource/Doc/924/0019811.pdf

Welsh Health Survey (2007) http://new.wales.gov.uk/statsdocs/health/hs2007/hs2007ch4e.xls

Northern Ireland Health and Social wellbeing Survey (2005/06) <u>http://www.csu.nisra.gov.uk/Physical%20activity.pdf</u>

Appendix 2. East/West Midlands Exercise Referral Mapping Questionnaire

This form is to be completed by the Coordinator or Manager of the ER Scheme

Background information

1. Title of the Scheme:

.....

2. Coordinator/Lead Contact Name:

.....

3. Coordinator/Lead Contact details:

Email:

Telephone:

Address:

4. What is the area covered by the scheme: i.e. Name of town, city, county covered by the scheme.

.....

5. Who is the lead agency in the scheme?

.....

6. How long has the scheme been running for?

Length of timeTickPilot phase1 - 3 years4 - 6 years7 - 9 years10 years +

Details of the scheme

7. What is the overall aim of the scheme? i.e. a vision statement or overarching aim?

8. What are the specific target groups for the scheme?

- □ People who are sedentary
- □ People with CHD
- □ People at risk of CHD
- □ People who are overweight or obese
- □ People with Diabetes
- □ People with musculoskeletal conditions
- □ People with Chronic fatigue/ME etc
- □ People at risk of falling
- People with Mental Health conditions
- □ Other (please state)

.....

9. Please state or attach your inclusion or exclusion criteria for the scheme?

10. What activity settings are available through your scheme and give examples of the activities available in the setting? Please tick the appropriate ones

Setting	Tick	Number of facilities involved	Type of activities
Local Authority Leisure Facility			
Private Leisure Facility			
Sports Club			
Outdoor settings			
Community settings			
Other (please state)			

11. What is the length of referral period? E.g.10 weeks, 12 weeks etc

- 4 weeks
- □ 6 weeks
- □ 8 weeks
- □ 10 weeks
- □ 12 weeks
- □ 14 weeks
- □ Other (please state).....

12. If known, please give an indication of the average number of activity sessions that clients attend during the exercise referral period

.....

13. Who can refer onto the scheme?

- □ GP
- Practice Nurse
- □ Community Healthcare (Health Visitors, Community Nurses etc)
- Dieticians
- □ Cardiac Rehabilitation professionals
- □ Physiotherapists
- Occupational Therapists
- □ Private health professionals
- □ Specialist Nurses
- □ Hospital Department Consultant
- □ Community Psychiatric Nurses
- □ Mental Health professionals
- □ Other (please state)

.....

14. How many GP practices are there in the area covered by the scheme?

.....

15. How many of these practices refer to the scheme?

.....

16. Which health professionals are the most frequent referrers? e.g. GP's, etc

.....

.....

17. What is the charge to patients/clients during the referral period?

Assessment charge: Re-assessment charge:

Activity Session charges: please give the range of approximate charges for different activities if known e.g. *Free walks – community sessions* $\pounds 2.50 - gym$ session $\pounds 3.50$

.....

18. Please state any other charges implemented by the scheme

.....

.....

19. Is the scheme run inline with the National Quality Assurance Framework for Exercise Referral Systems?

- YesNoPartly
- Unsure

20. If you answered partly to the question above please state which parts of the NQAF the scheme adheres to

21. Is feedback on the client/patient's progress given to the referrer? If you answer yes, at what point is the feedback given?

- - □ No
 - Unsure

22. Do referrers make follow up appointments with patients once they have completed the referral period?

- Yes
- □ No
- Don't know

23. What happens after the referral period? Where do people go next?

.....

Staff Training

24. What exercise referral qualifications do your instructors have? (please tick)

- □ CYQ Exercise Referral
- □ Wright Foundation Exercise Referral
- □ Cardiac Rehabilitation Phase IV
- □ Gayton Group Exercise Referral
- □ Other (please state)

.....

25. Are your instructors registered on the Register of Exercise professionals?

- Yes
- □ No
- □ Unsure

26. Do you organise any in house training for continuing professional development or the advancement of staff knowledge?

- Yes (please state).....
- □ No
- Unsure

Cost implications of the scheme

27. What are the core costs (if known) of running the scheme per annum?

Core Costs

Amount Spent

Co-ordination Training Staff Promotion Delivery Evaluation

Partnerships and Scheme Management

28. Please name the partners in the scheme and identify funding contributions that are made by each partner, please also give details of what resources the partners provide i.e. expertise, venues, training etc

Partner

Funding contributed

Resource contributed

29. Does the scheme have a steering group to manage and develop it?

- Yes
- □ No
- □ Unsure

30. Please outline the team responsible for the delivery of the scheme, including a brief description of their role, employing body and contracted hours?

Post	Organisation	Role	Contracted hours for the scheme per week
Example: Coordinator	PCT	Scheme Coordinator	21 hours
Fitness Assessor (x6)	Local authority leisure services	Assessment & programming	10 hrs x 6

Monitoring and Evaluation

31. Is the scheme monitored and evaluated?

- Yes
- No
- Unsure

32. Is the evaluation completed internally or externally?

- □ Internally (please state who by);
- □ Externally (please state who by);
- □ Scheme not evaluated

33. How often is the scheme evaluated?

- Quarterly
- □ Every six months
- □ Annually

34. Are any particular software packages to monitor the scheme?

- □ Yes (please state)
- □ No
- □ Unsure

35. Do you have any specific targets/objectives set for the scheme? If so please identify these targets.

- □ Yes
- □ No
- □ Unsure

36. Please give an indication of the key aspects of the scheme that you evaluate and monitor i.e. throughputs, adherence, satisfaction, physiological and psychological measures etc

.....

.....

.....

37. Have you undertaken a cost effectiveness evaluation of your scheme?

- Yes
- 🗆 No
- □ Unsure

38. Is your scheme currently part of a research programme? If yes please give brief details of this research.

Yes
No
Unsure

Current statistics

39. If known please give an indication of the overall number of clients/patients that participate in the scheme per annum.

.....

40. If known please give an indication of the adherence rates for your scheme (i.e: % of clients completing full period of the programme and if known the longer term adherence rates past this period.

.....

Long Term Sustainability

41. What is the status of the scheme? If your scheme is in a pilot phase or short term funded please indicate when the funding expires.

- Pilot phase, ending.....
- □ Short term funded, ending.....
- □ Funded from mainstream budgets
- □ Other (please state)

42. Please identify three successful elements of your scheme

.

1.	
2.	
~	
3.	

43. Are there any planned future developments for your scheme? If yes please describe

- □ Yes □ No
- □ Unsure

44. In your opinion what improvements could be made to the scheme?

Print Name:....

Signature:....

Date:....

Thank you for taking the time to complete this questionnaire. All individual scheme data will remain anonymous for reporting purposes. The data collated during the mapping exercise will be used to form a report on exercise referral in the West Midlands. This report will be used to inform the development of appropriate support for exercise referral schemes in the region and the cross regional discussions into exercise referral research to meet NICE guidelines.

Please return this form to Suzanne Gardner, Regional Physical Activity Co-ordinator, c/o Sport England West Midlands, 5th Floor, No 3 Broadway, Five Ways, Birmingham, B15 1BQ or fax to 0121 633 7115

Appendix 3. BHFNC Exercise Referral Scheme Mapping Questionnaire

This form is to be completed by the Coordinator or Manager of the ER Scheme

Section 1: Scheme coordinator contact information

1. Scheme coordinator contact name 2. Scheme coordinator contact details E-mail Telephone Address

Section 2: Details of the scheme

3. Title of the scheme

4. What is the area covered by the scheme? i.e. name of town, city, county

5. Who is the lead	l agency for t	the schem	ne? Please ti	ck the relevant box

Local authority	Voluntary sector
Primary care trust	University
Acute trust	Voluntary sector
Private sector	Joint local authority and PCT

Other (please specify)

6. How long has the scheme been running?

7. What is the overall aim of the scheme? i.e. a vision statement or overarching aim

8. What are the objectives of the scheme? e.g. to provide more opportunities for physical activity for people with medical conditions

9. Do you have a visual diagram which shows the conceptual framework of the scheme? <i>Please tick the relevant box</i>					
Yes		If yes, please attach	No		If no, please go to Q10
10. Do you have any inclusion criteria for the scheme based on physical activity					

(PA) levels? Please tick the relevant box				
An example of an inclusion criteria ba	ased on physical activity levels might be:			
sedentary - less than 30 minutes of I	PA per week; insufficiently active – less			
than 5x30 minutes moderate intensit	y PA per week; regularly active – 5 or			
more 30 minute sessions of moderate	e intensity PA per week.			
Yes If yes, please see belo	w No If no, please go to Q11			
Please specify how you measure phys	sical activity:			
	- for the scheme of a second ship black			
11. Do you have any exclusion criteri	a for the scheme? e.g. unstable blood			
Pressure Please lick the relevant box	No. If no. places go to 012			
helow	NO IT TIO, please go to Q12			
Below				
12 How are participants recruited to	the scheme? Please tick all that apply			
Opportunistically in a consultation	New patient consultation			
Health screening	Via existing condition clinic e g			
	asthma			
Via existing disease registers e.g. CHD	Via advertising e.g. in practice			
Patient initiated request				
Other (please specify)				
Concerning and the scheme?	Please tick all that apply			
Dractico purso	Montol hoolth professionals			
Community pursos health visitors				
Distigions	Drivate health professionals			
Cardiac rebabilitation professionals				
Caldiac reliabilitation professionals	apilensy			
Other (please specify)	epilepsy			
Other (please speeny)				
14. Approximately what percentage of	of GP practices in your locality refer to the			
scheme? Please tick the relevant box				
	More than 66%			
34%-66%	If known please give exact percentage			
15 Who is reenersible for booking th	no initial oversice referral consultation?			
Plass tick the relevant her	e initial exercise referral consultation?			
Health professional	Patient			
Exercise professional	Practice receptionist			
Other (please specify)				
16. How is any information and papel	rwork transferred between the health			
professional and exercise professional				

17. How many patients are referred	d into your programme on an annual basis?
18. What percentage of patients fa consultation?	ils to attend the initial exercise referral
10. Are only evetered in place to fell	
exercise referral consultation? Please	se tick the relevant box
Yes If yes, please specify below	No If no, please go to Q20
20. What settings are used for the s	scheme? Please tick all that apply
Local authority leisure facility	Home-based
Sports club	Private leisure facility
Community venue, e.g. church hall	Outdoor settings
Green exercise, e.g. green gyms	
Other (please specify)	
24 Milled tomas of activities are ave	
21. What types of activities are ava	
Gym-based sessions	
Swimming	Jogging/running
Group exercise classes	
Walking	Resistance exercise
Hydrotherapy	Yoga/Pilates/Tai-chi
Sports	Dance
Chair-based exercises	Lifestyle activity e.g. gardening
Other (please specify)	
22. What is the length of the referra	al period? Please tick the relevant box

4 weeks	6 weeks		
8 weeks	10 weeks		
12 weeks	14 weeks		

Other (please specify)

22a. Does the patient incur any costs during the referral period? *Please tick the relevant box*

Torotant box			
Yes	If yes, please go to	No	If no, please go to Q23
	0220		

22b. What is the charge to patients apply and give the cost to the patient	dur	ing the referral period? Please tick all that
Charge	\checkmark	Cost
Single overall charge		
Assessment charge		
Re-assessment charge		
Activity Session charges (please list):		
e.g. Gym		e.g. £2.50 per session
23 How is patient attendance moni	itore	ed during the referral period? e g
patient register, activity vouchers,	etc.	a daring the referral period. e.g.
	010.	
24. Are any systems in place to follo	ow ι	up patients who drop out during the
referral period? e.g. phone call, lett	er e	tc. Please tick the relevant box
Yes If yes, please specify	У	No If no, please go to Q25
below		
25. How do you define nations adhe	ron	a to the scheme?
25. How do you define patient adhe	ren	
26. What percentage of patients co	ompl	ete your programme?
	-	J . U
27. Is information about the patien	ts′ p	rogress fed back to the patient, referrer
or any other stakeholders? Please tick	k all	that apply
Patient		Referrer
Other (please specify)		
28. Is there a patient 'exit strategy	' in p	olace? e.g. concessionary rates after
completion of the referral period Ple	ease	tick the relevant box
Yes If yes, please see be	elow	No If no, please see below
Please could you provide details of the	exit	Please could you provide the reason(s) why
strategy		your scheme does not have an exit
		strategy
20 Are notionto followed un oftent	b are	have completed the referred resided
29. Are patients followed-up after t	ney	nave completed the referral period?

Please tick the relevant box						
Yes		If yes, please see below	No		If no, please see below	
At what time po up? e.g. 3, 6, 12	ints 2 ma	are patients followed- onths	Please could why patients	you are	u provide any reason(s) e not followed-up	

Section 3: Resources

30. To what extent did you use the National Quality Assurance Framework (NQAF) to inform the scheme? Please tick the relevant box									
Not at all		A small amount		Somewhat A lot					
31. How	/ use	eful did you find the l	IQAI	F in the fol	lowing	asp	pects of the s	schen	ne?
Please tic	k the	relevant boxes							
				Very	Usefi	ul	Slightly	N	ot
				useful			useful	use	eful
Initial pla	annin	ig and design							
Impleme	Implementation/ delivery								
Undertak	king e	evaluation							
Continue	ed sch	neme development							

Section 4: Staff qualifications

32. Do you have a minimum level of qualification for your instructors? e.g. CYQ Exercise Referral, Cardiac Rehabilitation Phase IV etc. Please tick the relevant box						
YesIf yes, please specify belowNoIf no, please go to Q33					If no, please go to Q33	
33. Do you off (CPD) for exe	fer a rciso	ny opportunities for e referral staff? Please	continuing pr tick the relevan	ofe	ssional development	
33. Do you off (CPD) for exe Yes	fer a rcis	any opportunities for e referral staff? Please If yes, please specify below	continuing pr tick the relevan No	ofe of bc	ssional development _{9x} If no, please go to Q34a	

Section 5: Monitoring and evaluation

34a. Does the scheme include any evaluation activities? Please tick the relevant box						
Yes		If yes, please go to	No		If no, please go to Q48	
		Q34b				
34b. Are the ev	alu	ation activities comple	eted internal	ly (e.g. by you) or	
externally (e.g	. by	a university)? Please t	ick the relevant	box	and specify by whom	
	\checkmark		By who	m		
Internally						
Externally						

35. Do you involve <i>tick the relevant box</i>	any stakeholders in	planning the sche	eme's evaluation? Pleas	se
Yes	If yes, please see below	No	If no, please go to Q34	
Please specify which	ch stakeholders are i	nvolved in the eva	aluation	
36. How often do y scheme? Please tick	ou collate evaluatior the relevant box	data and prepare	e a report on the	
Quarterly		Every six month	S	
Annually		Bi-annually		
Other (please specify 37. Do you assess) whether the activitie	s offered within t	he scheme are	
implemented as pla	anned? Please tick the r	elevant box		
Yes	If yes, please see below	No	If no, please go to Q38	
Please briefly desc	ribe			
38. Do your evalua population(s)? <i>Plea</i>	tion activities assess se tick the relevant box	whether the sch	eme reaches the targe	ət
Yes		No		
39. Do you evaluat	e cost effectiveness?	Please tick the relev	rant box	
Yes		No		
40. Do you assess	any patient outcome	s? Please tick the rele	evant box	
Yes	If yes, please go to Q41	No	If no please go to Q45	
41. What patient o	utcomes do you mon	itor? e.g. physica	l activity, blood	
pressure, mood, at	titude to physical act	tivity, satisfaction	n with the scheme etc.	
Please tick all that appl	y and specify the method	of measurement for	each outcome	
Outcol	me v	Method o	of measurement	
Physical activity				
Physical fitness				
Blood pressure				
Body composition				
MOOU Stage of behavioural	ahanga			
Attitude to physical a				
Attitude to physical a				
Othor (ploase specify	0			
Other (please specify)			
42. Which patients	do you collect data f	rom? Please tick the	e relevant box	
All who are referred		All who attend at le	east one session	
All who attend initial	consultation	All who complete th	ne programme	
Uther (please specify)			

g ou	Itcome data? Please tick all that apply	
	Exercise professional	
nt o	utcomes? Please tick all that apply	
	During the referral period	
rent	evaluation activities help assess	
spe	cified aims and objectives?	
	Somewhat A lo	t
ns q	do you think need to be made to t	he
cor	nducting your evaluation activities	s?
cor	nducting your evaluation activities	5?
cor	nducting your evaluation activities	5?
cor	nducting your evaluation activities	5?
	g ou nt o rent spe	g outcome data? Please tick all that apply Exercise professional nt outcomes? Please tick all that apply During the referral period rent evaluation activities help assess specified aims and objectives? Somewhat A loo ons do you think need to be made to t

Section 6: Scheme development

48. Please could you list up to three successful elements of the scheme and state why you feel these element are successful						
1.						
2.						
3.						

49. How useful would you find guidant referral schemes. ? Please tick the relevant to the second schemes.	nce on the ant boxes	following	aspects of e	xercise
	Very useful	Useful	Slightly useful	Not useful
Initial planning and design				
Implementation/ delivery				
Undertaking evaluation				
Continued scheme development				
Other, please specify				

50. Are there any developments planned for the scheme? <i>Please tick the relevant box</i>					
Yes		If yes, please specify	No		If no please go to Q51

Section 7: Permission to use information

51. Would you be happy for this project to be used as an example of good practice? <i>Please tick the relevant box</i>						
Yes			No			
52. Would you scheme? Please	52. Would you be happy for us to contact you for further information about the scheme? Please tick the relevant box					
Yes			No			
Signature			Date			

Thank you for taking the time to complete this questionnaire

Please return your completed questionnaire to Kim Buxton at: <u>K.E.Buxton@lboro.ac.uk</u>
Appendix 4. Background Briefing Paper

Dear Colleague,

Since the publication of the NICE guidance about physical activity interventions, specifically exercise referral schemes, there has been some uncertainty about the future of exercise referral schemes and concerns about how professionals will ensure their schemes are complying with NICE guidance. Late last year the BHF National Centre for Physical Activity and Health (BHFNC) held a meeting with the Regional Physical Activity and Health Coordinators to consider how we can best support exercise referral practitioners in implementing the NICE guidance.

At this meeting it was agreed that the BHF National Centre would lead a project to examine the feasibility of developing a framework for the design, delivery and evaluation of exercise referral schemes.

Over the last 10 months the BHF National Centre has been working in partnership with the regional physical activity and health coordinators on this project. Initial groundwork has required professionals working in exercise referral schemes to complete a questionnaire detailing what their scheme involves and how their scheme is evaluated. This audit has enabled the identification of schemes taking place across the Midlands and Northern regions, highlighting strengths, gaps and challenges in practice.

The BHFNC are now working in partnership with the regional physical activity coordinators in the South East and Eastern region to continue gathering evidence about existing schemes.

Why is it important for you to be involved?

An audit of current schemes will enable us to benchmark what schemes are doing across England, aid in the identification of strengths and weaknesses in various approaches to exercise referral and provide us with a rationale for the development of the framework. It is hoped that the framework will assist professionals in designing and implementing exercise referral schemes based on evidence of best practice and help identify resources to ensure schemes are evaluated adequately.

What does this audit involve?

We are asking scheme coordinators to spare 30 minutes to complete the attached questionnaire, this will allow us to gather evidence about schemes and to benchmark what's happening around design, delivery and evaluation.

Please email your completed questionnaire to: <u>K.E.Buxton@lboro.ac.uk</u> Alternatively you can return your completed questionnaire to Kim Buxton, BHF National Centre for Physical Activity and Health, James France Building, Loughborough University, Leicestershire, LE11 3TU.

If possible, please could you base responses to evaluation related questions on the most recent annual report.

Following the initial paper audit, the BHFNC in conjunction with your regional coordinator will be hosting a consultation seminar to gain your views about the content and design of the framework.

This seminar is provisionally booked for Thursday 31st January 2008, between 10-1pm in London; please could you let me know your availability for this seminar.

If you have any questions about the questionnaire or indeed any part of the proposed project, please do not hesitate to contact me on 01509 223267.

Yours sincerely,

King BURION

PAUYARin

Kim Buxton, Assistant Director - Project Manager Primary Care. BHF National Centre for Physical Activity and Health. Manager - Physical Activity.

Paul Jarvis S.E. Regional Development

Appendix 5 - Toolkit Consultation Questionnaire

BHF National Centre for Physical Activity and Health Draft Exercise Referral Toolkit

The purpose of the consultation exercise is to gain professionals' views on the content, design and practical utility of the toolkit and to obtain views about how best to present the final version of the toolkit.

Consultation Response Form

Part 1 – Information about you – Leave this section blank if you would prefer to send in comments anonymously

Name	
Address	
Postcode	
Email address	
Organisation	
Position	
If you are respondi	ng on behalf of an organisation or interest group, how many members
are you representir	ng and how did you obtain their views:

Part 2 – Overall comments about the toolkit

1. Do you think the toolkit is useful as a single source of reference?	Yes 🗖	No 🗖
If no, please explain your reasons or add any additional comments yo	u wish to m	nake:

2. Do you think you will use the toolkit?	Yes 🗖 Go to 2a	No 🗖 Go to 2b
2a. Please tell us how you think you might use the toolkit		
2b. Please explain your reasons or add any additional comments you v	vish to make	
3. Are there any sections of the guidance which you particularly a with?	gree or disa	agree
4. Are there any additional issues which you feel should have been included in the toolkit?	Yes 🗖	No 🗖
If yes, please state what these are and explain your reasons or add an comments you wish to make:	y additional	
5. What did you like <i>best</i> about the toolkit?		
		<u> </u>

6. What did you like *least* about the toolkit?

7. Please indicate how useful YOU have found each section of the toolkit. Please tick the relevant box.

	Very	Useful	Not	Not
	Useful		Useful	sure
Section 1: Background and rationale for the toolkit				
Section 2: Current research and practice				
Overview of current practice				
Overview of research				
National recommendations				
Section 3: Guidance for referring practitioners	1			
 The exercise referral pathway 				
Clinical governance				
 Governance arrangements 				
 Recommendations for referring practitioners 				
Section 4: Guidance for exercise professionals and exercise	cise refe	erral coo	rdinators	5
 Exercise professionals roles and responsibilities 				
 Professional competencies 				
 Exercise referral coordinators - setting up a scheme 				
Training				
 Recommendations for exercise professionals 				
 Recommendations for scheme coordinators 				
Section 5: Guidance for commissioners				
 Towards world class commissioning 				
 Commissioning steps 				
Section 6: A guide to evaluating exercise referral scheme	es			
 Importance of evaluation 				
 Evaluation design 				
 Evaluation expectations 				
 Evaluation planning 				
 Evaluation hierarchy 				
 Process evaluation 				
 Outcome evaluation 				
 Suggested timeline for evaluation of ERS 				
Evaluation recommendations				
Appendices				

8. Are there any sections that could be improved?	Yes 🗖	No 🗖	
If yes, what sections of the guidance do you think could be improve	d and how	?	\mathbf{D}

Section 1	
Section 2	
Section 3	
Section 4	
Section 5	
Section 6	
9. Did the toolkit contain an adequate depth of information? Yes I No I	
If no, please explain your reasons or add any additional comments you wish to make:	
10. Was the language set at an appropriate level? Yes D No D	
It no, please explain your reasons or add any additional comments you wish to make:	
11. In what format would you like to see the final version of the toolkit?	$\mathbf{)}\mathbf{)}$

Downloadable as separate sections:	Yes 🗖	No 🗖
• technical report: background, overview of current practice and	Yes 🗖	No 🗖
research		
 guidance for referring practitioners 	Yes 🗖	No 🗖
guidance for exercise professionals, commissioners	Yes 🗖	No 🗖
guidance for commissioners	Yes 🗖	No 🗖
CD-rom	Yes 🗖	No 🗖
Internet micro site from BHF National Centre website with	Yes 🗖	No 🗖
downloadable mix-and-match resources		
the final toolkit	be appropr	ate for
12. Are there any existing elements from the current presentation which you like?	Yes 🗖	No 🗖
in no, please explain of add any additional comments you wish to h		
13. Do you have any comments on the sharing of good practice features?	Yes 🗖	No 🗖
If yes, please add any additional comments:		
14. Do you think the toolkit cheyld contain images of EDS in	Vee T	
practice?		
If yes, do you have any images/photographs that you can share?		
15. Please use the space below to provide any additional com	ments.	

Thank-you for taking the time to provide feedback on the draft version of the toolkit.

Please return your consultation responses by 27th March 2009

Please send to: Kim Buxton, BHF National Centre for Physical Activity and Health, James France Building, Loughborough University, Loughborough, Leicestershire. LE11 3TU Or Email: <u>K.E.Buxton@lboro.ac.uk</u>

Appendix 6 – Toolkit Working Party Background Paper

BHFNC EXERCISE REFERRAL TOOLKIT WORKING PARTY

Background:

Following the consultation on the BHFNC Exercise Referral (ER) toolkit the BHFNC are setting up a working party to help take forward the exercise referral toolkit in order to ensure the final version reflects the needs of all national, regional and local stakeholders involved in the commissioning, management and delivery of ER schemes and where feasible responds to the issues raised during the consultation exercise.

We are looking for volunteers to assist the BHFNC in this process and are keen to engage professionals who are currently responsible for, or who have experience of delivering (referrers, exercise instructors, operators), coordinating, commissioning or evaluating ER schemes.

What will this involve?

The final drafting of the ER toolkit will be overseen by a working party comprised of national stakeholders and local or regional professionals with experience of ER schemes. The working party will be responsible for reviewing the consultation responses, summarising the key findings and developing an action plan for how the toolkit will be revised and presented.^{\circ}

There will also be several working party sub-groups; members of these sub-groups will have responsibility for revising specific sections of the ER toolkit according to the agreed action plan.

Professionals will be required to:

- Attend at a maximum of 5 meetings either working party or working party sub-groups;
- Respond and comment on relevant papers within a timely manner;
- Contribute to re-writing /revising relevant sections of the toolkit;
- Appraise the Exercise Referral resources to be uploaded on BHFNC;
- Contribute to the production of an ER toolkit executive summary, technical report and national priorities briefing document.

Nature and Extent of Commitments

The deadline for completion of the final version of the ER toolkit is 31st October 2009. The project will have periods of intense work, particularly when sections of the toolkit are being revised by working party sub-group members and also when working party members are being asked to review documents within relatively narrow windows of time.

Involvement in the working party is on a voluntary basis, the BHFNC does not have the funds to reward or reimburse professionals for either their time or travel costs, however all contributions will be fully acknowledged within the BHFNC toolkit. BHFNC will endeavour to keep face-to-face meetings and travel to a minimum and where possible, will communicate via email and/or conference calls.

[⇔] Note: Revisions to the toolkit will primarily be based on the consultation feedback

Appendix 7 - Working Party Expression of Interest Form

BHF NATIONAL CENTRE FOR PHYSICAL ACTIVITY AND HEALTH EXERCISE REFERRAL TOOLKIT WORKING PARTY EXPRESSION OF INTEREST

We would be grateful if you would complete and return this form to help us build up a clearer profile of the expertise amongst **potential members** of the exercise referral toolkit working party.

Name	
Position	
Organisation	
Address	
Telephone No.	
Fax No.	
Email	

MAIN AREAS OF EXPERTISE

Please indicate below your main area of exercise referral expertise

Referring Practitioner	ER Scheme Commissioner	
Exercise Referral Instructor	ER Training Provider	
Operator	Academic/Researcher	
ER Scheme Coordinator	Evaluation Specialist	
Other, please specify below		

Please list any other skills or subject expertise that may be of value/relevance:

<u>Potential working party members</u> must disclose the existence and nature of any prejudicial interests in Exercise Referral, for example a personal or non-personal pecuniary interest^{*}

Have you any prejudicial interests in exercise referral? *If yes,* please give details below.

^{*} Information about any prejudicial interests will be made publicly available on the BHFNC website in the exercise referral toolkit working party technical report.

Appendix 8 - Geographical Distribution of Exercise Referral Schemes By Region



EAST MIDLANDS (NUTS 1 AREA): Breakdown to NUTS 2, 3 and LAU1 Areas





EAST OF ENGLAND (NUTS 1 AREA): Breakdown to NUTS 2, 3 and LAU1 Areas





NORTH EAST (NUTS 1 AREA): Breakdown to NUTS 2, 3 and LAU1 Areas

Z31



NORTH WEST (NUTS 1 AREA): Breakdown to NUTS 2, 3 and LAU1 Areas

LONDON (NUTS 1 AREA): Breakdown to NUTS 2, 3 and LAU1 Areas



YORKSHIRE AND THE HUMBER (NUTS 1 AREA): Breakdown to NUTS 2,3 and LAU1 Areas



Z34

Appendix 9 - Physical Activity/Exercise Referral Transfer Form

Physical activity referral is one way of increasing physical activity levels of patients with specific medical conditions.

It may not be the most appropriate route for patients where there is no underlying medical condition or risk. A general recommendation to increase physical activity levels in order to gain health benefits may be all that is required if you consider the patient has reasonable motivation and resources to safely increase their physical activity levels.

Refer to the <u>scheme inclusion criteria</u> and use your professional judgement to determine whether the exercise referral scheme is the most appropriate route for the patient.

PLEASE COMPLETE THIS FORM IF THE PATIENT IS BEING REFERRED

To be completed by Referring Practitioner ONLY

Please <u>complete all sections of the form</u>, incomplete forms may be returned and your patient may be temporarily deferred until all relevant medical information is obtained.

	PATIENT DETAILS	REFERR	ING PRACTITIONERS DETAILS
Surname:		Name:	
Forename:		Position:	
Male/Female:		Address:	
Date of Birth:			
Address:			
		Postcode:	
		Tel. No:	
Postcode:		Fax. No:	
Contact Tel. No:		Email Address:	
NHS No:		Referral No:	
REGISTERED GP	DETAILS (if different from ref	ferring practitioner)	
Name:		Address:	
Practice:			
Tel. No:			
Fax. No:			
Email Address:		Postcode:	
REASON FOR RE	FERRAL: Please check agains	t scheme inclusion/exclusio	on criteria.
Insert list of condition	ons included in the scheme if p	referred	
MEDICAL INFORM	ATION: Please provide all rele	evant information about the	e patient's health status.
Resting HR:	Systolic BP:	Diastolic BP:	BMI:
MEDICAL CONDIT	TONS: Please give details of <u>al</u>	Il relevant current and pa	st health problems.
Details i.e. Previou	is history of Chronic Fatigue	Dates Diagnose	d 20 th May 2000

MEDICATION:	PHYSICAL LIMITATIONS:
Please provide a list of any medications being taken.	Please provide details any physical limitations
i.e. Beta blockers	e.g. Arthritis of the hip
ADDITIONAL RELEVANT INFORMATION: Please include included in other parts of the form.	any additional relevant information which has not been
ADDITIONAL RELEVANT INFORMATION: Please include included in other parts of the form. e.g. awaiting further investigations	any additional relevant information which has not been
ADDITIONAL RELEVANT INFORMATION: Please included included in other parts of the form. e.g. awaiting further investigations	any additional relevant information which has not been
ADDITIONAL RELEVANT INFORMATION: Please included included in other parts of the form. e.g. awaiting further investigations	any additional relevant information which has not been
ADDITIONAL RELEVANT INFORMATION: Please included included in other parts of the form. e.g. awaiting further investigations	any additional relevant information which has not been

AUTHORISATION

I can confirm that the details given are a true reflection of the patient's medical history & medication, I refer this patient to the physical activity scheme under the terms & conditions set out in the protocol.

Name of Referring Practitioner (PLEASE PRINT)	
Signature of Referring Practitioner	
Contact Telephone No.	
Date of Referral	

PATIENT CONSENT^{XXXII}

The Exercise Referral Scheme has been fully explained to me. I am prepared to participate and I give permission for this information to be passed to staff on the physical activity referral scheme.

PLEASE PRINT YOUR NAME	
Signature of Patient	
Date	

IMPORTANT:

This referral is valid for <u>3 months</u>. If the patient fails to attend the initial consultation within 3 months of the date of referral and still wishes to participate in the referral scheme, the patient <u>must</u> see their Referring Practitioner in order to be re-referred.

Physical Activity Referral Officers are advised <u>NOT TO ACCEPT</u> responsibility for a referred patient until all relevant clinical information is confirmed and signed.

Referral letters or forms 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**.

^{xxxii} All information in this form will be treated in the strictest confidence and stored securely according to the Data Protection Act 1998.

PHYSICAL ACTIVITY/EXERCISE REFERRAL TRANSFER FORM

sical activity referral is one way of increasing physical activity levels of patients with specific lical conditions.

Surname: The last name currently used by ay not be the most appropriate route for patients where there is no underlying medical dition or risk. A general recommendation to increase physical activity levels in order to gain health the patient. afits may be all that is required if you consider the patient has reasonable motivation and resources Forenames(s): The forename(s) currently afely increase their physical activity levels. used by the patient, in the correct order. Sex: Male or female gender of patient. Date of Birth: Date of birth of patient. Patient's Address and Postcode: The address and postcode to which correspondence should be addressed. This would normally be the patient's usual home address. Telephone no: The patient's telephone contact number.

Medical Information:

Patients Details:

This section of the form should include a current measurement of resting heart rate, blood pressure and body mass index. This section of the transfer form should include a comprehensive and relevant summary of the patient's current and past medical status.

Referring practitioners should oclude sufficient information to give a clear picture of the medical status of the patient. It may be appropriate to give information about the duration and severity of the medical condition the patient is being referred for. Sufficient information should be included so that the exercise professional can make an informed judgement about the most appropriate exercise intervention for the patient.

To be co	mpleted by Referring Practitioner ONLY
e <u>complete all sections of the f</u>	orm, incomplete forms may be returned and your patient mag
brarily deferred until all relevant n	edical information is obtained.
PATIENT DETAILS	REFERRING PRACTITIONERS DETAILS
Surname:	Name:
Forename:	Position:
Aale/Female:	Address:
Date of Birth:	
Address:	
	Postcode:
	Tel. No:
Postcode:	Fax. No:
ntact Tel. No:	Email Address:
NHS No:	Referral No:
ISTERED GP DETAILS (if differen	from referring practitioner)
Name:	Address:
Practice:	
Fax. No:	Bostondo
SON FOR REFERRAL: Please che	ck against scheme inclusion/exclusion criteria.
t list of conditions included in the sc	neme if preferred
\mathbf{N}	
\mathbf{N}	
ICAL INFORMATION: Please provi	de all relevant information about the patient's health status
Resting HR: Systol	c BP: Diastolic BP: BMI:
ICAL CONDITIONS: Please give de	tails of all relevant current and past health problems.
gire a	and the second second
	- contract and contract

Referring Practitioners Details:

Name of Referring Practitioner: The name of the person making the referral Position: The position of the person making the referral, e.g. practice nurse, dietician, physiotherapist Referring Practitioners Address and Postcode: The address and postcode of person making the referral Telephone/fax/e-mail: The telephone/fax/email address of the referring practitioner.

Registered GP Details:

Name: The name of the general practitioner with whom the patient is registered.

Practice Address and Postcode: The address and postcode of the general practitioner with whom the patient is registered.

Telephone/fax/e-mail: The telephone / fax / e-mail address of the registered general practitioner.

Reason for Referral:

The referring practitioner should be explicit about why the patient is being referred to the scheme. This will help the receiving exercise professional understand the nature of, and reasons for, the referral. The 'reason for referral' may, *if desired*, include an indication of the expected referral outcome which, for example, aids the treatment and management of diabetes, treatment of borderline hypertension, weight management.



Appendix 10 - Irwin and Morgan sample risk stratification tool

HEALTH PROMOTION

DEVELOPING **RISK TO**

By Dawn Irwin MSc and Oliver Morgan BEng (Hons) Msc

SCHEME DEVELOPMENT

In the central London borough of Kensington and Chelsea, the local Primary Care Trust has been working in collaboration with two existing exercise referral schemes and the local authority, to develop local exercise opportunities. The aim was to increase the number of people participating in regular exercise.

Our first step was to establish a working group, which included scheme managers, a general practitioner and representatives from the Primary Care Trust and local authority. Following an assessment of the existing schemes, the group identified the referral process as the most problematic stage of successful exercise referral schemes. We therefore decided that our first piece of work would be to look at how patients are currently referred. To do this we conducted telephone interviews with general practitioners and general practice nurses to find out what they needed to make better referrals. The respondents overwhelmingly replied that they wanted referral guidelines that they could use during a clinical consultation.

THE RISK STRATIFICATION TOOL

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The group used the National Quality Assurance Framework (4) as the basis of the development process and also looked at examples of several different schemes across the UK. These schemes largely took a risk stratification approach, defining health conditions as high, medium and low risk. While we thought this provided a clear and easy way to consider risk, none of the examples contained sufficient

Exercise referral schemes exist in an evidence-free wilderness. The results from existing studies are inconclusive; a review by the Health Education Authority of physical activity promotion in primary care (1) suggested only limited evid of effectiveness and two further reviews by Hillsdon and Thorogood (2,3) recommend that home-based activities may be better. So where can we draw on evidence in order to improve the effectiveness of existing schemes? This article looks at how one primary care trust developed its own risk stratification tool to improve the referral process to the existing referral schemes.

detail for the referring clinician to be able bone density changes represents low risk, history of fracture increases the risk to medium. When a history of previous low trauma fracture is factored into the equation, this represents high risk and therefore the patient is not suitable for the scheme, but for specialist referral into the Falls and Injury Prevention Exercise Service

The sixth edition of the American College of Sports Medicine's Guidelines for Exercise Testing and Prescription (5) was used as a resource for evidence along with ACSM Position Stands on Osteoporosis (6), Type 2 Diabetes (7), Hypertension (8) and Older Adults (9). Other sources of guidelines included the Chartered Society of Physiotherapy Guidelines for the Management of Osteoporosis (10) and the cise referral schemes. In addition, an British Association of Cardiac Rehabilitation (11).

USING THE TOOL

The tool takes the form of a simple traffic light system and is produced as a laminated A4 card. Basic information about the various schemes is printed on the reverse side and each scheme has also received a colour coding which corre-

sponds to the risk level that it can take to categorise patients. For example, minor Finally, we have re-designed the referral forms so that clinicians can indicate the but a diagnosis of osteoporosis with no risk level of the condition for which they are referring.

OTHER DEVELOPMENTS

Currently a set of evidence based exercise protocols is being developed. These will form the basis of an exercise resource that will be available at each scheme, for use by the fitness instructors when programming exercise for referred patients. The success of these interventions will be assessed through the scheme's monitoring systems and periodic evaluations within general practice.

CONCLUSION

We expect that this risk stratification tool will help increase the confidence of clinicians to refer their patients to exerevidence based risk stratification tool is likely to make referrals safer and more effective.

References

1. Riddoch C, Puig-Ribera A, Cooper A Effectiveness of physical activity promotion Schemes in primary care: a review. London Health Education Authority, 1998 2. Hillsdon M, Thorogood M, Antiss T, Morris J.

www.sportex.net

OW RISK	
verweight	No complications
igh normal blood pressure	(130-139/85-89) not medication controlled
econditioned	Due to age or inactive lifestyle
ype 2 diabetes	Diet controlled
Ider people aged >65	No more than 2 CHU risk factors and NUT AT RISK OF FALLS
ntenatal	No symptoms of pre-eclampsia / no history of miscarriage
ostnatal	Provided 6/52 check complete and no complications
steoarthritis	Mild where physical activity will provide symptomatic relier
lid bone density changes	BMD > ISD and <2.5 SD below young adult mean
tercise induced astrima	Without other symptoms
noker	one other ond risk factor & no known impairment of respiratory function.
	Asymptomatic
	Asymptomatic
EDIUM RISK	
pertension Stage 1	(140-159/90-99). Medication controlled
pe 2 diabetes	Medication controlled
pe 1 diabetes	With adequate instructions regarding modification of insulin dosage depending on
	timing of exercise, and warning signs
nysical disabilities	No other risk factors
oderate OA/ RA	With intermittent mobility problems
inical diagnosis Osteoporosis	BMD -2.5 at spine, hip or forearm or ≥ 4 on FRACTURE index, with no history of
	previous low trauma fracture.
irgery - Pre and Post:	General or Orthopaedic. NOT CARDIAC.
termittent claudication	No symptoms of cardiac dysfunction
roke/TIA	> 1 year ago. Stable CV symptoms. Mobile, no assistance required.
thma	Mild (ventilatory limitation does not restrain submaximal exercise)
)PD	Without ventilatory limitation but would benefit from optimisation of respiratory
	system mechanics and correction of physical deconditioning.
eurological conditions	E.g. young onset Parkinson's Disease (stable); Multiple Sclerosis
rly symptomatic HIV	Moderately diminished CD4 cells, intermittent or persistent signs and symptoms
	e.g. fatigue, weight loss, fever, lymphadenopathy.
ronic Fatigue Syndrome	Significantly deconditioned due to longstanding symptoms.
pression	Mild or moderate.
bromyalgia	Associated impaired functional ability, poor physical fitness, social isolation,
	neuroendocrine and autonomic system regulation disorders.
In RISK	
all older people with esteeperesis	(PMD > 2.5 at sping, big or forgarm in the presence of one or more documented los
an older people with osteoporosis	(billo >-2.5 at spine, hip of forearm in the presence of one of more documented for trauma or fragility fractures)
in matory of matture	REFER DIRECT TO FALLS SERVICE
stable and uncontrolled	REFER DIRECT TO TALLO JENTIOL
rdiac disease	
audication with cardiac dysfunction	
thostatic hypotension	Fall SBP >20 mg/Hg or DBP >10 mg/Hg within 3 mins of standing.
roke/TIA	Recent (>3 months ago)
evere Osteoarthritis/	With associated immobility.
neumatoid arthritis	
pe 1 or Type 2 Diabetes (Advanced)	With accompanying autonomic neuropathy, advanced retinopathy.
oderate to severe asthma	Where ventilatory limitation restrains submaximal exercise.
)PD/emphysema	With true ventilatory limitation
	With accompanying neuromuscular complications, severe depletion of CD4 cells.
DS	malimente a manaterialis information
	manufancy of opportunistic infection.
IDS ychiatric illness/cognitive	mangnancy or opportunistic infection.

www.sportex.net

RISK TOOL

HEALTH PROMOTION

EXERCISE REFERRAL SCHEME - RISK STRATIFICATION

LOW RISK P	OPUL ATIONS				
Definition:	n: People with minor, stable physical limitations or 2 or less (HD) risk factors (see below).				
Exercise Sett	Yercise Setting Exercise Referral Schemes or other community leisure setting		nunity leisure setting		
MEDIUM RIS	SK POPULATION				
Definition:		People with significant physical limitation	ons related to chronic disease or disability.		
Setting:		Exercise Referral Schemes or other com	nunity leisure setting.		
J			,		
HIGH RISK I	POPULATIONS				
Definition:		People with current severe disease or di	sability. Not suitable for Exercise		
		Referral Schemes.			
Setting:		Secondary and Tertiary Health Care setti	ngs ONLY		
		EXERCISE REFERRAL SCHEMES			
Low	Medium	Kensington Leisure Centre	Walmer Road, W11 4PQ		
			Tel: 020 7727 9747		
Low	Medium	Chelsea Sports Centre	Chelsea Manor St SW7 5PL		
			Tel: 020 7352 6985		
Low	Medium	Portobello Green Fitness Centre	3-5 Thorpe Close W10 5XL		
			Tel: 020 8960 2221		
		REHABILITATION AND TERTIARY EXERCISE	SERVICES		
High Risk		Cardiac Rehabilitation*	Kensington & Chelsea PCT		
		Established Osteoporosis **	Tel: 020 8237 2535		
		Falls Risk ***			
		CHD RISK FACTORS			
Family histor	У	<55 male; <65 female	<55 male; <65 female		
Cigarette sm	oking	Current or given up within past 6/12			
Hypertension	1	≥ 140/≥ 90			
Hypercholest	erolaemia	Total > 5.2 mmol/L OR HDL <0.9 mmol/L OR LDL > 3.4 mmol/L			
Sedentary lif	Sedentary lifestyle Not meeting minimum recommendation ≥ 30 mins moderate physical activity every				
Obesity	Jbesity BMI ≥ 30 kg/m2 or waist girth > 100 cm				
Impaired Fasting Glucose $\geq 6.1 \text{ mmol/L}$					
Angina Stable and controlled with no pain at rest					
Arrhythmiae	Arrhythmias Provided full cardiologist screening and approval				
Valvular Hoa	aluular Heart disease Provided full cardiac screen and approval				
Congestive C	Valvular neart disease Provided full cardiac screen and approval Connecting Condice Failure Continuing Stable on medical therapy without absolute contraindications (continuing) and therapy without absolute contraindications (continuing)				
congestive G	songestive variate randre stable, on medical therapy without absolute contraindications (particularly obstruction to loft veptricular outflow, decomponented CHE or threatening arthothesia and have				
		eversion capacity of > 2 METs)	ed on or chreatening arriveninas and have an		
		exercise capacity of > 5 mills)			

* At present there is no provision within K&C PCT for Phase IV Cardiac Rehabilitation Exercise Services. Patients who present with any of the conditions overleaf who have associated cardiac problems require special consideration.

* ** See FRACTURE Index Screening Tool

* *** See Falls Risk Assessment Screening Tool

Randomised controlled trials of physical activity promotion in free living populations: a review. Journal of Epidemiology Community Health 1995;49:448-453

3. Hillsdon M, Thorogood M. A systematic review of physical activity promotion strategies. Journal of Sports Medicine & Physical Fitness 1996; 30:84-89

4. Exercise Referral Schemes: A National Quality Assurance Framework. Department of Health 2001

5. American College of Sport Medicine's Guidelines for Exercise Testing and Prescription Sixth edition. ACSM 2000

6. Osteoporosis and Exercise. American

College of Sports Medicine's Position Stand MSSE 1995;27(4):pp.i - vii 7. Exercise and Type 2 Diabetes. American

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Medicine Position Stand. MSSE 1993;25(10):ppi - x

 Exercise and Physical Activity for Older Adults. American College of Sports Medicine Position Stand. MSSE 1998;30:6

10. Guidelines for the Management of Osteoporosis. Chartered Society of Physiotherapy and National Osteoporosis Society 1999 11. British Association of Cardiac Rehabilitation:Guidelines for Cardiac Rehabilitation. Blackwell Science 1995

Dawn Irwin MSc and Oliver Morgan BEng (Hons) Msc

Dawn Irwin is a senior clinical exercise practitioner and the falls prevention and exercise development co-ordinator for Kensington and Chelsea Primary Care Trust. Oliver Morgan is a multi-disciplinary public health specialist working in Kensington and Chelsea Primary Care Trust.

Appendix 11 - General Practice Physical Activity Questionnaire



General Practice Physical Activity Questionnaire

Date.....

Name.....

1. Please tell us the type and amount of physical activity involved in your work.

		Please mark one box only
а	I am not in employment (e.g. retired, retired for health reasons, unemployed, full- time carer etc.)	
b	I spend most of my time at work sitting (such as in an office)	
c	I spend most of my time at work standing or walking. However, my work does not require much intense physical effort (e.g. shop assistant, hairdresser, security guard, childminder, etc.)	
d	My work involves definite physical effort including handling of heavy objects and use of tools (e.g. plumber, electrician, carpenter, cleaner, hospital nurse, gardener, postal delivery workers etc.)	
е	My work involves vigorous physical activity including handling of very heavy objects (e.g. scaffolder, construction worker, refuse collector, etc.)	

2. During the <u>last week</u>, how many hours did you spend on each of the following activities? <u>Please answer whether you are in employment or not</u>

	Please mark one box only on each row				
		None	Some but	1 hour but	3 hours or
			less than	less than	more
			1 hour	3 hours	
	Physical exercise such as swimming,				
а	jogging, aerobics, football, tennis, gym				
	workout etc.				
h	Cycling, including cycling to work and				
5	during leisure time				
<u> </u>	Walking, including walking to work,				
	shopping, for pleasure etc.				
d	Housework/Childcare				
е	Gardening/DIY				

3. How would you describe your usual walking pace? Please mark one box only.

Slow pace (i.e. less than 3 mph)	Steady average pace	
Brisk pace	Fast pace (i.e. over 4mph)	

Appendix 12 - NQAF Patient Characteristics & Exercise Professional Expertise Pyramid^{xxxiii}

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.



^{xxxiii}Diagram taken from Department of Health (2001) Exercise Referral Systems: A National Quality Assurance Framework. London: Department of Health

Appendix 13 - Sample Courtesy letter to Patient's GP****

USE SCHEME HEADED PAPER (if available)

Reply to: <a><!-->

<<insert GP's Name <<Address>> <<Postcode>>

<<insert date>>

Dear Dr XX,

Re: (Patient name, age, DOB and address of patient)

Patient X came to see me today, as part of the <<insert name of the exercise referral scheme>>, after being referred by X <<insert referring practitioner's details>>. Patient X was referred into our scheme for the following reason <<insert reason>> and would like to increase their physical activity.

<<Insert referring practitioners name>> has provided me with the following information <<insert details
>> about patient X's medical history.

Patient X has also given me the following information <<insert details>> about their medical history and current medication <<insert details>>.

Patient X has told me about their current physical capabilities <cinsert details e.g. finds it difficult to walk
comfortably for more than a mile etc>> and their occupation, family life and current physical activity.

The results of the pre-exercise assessments today were as follows:

Insert relevant information:				
Height	<mark>XX</mark>	Weight	XXkg	
BMI	XX	Waist to Hip ratio	XX	
Body fat %	XX			
Resting heart rate	XX	Blood Pressure	XXX/XXmmHg	

I am proposing a programme that will support patient X to become more physically active and help to improve his/her long term health. I have agreed the following programme with patient X <-insert details of the physical activity programme agreed>>. Patient X has consented for me to contact you to obtain any further relevant information. Please could you let me know if there is any medical reason why this patient of yours should not take part in an exercise programme of this sort?

If no reply has been received within X (14?) working days, we <insert name of the exercise referral scheme> assume patient X is suitable for our programme. Please do not hesitate to contact me if you have any queries.

Yours sincerely,

Exercise Professional X

Note: *you must have current blood pressure and heart rate measurements before you can accept this patient, if you do not have this information please request that the GP provides you with this information.

^{xxxiv} Produced by Dr John Searle, Chief Medical Officer, FIA with the permission to reprint.

Appendix 14 - Sample content of a patient information sheet and pre-exercise assessment/screening consent form

Brief Introduction about your scheme

Include details about how long it has been running, its purpose, who is involved, number of patients who have participated.

What's the benefit of being physically active?

Physical activity is extremely important to health and well-being and can help in the prevention, treatment and management of a range of health problems, such as diabetes, high blood pressure, asthma, arthritis, obesity and many more conditions <<you may want to include examples based on the conditions included in your programme>>. Being active also improves feelings of well-being, boosts self-confidence, improves sleep and helps with stress management. It's a great way of meeting new people and having fun.

What's the benefit of the scheme?

The physical activity programme that you will be following will be individually designed for you by a well-qualified exercise professional and will be based on your medical needs, present physical activity/fitness levels and your interests and preferences. Depending on your needs, you will be encouraged to be physically active <x times per week for x minutes> - at a level you can cope with. The activities you will be taking part in will be explained and discussed with you in detail. In addition, throughout the referral programme, your progress will be monitored and you will be given continued support and advice.

During the physical activity referral period, you will experience the positive effects physical activity can have on your quality of life. You will also meet new people and hopefully enjoy yourself!

In order to develop a physical activity programme specific to your needs the exercise professional will need to conduct some pre-exercise assessments/screening. It is necessary to carry out a pre-exercise assessment to find out what activity is most suitable for you and your health.

What will the pre-exercise assessments/screening involve?

Provide details about the pre-exercise assessments that will be conducted, the purpose of these and what they involve.

We will send a copy of your activity programme to your GP for their information.

Are there any risks to my health?

There will always be an element of risk associated with being physically active, however these risks need to be put into context. Many thousands of patients have taken part in physical activity referral schemes and there remain very few reported serious adverse events.

The pre-exercise screening is undertaken to identify any underlying risks and the exercise professional understands the importance of designing and developing a progressive physical activity programme to suit your needs and your abilities. To avoid the risk of injury you should follow the physical activity programme exactly as directed by the exercise referral professional.

If I agree to take part in the referral scheme what do I have to do?

- Agree to regularly attend the sessions.
- Follow your physical activity programme as directed.
- Keep the exercise professional informed if you are unable to attend.
- Inform the exercise referral professional of any changes in your physical/emotional condition or if your GP changes your medication or treatment programme.
- Let the exercise professional know if you experience any problems with your physical activity programme.
- Inform your exercise professional and your GP if you feel any of the following symptoms during physical activity:
 - Dizzy/faint
 - Unusually short of breath
 - Chest pains
 - Musculoskeletal injury

Questions?

Any concerns or questions you have about your pre-exercise assessment or taking part in the scheme are encouraged. You are also encouraged to ask the exercise professional questions about your physical activity programme or the scheme at any time.

Freedom of Consent.

Please	tick
--------	------

I understand that my participation in the physical activity referral scheme is entirely voluntary and that I am free to withdraw at any time.	
I have read this form and I understand what I will be asked to do.	
I consent to participating in the physical activity referral scheme	
I will undertake to keep the exercise referral professional informed about any changes in my condition and/or medication.	
I have read this form and I understand what I will be asked to do during the pre-exercise assessments/screening.	

Patient Name:	
Patient Signature:	
Date:	

Appendix 15 - Physical Activity Readiness Questionnaire (PAR-Q)***

Physical Activity Readiness Questionnaire - PAR-Q (revised 2002)



(A Questionnaire for People Aged 15 to 69)

Regular physical activity is fun and healthy, and increasingly more people are starting to become more active every day. Being more active is very safe for most people. However, some people should check with their doctor before they start becoming much more physically active.

If you are planning to become much more physically active than you are now, start by answering the seven questions in the box below. If you are between the ages of 15 and 69, the PAR-Q will tell you if you should check with your doctor before you start. If you are over 69 years of age, and you are not used to being very active, check with your doctor.

Common sense is your best guide when you answer these questions. Please read the questions carefully and answer each one honestly: check YES or NO.

YES NO I. Has your doctor ever said that you have a heart condition and that you should only do physical activity recommended by a doctor? Do you feel pain in your chest when you do physical activity? In the past month, have you had chest pain when you were not doing physical activity? Do you base your balance because of dizzness or do you ever lose consciousness? Do you have a bone or joint problem (for example, back, knee or hip) that could be made worse by a change in your physical activity? G. Is your doctor currently prescribing drugs (for example, water pills) for your blood pressure or heart condition? To Do you know of any other reason why you should not do physical activity? If YES to one or more questions Tak with your doctor by phone or in person BEFORE you start becoming much more physically active or BEFORE you have a fitness appraled. To your doctor by phone or in person BEFORE you start sown and build you gradually. Or, you may need to restrict your activities are start you, that with your doctor built he questors you anowered YES in a dot which events you water water water to pour activities you wish to participate in and follow his/her advice. Find out which community programs are safe and helpful for you. It appared to find gradual, this is an oxediert way to determine your carcin the active at the safe of you. It appared to the gradual - this is an oxediert way to determine your back fittes so that becoming much more physically active – begin slowly and build up gradually. This is the active composite active way to go. It appared the fittes approximate the wore doctor way to determine your back fittes abon highly recommended th					
	YES	NO	1.	Has your doctor ever said that you have a heart cond	ition <u>and</u> that you should only do physical activity
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			3.	In the past month, have you had chest pain when you	were not doing physical activity?
			4.	Do you lose your balance because of dizziness or do	you ever lose consciousness?
			5.	Do you have a bone or joint problem (for example, b change in your physical activity?	ack, knee or hip) that could be made worse by a
			6.	ls your doctor currently prescribing drugs (for examp dition?	le, water pills) for your blood pressure or heart con-
Find the set of t			7.	Do you know of <u>any other reason</u> why you should not	t do physical activity?
Tak with your doctor by phone or in person BEFORE you start becoming much more physically active or BEFORE you have a fitness appraisal. Te your doctor about the PAR-Q and which questions you answered YES. • You may be able to do any activity you want — as long as you start slowly and build up gradually. Or, you may need to restrict your activities to those which are safe for you. Tak with your doctor about the kinds of activities you wish to participate in and follow his/her advice. • Find out which community programs are safe and helpful for you. NO to all questions Ty you answered N0 honestly to all PAR-Q questions, you can be reasonably sure that you can: • start becoming much more physically active – begin slowly and build up gradually. This is the safest and easiest way to go. • Lake part in a fitness appraisal – this is an excellent way to determine your basic fitness so that you can plan the best way for you to live actively. It is also highly recommended that you have your blood pressure evaluated. If your reading is over 144/94, talk with your doctor before you start becoming much more physically active. • Detains No changes permitted. You are encouraged to photocopy the PAR-Q but only if you use the entire form. The PAR-Q is being given to a person before he or she participates in a physical activity program or a fitness appraisal, this section may be used for legal or administrative purposes. The PAR-Q is being given to a person before he or she participates in a physical activity program or a fitness appraisal, this section may be used for legal or administrative purposes. The PAR-Q is being given to a person before he or she participates in a physical activity program or a fitness appraisal, this section may be used for legal or administrative purposes. The read, understood and completed this questionnaire. Any questions I had were answered to my full satisfaction.* ME	f			YES to one or more guestions	
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Informed Use of the PAR-Q: The Canadian Society for Exercise Physiology, Health Canada, and their agents assume no liability for persons who undertake physical activity, and if in doubt after complisit guestionnaire, consult your doctor prior to physical activity. No changes permitted. You are encouraged to photocopy the PAR-Q but only if you use the entire form. NOTE: If the PAR-Q is being given to a person before he or she participates in a physical activity program or a fitness appraisal, this section may be used for legal or administrative purposes. "I have read, understood and completed this questionnaire. Any questions I had were answered to my full satisfaction." WAME	 take pai that you have yo before y 	rt in a fi 1 can pla 1 ur blooc you star	iness a in the I press t beco	appraisal — this is an excellent way to determine your basic fitness so best way for you to live actively. It is also highly recommended that you sure evaluated. If your reading is over 144/94, talk with your doctor ming much more physically active.	PLEASE NOTE: If your health changes so that you then answer YES to any of the above questions, tell your fitness or health professional. Ask whether you should change your physical activity plan.
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Note: This physical activity clearance is valid for a maximum of 12 months from the date it is completed and becomes invalid if your condition changes so that you would answer YES to any of the seven questions.	or GUARDIAN (fe	or particip	ants und	der the age of majority)	
CSEPTE © Canadian Society for Evercise Physiology Supported by:			Note	: This physical activity clearance is valid for a maximum o	f 12 months from the date it is completed and
Supported by Health Santé			ne	scomes invalid if your condition changes so that you would	a answer 125 to any of the seven questions.
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To download a PDF version of PAR-Q visit: http://www.csep.ca

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Appendix 16 - Sample Checklist for the Initial Consultation

Exercise Referral Patient Consultation Check the details on the referral form. Complete pre-exercise screening. Explain procedures for pre-exercise assessments. Obtain patient consent. Complete appropriate pre-exercise assessments. Discuss results and proposed actions. Assess patient's motivation and preferred activities. Explore possible barriers to increasing physical activity and identify solutions. \Box Establish patient's goals. Design a safe and effective exercise programme which matches the patient's risk stratification and reflects current guidelines for the patient's medical condition. Discuss and agree exercise programme with the patient. Provide the patient with a written personalised exercise programme. Discuss how to keep a record of the exercise programme with the patient. Explain relevant leisure facility protocols, e.g. evacuation, emergency . procedures. Outline what to do if a problem arises – who to contact etc. \square Place a copy of the personalised exercise programme on the patient's file.

Appendix 17 - National Occupational Standard Unit B17 xxxvi

BI7 Work in partnership with other organisations and professionals to promote physical activity and its benefits

Introduction

Summary

This unit is about identifying and working with other organisations and professionals who can help you promote physical activity and its benefits to a target population. Promotion may include awareness raising, marketing or changing the environment to enable more physical activity. Other organisations and professionals may include, for example, schools, child care organisations, community and leisure centres, GPs and other health professionals, sports coaches, architects or planners.

The unit is divided into two parts. The first part (pages 2-6) describes the five things you have to do. These are:

- **B17.1** Develop your knowledge and understanding of the target population
- **B17.2** Build relationships with other organisations and professionals with whom you can work
- B17.3 Promote physical activity and its benefits to other organisations and professionals
- **B17.4** Agree common goals and objectives
- **B17.5** Work with other organisations and professionals to achieve common goals and objectives

The second part (pages 7-8) describes the knowledge and understanding you must have.

Target Group

This unit is for practitioners who promote physical activity and its benefits for people whose physical activity is less than the recommended level.

Final version approved September 2006

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B17.1

Develop your knowledge and understanding of the target population

	The National	Sta	Indard
VV To 1 2 3 4	That you must do meet the national standard, you must: collect and organise information about the target population analyse this information and identify the key features relevant to physical activity check that your analysis is valid through discussion with the target population explore and challenge assumptions where	 What you must cover This element covers the following: a key features of the target population 1 demographics 2 physical environment 3 ethnic mix 4 social and economic issues 	
5	necessary regularly review and enhance your information and analysis	6	health issues that may have some impact on physical activity barriers to participation and adherence



B17.2

Build relationships with other organisations and professionals with whom you can work

The National Standard							
What you must cover							
This element covers the following							
 a organisations and professionals 1 with the promotion of physical activity as core to their role 2 with the potential to have an impact on physical activity and with a good understanding of their role in relation to this 3 with the potential to have an impact on physical activity but without a good understanding of their role in relation to this 							

B17.3

P o	Promote physical activity and its benefits to other organisations and professionals								
	The National Standard								
 <i>T</i>₀ <i>I</i> <i>2</i> <i>3</i> <i>4</i> <i>5</i> <i>6</i> 	 hat you must do meet the national standard, you must: provide information on the benefits of physical activity which will be relevant to other organisations and professionals ensure the information is evidence-based and reflects good practice communicate this information in a way that is appropriate to organisations and professionals build a persuasive case which shows the relevance of their work to encouraging physical activity deal effectively with queries and objections provide links to relevant networks and colleagues where appropriate 	 What you must cover This element covers the following a organisations and professionals 1 with the promotion of physical activity as core to their role 2 with the potential to have an impact on physical activity and with a good understanding of their role in relation to this 3 with the potential to have an impact on physical activity but without a good understanding of their role in relation to this 							

B17.4								
Agree common goals and objectives								
	The National Standard							
What you must of To meet the national state	do ndard, you must:	What you must cover This element covers the following						
 agree the aims, or methods of your agree the roles a and other organ only agree respowith your level or competence agree how you wand evaluate properties 	objectives and working shared agenda and responsibilities of yourself isations and professionals nsibilities that are consistent of responsibility and will maintain contact, review gress during joint working	 a organisations and professionals 1 with the promotion of physical activity as core to their role 2 with the potential to have an impact on physical activity and with a good understanding of their role in relation to this 3 with the potential to have an impact on physical activity but without a good understanding of their role in relation to this 						
B17.5

Work with other organisations common goals and objectives	and professionals to achieve
The Nationa	ll Standard
What you must do	What you must cover
To meet the national standard, you must:	This element covers the following
I work to the goals and objectives you have agreed in your shared agenda	a organisations and professionals

- 2 keep other **organisations and professionals** informed of your own progress
- 3 monitor and review the progress they are making
- 4 solve problems jointly, providing support from your own area of expertise
- 5 work with other **organisations and professionals** to evaluate the impact of working together
- 6 maintain effective working relationships with other and professionals throughout joint working

- I with the promotion of physical activity as core to their role
- 2 with the potential to have an impact on physical activity and with a good understanding of their role in relation to this
- 3 with the potential to have an impact on physical activity but without a good understanding of their role in relation to this

What you must know and understand

To be competent in this unit, you must know and understand the following

- KI what is health related physical activity
- K2 recommended levels of physical activity
- K3 the potential which physical activity has for raising levels of health in communities and the consequences of not achieving recommended levels
- K4 community based approaches to encouraging physical activity
- K5 your own organisation's strategies and policies for working in the community
- K6 models and case studies of effective practice in community-based health related physical activity
- K7 different types of communities for example, inner city and rural and how their different features and needs will influence the way you work
- K8 why it is important to develop an accurate understanding of the community in which you are working
- K9 sources of information and research methods you should use to develop an understanding of your community and its levels of physical activity
- K10 the broad types of community issues that may impact on new approaches to physical activity
- KII how you should analyse the information you have collected and draw conclusions based on this analysis
- K12 the importance of exploring and challenging assumptions that you or others may have about the community
- K13 how to identify, establish contact and network with other organisations and professionals most relevant to your work in the community
- K14 the roles and priorities of other organisations and professionals and how you can use these to build common agendas
- K15 why it is important to approach other organisations and professionals and establish a relationship with them in a way that is appropriate to them and their expectations and how to do so
- K16 how to build lasting and respectful relationships with other organisations and professionals
- K17 why it is important to explain your own role, aims and objectives and clarify any information you have about other organisations and professionals and their responsibilities
- K18 the importance of collaborative working and trying, wherever possible, to align agendas
- K19 the most effective ways of promoting the benefits of physical activity to other organisations and professionals
- K20 how to identify, organise and present evidence-based material that will influence other organisations and professionals on the benefits of physical activity for inactive populations
- K21 types of queries and objections you may encounter when engaging with other organisations and professionals in relation to physical activity and how to deal with these effectively
- K22 networks and colleagues who may be able to deal more effectively with queries and objections from other organisations and professionals
- K23 how to identify common areas of interest and ways of working
- K24 the importance of maintaining contact and regularly reviewing progress
- K25 the types of problems that may arise whilst working with other organisations and professionals and how to address these
- K26 how to maintain effective working relationships with other organisations and professionals

Appendix 18 - Sample GP Practice Sign-up Form

To register your practice and each primary care practitioner who will be authorised as a referrer to the XXX Exercise Referral Scheme, please complete details below and return to:

<<Insert Exercise Referral Coordinators Name & Full Postal Address>>

I/we have read the "Exercise on Referral Protocol for GPs and nurses" and agree to comply with the stated referral criteria and patient enrolment process.

PRACTICE NAME
LEAD GP
SIGNED
ADDRESS
TELEPHONE NO
EMAIL ADDRESS

	Name of Practitioner	Job Title	Date
I			

Please continue on additional sheet if necessary.

New staff may be added using this form at a later date.

Include details of where electronic copies of this form and further details can be obtained from <u>XXX</u>

Appendix 19 - Sample Sign-up Form For Allied Health Professionals

Registered <<*Physiotherapists, Occupational Therapists, Community Dieticians, Physiotherapists etc,* delete as appropriate >> employed by employed.com employed by https://www.engloyed.com employed by setup.com"/>setup.com employed.com</a

- retain clinical responsibility for patients while they are on the scheme
- complete ALL required information on the Exercise Referral form
- be available to the exercise professional to answer queries relating to the patients they have referred to the scheme
- inform the patients GP via letter that they have referred a patient for exercise on referral

In addition:

Healthcare professionals referring patients to the Exercise on Referral scheme must be registered with the relevant professional body and have appropriate qualifications and accreditation for the role they perform.

NHS employed healthcare professionals referring patients to the Exercise on Referral scheme must be professional and competent to make referrals and should follow the stated terms and conditions in this document. NHS employees who meet these requirements are covered by vicarious liability.

I have read the "Exercise on Referral Protocol for Allied Health Professionals" and agree to comply with the stated referral criteria, patient enrolment process and accept clinical responsibility for the patients I refer.

Signed:

NAME	 	
DEPARTMENT	 	
WORK ADDRESS	 	
TELEPHONE NO		
EMAIL ADDRESS	 	

Please complete, sign and return this form to the address below: <</p>

Include details of where electronic copies of this form and further details can be obtained from XXX

Appendix 20 - Evaluation Design

The evaluation design describes the set of procedures and tasks that need to be carried out to systematically examine the effects of a programme (Nutbeam and Bauman, 2007).

The evaluation design of a health promotion programme can be broadly grouped into 3 main types, based on the strength of evidence they provide for intervention effectiveness.

- Experimental
- Quasi-experimental
- Non-experimental

This section aims to provide a brief overview of each evaluation design and highlight the advantages and disadvantages of each approach in relation to the evaluation of exercise referral schemes.

Experimental Evaluation Design

Experimental designs are regarded as the most rigorous and scientific approach to evaluation of effectiveness and the Randomised Controlled Trial (RCT) is often considered as the 'gold standard'.

Randomised Controlled Trial (RCT)

An RCT involves assigning eligible participants at random to either an 'intervention' or a 'non intervention' group. As the assignment of groups is by chance, it is assumed that the groups are similar on all other characteristics that might effect the outcome measures of interest. RCT's are designed to have a very high level of 'internal validity' but because of the way they are conducted they may have less 'external validity' or application in the real world. Because an RCT uses random allocation it is assumed that this will minimise any differences between groups at the start of a programme and allow any observed changes in the intervention group to be attributed to the intervention and not due to 'chance effects' that have nothing to do with the programme. In other words an RCT improves the confidence that the observed changes were *caused* by the programme.

Clustered Randomised Control Trial

Cluster randomisation involves participants being allocated to either the intervention or a control condition, as a group, rather than individually. In the context of an exercise referral scheme, patients could be cluster randomised by practice. Participants referred from one practice receive the intervention and patients from another practice form the non-intervention control group. Cluster randomisation may be more practical than randomising on the individual level, and may also reduce the risk of contamination.

Quasi-experimental Evaluation Design

Quasi-experimental designs are commonly used in the evaluation of programmes when random assignment is not possible or practical. Like experimental designs, quasi-experimental designs involve comparing the changes between one group that receive the programme and a no intervention control group. The decision of who receives the programme and who doesn't is not random and is usually determined by either systematic allocation or convenience. Although it is desirable for the comparison group to be as similar as possible to the intervention group on factors which could affect the selected outcomes, for instance age and gender, this may not always happen.

In an exercise referral context, like in the cluster randomised design, participants referred from one practice could receive the intervention and patients from another practice form the non-intervention control group, however in a quasi-experimental design the choice of which practice is allocated to the intervention and to the control is not random.

Non-experimental Evaluation Design

Although non-experimental designs are used to evaluate health promotion programmes, including exercise referral schemes, these designs have the lowest level of scientific quality and the least confidence that the changes were caused by the intervention. As a result, these types of studies are often excluded from systematic reviews of evidence. This was the case with the NICE review of exercise referral schemes (NICE, 2006) and similar reviews of interventions conducted in primary care in the USA and elsewhere (U.S. Preventive Services Task Force).

A non-experimental design does not involve a control group and therefore provides limited evidence that the observed changes were due to the intervention or programme and not due to other influences.

Which Evaluation Design Should I Use?

This table illustrates some of the advantages and disadvantages of different evaluation designs in relation to exercise referral schemes.

Evaluation Design	Advantages	Disadvantages
Experimental	Provides the strongest level of confidence that observed outcomes are a result of the	Requires a control group who would not receive the exercise referral intervention
	intervention	Delaying or denying access to a programme requires ethical approval
		Likely to require specialist expertise to set up and oversee evaluation design, specifically random allocation, maintain quality control of intervention, and avoid contamination of the control group
		Difficult to control all the variables which may influence programme outcomes
		Requires a larger budget
Quasi- experimental	The context and way in which the intervention or programme is delivered is often more natural or more similar to 'usual practice' than in an RCT, meaning the results may be more generalisable to other schemes/settings	The comparison group may differ considerably from the intervention group at the outset, making the interpretation of results problematic
Non-experimental	Lends itself to the evaluation of the 'real-life' situation More feasible to implement in the context of exercise referral schemes	Does not provide compelling evidence that the intervention <i>caused</i> the observed changes Findings may not be generalisable to other exercise referral schemes

Appendix 21 - A Logic Model Template



PROCESS EVALUATION	OUT	COME EVALUA	ATION

Appendix 22 - Outdoor Health Questionnaire

Outdoor health questionnaire Walking the way to health Name of walk: Name of sc	heme:
	walking
A Participant details	the way to health
Title: Full name:	
House number/name and street:	
City/County: Postco	de:
Tel no: e-mail:	
Preferred contact method: Phone Email	Post Do not contact
Please provide the name and telephone number of someone who can be contacted in an emergency:	
B Health screening	
For most people, physical activity does not pose a haz identify the small number of people for whom it would	ard. The questions below have been designed to be wise to have medical advice before starting:
1 Has your doctor ever said you have a heart conditions? Yes ☐ No ☐	4 In the past month, have you had pain in your chest when you were NOT doing physical activity? Yes □ No □
2 Do you feel pain in your chest when you do physical activity? Yes ☐ No ☐	5 Do you have a bone or joint problem that could be made worse by a change in your physical activity? Yes No
3 Do you ever lose balance because of dizziness or ever lose consciousness? Yes □ No □	
Declaration	
I understand that if I have answered 'Yes' to one or more of attending a walking programme. I agree to tell the walk lear understand that this information will be shared with other wa	the above questions, I should seek medical advice before ders if there is a change in my medical condition. I alk leaders and that I walk at my own risk.
Signed:	Date:
To make the case for funding for your walking scheme questions:	s, please help us by answering the following
6 Have you been diagnosed by your doctor or health professional with any of the five following medical conditions?	7 Do you have a long-standing (ie: for more than 12 months and likely to continue) illness or disability which affects (or limits) your day to day activities?
Heart disease	Yes No Prefer not to say
GOPD (Emphysema and Chronic Bronchitis) Diabetes Asthma	If Yes, please give brief details:
Addina	
Please advise the walk leader if you have any othe	r conditions you feel they might need to know of.
	Please turn over
V6 Mar 09	

с	About you					
1	New walker?		Existing walker	?		Returning walker?
2	Are you a trained	l volunteer wa	lk leader?			Yes 🗌 No 🗌
3	Have you been r professional to c	ecommended l ome on this sc	by your doctor or neme?	health		Yes 🗌 No 🗌
4	In the past week which was enoug <i>This may include</i> <i>places, but shou</i>	a, on how many gh to raise your e sport, exercis Id not include f	days have you d breathing rate? e, and brisk walki ousework or physic	done a tota ing or cycli sical activi	l of 30 min ng for recr ty that is p	nutes or more of physical activity, reation or to get to and from part of your job.
		□ □ 0 1	□ □ [2 3	4 5	□ 6	□ 7
Be	cause WHI is a pu	ublic service, w	e have to report of	on the follo	wing infor	mation. Please help us! ©
5	Age:	16-24 🗌 25	-34 🗌 35-44 🗌	45-54	55-64	65-74 75-84 85+
6	Gender:	Male	Female			
E Vhite Vhite Vhite Nixec Nixec	thnicity: /British Irish /Other IWhite & Black Afric IWhite & Asian Please tell us ho	Mixed/0 Asian o Asian o Asian o can Asian o Can Black o w you found ou	Other Mixed r Asian British/India r Asian British/Paki r Asian British/Ban r Asian British/Othe r Black British/Caril	an istani gladeshi er Asian bbean ed this sche	Blac Blac Chir Chir Chir	k or Black British/African
	GP/health profes Walking group Resident's Assoc	sional referral	Library Poster/adve	ertisement er referral	☐ Wo ☐ Lei ☐Oth	ord of mouth isure Centre er (please state which)
9	Thank you for co walks? Yes [Using and s	mpleting this q ☐ No ☐ sharing you	uestionnaire. Are	e you happ n	y to be co	ntacted to help us evaluate health
Yo ea info na pa bo fur	ur information will be ch local scheme to e ormation will also be tural environment to ssed on to walk coo th the local scheme ther funding bids for	e held by Natura evaluate their he used by Natura improve the hea rdinators for inpu and the national the local and na	I England, in accor alth walks and shor I England to furthe Ith of the populatio Itting into a central programme. The Itional schemes an	dance with w funders th r its work or on. The info database. results of ar d help defin	the Data Pi at they offe safeguard rmation wil This will be y analysis e the healt	rotection Act 1998. It will be used by er value for money. Summary ling and promoting the use of the I be collected by walk leaders and e used to draw anonymous reports for will be used to influence and support h value of the natural environment.
h	ave read and unders	stood the above	statement.			
Sig	ined:			Date:		
V6	Mar 09					walking the way to health

Appendix 23 - REFERQUAL XXXVII

Exercise Referral Scheme Questionnaire

Please answer the following questions to let us know a little bit about you:

Age Gender: Male/Female (Please circle one)

Please circle which of the following one box best describes the way you live:

Alone	With spouse or	In a shared house	Other
	partner		

Was reducing weight one of the reasons you were referred to the scheme? Yes/No

The following questions relate to your general exercise habits, rather than to your specific experience of the Exercise Referral Scheme. Please circle one of the numbers 1-7 next to each of the statements below. If you strongly agree with a statement, please circle number 7. If you strongly disagree with a statement, please circle number 1. If your feelings are not strong, circle one of the numbers in the middle.

Strongly Agree

	-							Please
							About you	circle one
								of the
1	2	3	4	5	6	7	I feel pain when exercising	letters A-E
1	2	3	4	5	6	7	I enjoy exercising	to let us
1	2	3	4	5	6	7	I have time to exercise	know how
1	2	3	4	5	6	7	Exercising is not expensive	much of

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the referral you completed or are still in the process of completing. If you did not attend at all, your opinions are still very valuable to us and we would greatly appreciate you completing the rest of the questionnaire.

- A I did not attend at all.
- B I started but did not complete my referral.
- C I have started but have not yet completed my referral.
- D I completed my referral but have stopped exercising since.
- E I completed my referral and still exercise

I completed approximately % of the total number of sessions

Please complete the following questions about how much you normally exercise:

 During a typical **7-day period** (a week), how many times on average do you do the kinds of exercise for more than 15 minutes during your free time (write on each line the appropriate number:

Times per week

a. Strenuous exercise (heart beats rapidly)

(e.g. running, jogging, soccer, squash, vigorous swimming, vigorous long distance bicycling)

b. Moderate exercise (not exhausting)

(e.g. fast walking, tennis, easy bicycling, badminton, Easy swimming, popular and folk dancing)

c. Mild exercise (minimal effort) (e.g. yoga, fishing from river bank, bowling, golf, easy walking)

[Source: Godin, G., and Shephard, R. J. (1985) 'A simple method to assess exercise behaviour in the community', *Canadian Journal of Applied Sports Science*, 10: 141-146.]

SECTION 1

The first part of the survey deals with your expectations **before you were referred**. This section <u>is not</u> specific to the leisure centre at which you may have been, but should be viewed as being applicable to Exercise Referral Schemes in general. Please circle one of the numbers 1-7 next to each of the statements below. If you strongly agree with a statement, please circle number 7. If you strongly disagree with a statement, please circle number 1. If your feelings are not strong, circle one of the numbers in the middle.



Strongly Agree

1	2	3	4	5	6	7		
								The facilities
1	2	3	4	5	6	7	Q1	The leisure centre should have up-to-date
								equipment.
1	2	3	4	5	6	7	Q2	The leisure centre should look nice and attractive
1	2	3	4	5	6	7	Q3	Their staff should be well dressed and appear neat.
1	2	3	4	5	6	7	Q4	The changing rooms at the centre should be clean
								and well maintained.
								Reliability, responsiveness and
								assurance of service
1	2	3	4	5	6	7	Q5	When these leisure centres promise to do
								something, they should do it when they say they will.
1	2	3	4	5	6	7	Q6	When people have problems, these leisure centres
								should be sympathetic and reassuring.
1	2	3	4	5	6	7	Q7	These leisure centres should be dependable.
1	2	3	4	5	6	7	Q8	The leisure centre should stick to its timetable
								accurately.
1	2	3	4	5	6	7	Q9	They should keep their records accurately.
1	2	3	4	5	6	7	Q10	They should be expected to tell people exactly when
								services would be available.

1	2	3	4	5	6	7	Q11	It is realistic to expect prompt service from
	0	0	4	<i>г</i>	0	7	010	Employees of these leisure centres.
1	Ζ	ა	4	Э	о	'	QIZ	help clients
1	2	2	1	5	6	7	012	It is not alway if they are too bury to respond a
	2	3	4	5	0	'	QIS	norson's request promotiv
1	2	3	1	5	6	7	014	Their staff should be polite
1	2	2	-	5	6	' 7	015	Their staff should get adequate support from these
	2	5	-	5	0	'	QIU	leisure centres to do their jobs well
1	2	3	4	5	6	7	Q16	People should be able to trust staff of these leisure
	2	0		Ŭ	0		QIU	centres.
1	2	3	4	5	6	7	Q17	Exercise Professionals dealing with people on the
								scheme should be of a similar age to the exercisers.
1	2	3	4	5	6	7	Q18	Exercise Professionals should be able to
								demonstrate a considerable knowledge of the
								benefits to health of exercise.
1	2	3	4	5	6	7	Q19	Employees of these centres should offer help and
								support when requested by people.
								Ability of staff to appreciate peoples'
								needs
1	2	3	4	5	6	7	Q20	People should receive praise from the staff of these
								leisure centres.
1	2	3	4	5	6	7	Q21	These leisure centres should be expected to give
				_		_		people individual attention.
1	2	3	4	5	6	7	Q22	Employees of these centres should seek to identify
	0	0	4	-	0	7	000	people's previous exercise experience.
1	2	3	4	5	6	1	Q23	It is not unrealistic to expect staff to know what the
4	0	0	A	F	0	7	004	It is not upropliationto overast these laisure contrasts
	2	3	4	5	ю	1	Q24	have their everyingers' heat interacts at heart
1	0	2	٨	E	C	7	025	They should be expected to have expecting have
	2	3	4	Э	ю	1	Q25	They should be expected to have operating hours
1								convenient to all their customers
								convenient to all their customers
								convenient to all their customers

1	2	3	4	5	6	7	Q26	GPs should be enthusiastic towards the Exercise
								Referral procedure.
1	2	3	4	5	6	7	Q27	GPs referring to an Exercise Referral program
								should be active themselves.
1	2	3	4	5	6	7	Q28	GPs should be able to demonstrate understanding of
								the benefits of exercise.
1	2	3	4	5	6	7	Q29	GPs should encourage doing exercise all the time.

SECTION 2

Directions: The second part of the questionnaire deals with your perceptions of the service **after you had visited the centre**. Once again, please circle one of the numbers from 1-7 based on how strongly you agree or disagree with the statement. This part of the questionnaire <u>IS</u> specific to the centre that you attended so please answer the questions with your centre in mind.

Please tick the box next to the centre that you were referred to. Please also tick the box next to the ONE centre that you exercised at most regularly, even if this was the same centre. **Please tick only one box in each case**:



								The facilities
1	2	3	4	5	6	7	Q30	The centre has up-to-date equipment.
1	2	3	4	5	6	7	Q31	The centre is nice and attractive
1	2	3	4	5	6	7	Q32	The centre's staff are well dressed and appear neat.
1	2	3	4	5	6	7	Q33	The changing rooms at the centre were clean and
								well maintained.
								Reliability, responsiveness and
								assurance of service
1	2	3	4	5	6	7	Q34	When the staff at the centre promise to do
								something, they do so when they say they will.
1	2	3	4	5	6	7	Q35	When you have problems, the centre is sympathetic
								and reassuring.
1	2	3	4	5	6	7	Q36	The centre is dependable.
1	2	3	4	5	6	7	Q37	The centre sticks to its timetable accurately.
1	2	3	4	5	6	7	Q38	The centre keeps its records accurately.
1	2	3	4	5	6	7	Q39	The centre tells people exactly when services would
								be available.
1	2	3	4	5	6	7	Q40	You receive prompt service from the centre's
								employees.
1	2	3	4	5	6	7	Q41	Staff at the centre are always willing to help people.
1	2	3	4	5	6	7	Q42	Staff at the centre are never too busy to respond to
								people's requests promptly.
1	2	3	4	5	6	7	Q43	Staff at the centre are polite.
1	2	3	4	5	6	7	Q44	Staff get adequate support from the centre to do their
								jobs well (e.g. Had everything they needed; Not
								overloaded)
1	2	3	4	5	6	7	Q45	You can trust staff at the centre
1	2	3	4	5	6	7	Q46	Exercise Professionals at the centre are of a similar
								age to the exercisers.

1	2	3	4	5	6	7	Q47	Exercise Professionals at the centre demonstrated a							
								considerable knowledge concerning the benefits to							
								health of exercise.							
1	2	3	4	5	6	7	Q48	Staff at the centre offered help and support when							
								requested.							
								Ability of staff to appreciate peoples'							
								needs							
1	2	3	4	5	6	7	Q49	I received praise from the staff at the centre.							
1	2	3	4	5	6	7	Q50	The centre does give you individual attention.							
1	2	3	4	5	6	7	Q51	Staff at the centre sought to identify my previous							
								exercise experience.							
1	2	3	4	5	6	7	Q52	Staff at the centre know what your needs are.							
1	2	3	4	5	6	7	Q53	The centre has my best interests at heart.							
1	2	3	4	5	6	7	Q54	The centre has operating hours convenient to all							
								their customers							
								Factors related to the GP							
1	2	3	4	5	6	7	Q55	My GP was enthusiastic towards the Exercise							
								Referral procedure.							
1	2	3	4	5	6	7	Q56	My GP was openly physically active.							
1	2	3	4	5	6	7	Q57	My GP demonstrated understanding of the benefits							
								of exercise.							
1	2	3	4	5	6	7	Q58	My GP always encouraged me to be physically							
								active.							

Thank you very much indeed for taking the time to complete this questionnaire. Your answers are invaluable to the success of the research. Finally, please ensure you have completed and signed the consent forms and return in the pre-paid envelope, or to:

Appendix 24 - The Stages of Change Questionnaire

Physical activity includes activities such as brisk walking, jogging, cycling, swimming, or any other activity, such as gardening, in which the exertion makes you feel warmer or slightly out of breath.

	No	Yes
1. I am currently physically active	0	1
2. I intend to become more physically active in the next 6 months	0	1

For activity to be *regular*, it must add up to a *total* of 30 minutes or more per day and be done at least 5 days per week. For example, you could take one 30-minute walk or take three 10-minute walks.

	No	Yes
3. I currently engage in regular physical activity	0	1
4. I have been regularly physically active for the past 6 months	0	1

Scoring Algorithm

- If (question 1 = 0 and question 2 = 0) then you are at stage 1.
- If (question 1 = 0 and question 2 = 1) then you are at stage 2.
- If (question 1 = 1 and question 3 = 0) then you are at stage 3.
- If (question 1 = 1, question 3 = 1, and question 4 = 0) then you are at stage 4.
- If (question 1 = 1, question 3 = 1, and question 4 = 1) then you are at stage 5.

Appendix 25 - The Self-Efficacy for Exercise Scale

How confident are you right now that you could exercise 3 times per week for 20 minutes if:

	N Cc	lot onfic	ler	ıt							۱ Cc	Very onfident
1.	You were worried the exercise would cause further pain	0	1	2	3	4	5	6	7	8	9	10
2.	You were bored by the program or activity	0	1	2	3	4	5	6	7	8	9	10
3.	You were not sure exactly what exercises to do	0	1	2	3	4	5	6	7	8	9	10
4.	You had to exercise alone	0	1	2	3	4	5	6	7	8	9	10
5.	You did not enjoy it	0	1	2	3	4	5	6	7	8	9	10
6.	You were too busy with other activities	0	1	2	3	4	5	6	7	8	9	10
7.	You felt tired during or after exercise	0	1	2	3	4	5	6	7	8	9	10
8.	You felt stressed	0	1	2	3	4	5	6	7	8	9	10
9.	You felt depressed	0	1	2	3	4	5	6	7	8	9	10
10	. You were afraid the exercise would make you fall	0	1	2	3	4	5	6	7	8	9	10
11	. You felt pain when exercising	0	1	2	3	4	5	6	7	8	9	10

Appendix 26 - Seven-Day Physical Activity Recall

PAR#: 1	234567	Par	ticipant								
		Inte	rviewer		Today is		Today's D	ate			
1. Were	you employed in	the last se	ven days?		0.	No (Skip to	Q#4) 1.	Yes			
2. How	many days of the	last seven o	lid you work?			days					
3. How	many total hours	did you wor	k in the last s	? -	hours last	t week					
4. What	two days do you	consider y	our weekend	days?	(m:	ark davs beid	w with a sou	uigale)			
WORKSI	HEET				DAYS						
							1				
	SLEEP	1	2	3	4	5_	6	7			
M O	Moderate										
R N I	Hard										
N G	Very Hard								-		
A F T	Moderate										
E R N	Hard										
0 0 N	Very Hard										
E V	Moderate										
E N	Hard										
N G	Very Hard										
Total	Strength:										
Per Day	Flexibility:										
4a. Com	pared to your physic	cal activity o	ver the past 3	months,	6. Do you thin	nk this was a v	alid PAR Inte	rview?			
was last v	veek's physical acti	vity more, le	ess, or about th	ne same?	1. Yes	0. N	0				
1. More	2. there any problems	Less with the PA	3. About tl B interview?	he same	7. Were there	If NC any special of), go to the bac circumstances	ck and explain. s concerning thi	s PAR		
0 No					0 No	4	Vae If VEC	what were they	2(circle		
0. 140	1. Y If YE	S, go to the l	back and explain	n.	1. Injury all we 4. Injury part w	ek 2. Illne: veek 5. Prec	ss all week	3. Illness par 6. Other:	t week		

Appendix 27 - The Godin Leisure Time Exercise Questionnaire

INSTRUCTIONS

In this excerpt from the Godin Leisure-Time Exercise Questionnaire, the individual is asked to complete a self-explanatory, brief four-item query of usual leisure-time exercise habits.

CALCULATIONS

For the first question, weekly frequencies of strenuous, moderate, and light activities are multiplied by nine, five, and three, respectively. Total weekly leisure activity is calculated in arbitrary units by summing the products of the separate components, as shown in the following formula:

Weekly leisure activity score = $(9 \times \text{Strenuous}) + (5 \times \text{Moderate}) + (3 \times \text{Light})$

The second question is used to calculate the frequency of weekly leisure-time activities pursued "long enough to work up a sweat" (see questionnaire).

EXAMPLE: Strenuous = 3 times/wk + Moderate = 6 times/wk + Light = 14 times/wk

Total leisure activity score = $(9 \times 3) + (5 \times 6) + (3 \times 14) = 27 + 30 + 42 = 99$

During a typical 7-Day period (a week), how many times on the average do you do the following kinds of exercise for more than 15 minutes during your free time (write on each line the appropriate number).

Times Per Week

STRENUOUS EXERCISE

(HEART BEATS RAPIDLY)

(e.g., running, jogging, hockey, football, soccer, squash, basketball, cross country skiing, judo, roller skating, vigorous swimming, vigorous long distance bicycling)

MODERATE EXERCISE

(NOT EXHAUSTING)

(e.g., fast walking, baseball, tennis, easy bicycling, volleyball, badminton, easy swimming, alpine skiing, popular and folk dancing)

MILD EXERCISE

(MINIMAL EFFORT)

(e.g., yoga, archery, fishing from river bank, bowling, golf, easy walking)

During a typical 7-Day period (a week), in your leisure time, how often do you engage in any regular physical activity long enough to work up a sweat (heart beats rapidly)? OFTEN SOMETIMES **NEVER/RARELY**

1. 🗆 2. 🗆 3. 🗆 Appendix 28 - The SF12





6. These questions are about how you feel and how things have been with you <u>during the past 4 weeks</u>. For each question, please give the one answer that comes closest to the way you have been feeling. How much of the time during the <u>past 4 weeks</u>...



7. During the <u>past 4 weeks</u>, how much of the time has your <u>physical health</u> <u>or emotional problems</u> interfered with your social activities (like visiting friends, relatives, etc.)?



(SF12v2 Standard, US Version 2.0)

Appendix 29 - The EQ-5D xxxviii

By placing a tick in one box in each group below, please indicate which statements best describe your own health state today.

Mobility	_
I have no problems in walking about	
I have some problems in walking about	
I am confined to bed	ц. ^ф .
	$\langle \rangle$
Self-Care	
I have no problems with self-care	
I have some problems washing or dressing myself	
I am unable to wash or dress myself	
Usual Activities (e.g. work, study, housework, family or leisure activities)	Jacob Contraction
I have no problems with performing my usual activities	
I have some problems with performing my usual activities	
I am unable to perform my usual activities	
Pain/Discomfort	
I have no pain or discomfort	
I have moderate pain or discomfort	
I have extreme pain or discomfort	
Anxiety/Depression	
I am not anxious or depressed	
I am moderately anxious or depressed	
I am extremely anxious or depressed	

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xxxviii A revised version of this questionnaire is included in the appendices - www.bhfnc-exerciserefferal.org.uk



Appendix 30 - The WHOQOL-BREF ****

The following questions ask how you feel about your quality of life, health, or other areas of your life. I will read out each question to you, along with the response options. **Please choose the answer that appears most appropriate.** If you are unsure about which response to give to a question, the first response you think of is often the best one.

Please keep in mind your standards, hopes, pleasures and concerns. We ask that you think about your life **in the last four weeks**.

		Very poor	Poor	Neither poor nor good	Good	Very good
1.	How would you rate your quality of life?	1	2	3	4	5

		Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
2.	How satisfied are you with your health?	1	2	3	4	5

The following questions ask about **how much** you have experienced certain things in the last four weeks.

		Not at all	A little	A moderate amount	Very much	An extreme amount
3.	To what extent do you feel that physical pain prevents you from doing what you need to do?	5	4	3	2	1
4.	How much do you need any medical treatment to function in your daily life?	5	4	3	2	1
5.	How much do you enjoy life?	1	2	3	4	5
6.	To what extent do you feel your life to be meaningful?	1	2	3	4	5
		Not at all	A little	A moderate amount	Very much	Extremely
7.	How well are you able to concentrate?	1	2	3	4	5
8.	How safe do you feel in your daily life?	1	2	3	4	5
9.	How healthy is your physical environment?	1	2	3	4	5

xxxix World Health Organization (1993). WHOQoL Study Protocol. WHO (MNH7PSF/93.9)

uning	in the last four weeks.	ſ				
		Not at all	A little	Moderately	Mostly	Completely
10.	Do you have enough energy for everyday life?	1	2	3	4	5
11.	Are you able to accept your bodily appearance?	1	2	3	4	· 5
12.	Have you enough money to meet your needs?	1	2	3	4	5
13.	How available to you is the information that you need in your day-to-day life?	1	2	3	4	5
14.	To what extent do you have the opportunity for leisure activities?	1	* 2	3	4	5
		Very poor	Poor	Neither poor nor good	Good	Very good
15.	How well are you able to get around?	1	2	3	4	5
		Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
16.	How satisfied are you with your sleep?	1	2	3	4	5
17.	How satisfied are you with your ability to perform your daily living activities?	1	2	3	4	5
18.	How satisfied are you with your capacity for work?	1	2	3	4	5
19.	How satisfied are you with yourself?	1	2	3	4	5

The following questions ask about how completely you experience or were able to do certain things in the last four weeks.

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