NICE National Institute for Health and Care Excellence

Surveillance proposal consultation document

2018 surveillance of physical activity: exercise referral schemes (NICE guideline PH54)

Surveillance background

This 2018 surveillance review has taken into account 3 NICE guidelines on the theme of physical activity:

- Physical activity in the workplace. NICE guideline PH13 (May 2008).
- Physical activity for children and young people. NICE guideline PH17 (January 2009).
- Physical activity: exercise referral schemes. NICE guideline PH54 (September 2014).

This report details the surveillance proposal for one of these guidelines, NICE guideline PH54. Details of the review proposals of the other 2 physical activity guidelines, PH13 and PH17, can be found on the respective websites.

Proposed surveillance decision

We propose to not update the NICE guideline on physical activity: exercise referral schemes at this time.

Reasons for the proposal to not update the guideline

The majority of new evidence was found to be consistent with the current recommendations. We found new evidence on barriers to uptake of exercise referral schemes, however recommendations from other NICE guidelines address these barriers and are already cross-referred to in PH54.

We are also proposing to withdraw recommendation 3 of the guideline, as NICE no longer make recommendations directed at Public Health England.

For further details and a summary of all evidence identified in surveillance, see appendix A below.

Overview of 2018 surveillance methods

NICE's surveillance team checked whether recommendations in physical activity: exercise referral schemes (NICE guideline PH54) remain up to date.

The surveillance process consisted of:

- Initial feedback from topic experts via a questionnaire.
- Input from voluntary and community sector organisations and stakeholders on known variations in practice and policy priorities.
- Literature searches to identify relevant evidence.
- Assessment of new evidence against current recommendations.
- Deciding whether or not to update sections of the guideline, or the whole guideline.
- Consultation on the decision with stakeholders (this document)

After consultation on the decision we will consider the comments received and make any necessary changes to the decision. We will then publish the final surveillance report containing the decision, the summary of the evidence used to reach the decision, and responses to comments received in consultation.

For further details about the process and the possible update decisions that are available, see ensuring that published guidelines are current and accurate in developing NICE guidelines: the manual.

Evidence considered in surveillance

Search and selection strategy

We searched for new evidence related to the whole guideline.

We found 4 studies in a search for randomised controlled trials, systematic reviews and qualitative studies published between 1 October 2013 and 6 March 2018.

See appendix A: summary of evidence from surveillance below for details of all evidence considered, and references.

Selecting relevant studies

The standard surveillance review process of using RCT and systematic review selection criteria would not capture relevant studies investigating barriers and facilitators to uptake or exercise referral schemes. In line with the selection criteria used in the guideline, we included qualitative evidence in this area.

Ongoing research

We checked for relevant ongoing research; of the ongoing studies identified, 2 studies were assessed as having the potential to change recommendations; therefore we plan to check the publication status regularly, and evaluate the impact of the results on current recommendations as quickly as possible. These studies are:

- A multi-centred randomised trial to assess if adding web-based support to exercise referral schemes for individuals with metabolic, musculo-skeletal and mental health conditions can increase physical activity after 12 months
- Guildford HyperTension 2000: Exercise interventions to increase levels of physical and sporting activity

Intelligence gathered during surveillance

Views of topic experts

We considered the views of topic experts, including those who helped to develop the guideline.

For this surveillance review, 6 topic experts completed a questionnaire about developments in evidence, policy and services related to the guideline. Four of the topic felt that the guideline is in need of an update, whilst 2 felt that the guideline does not need updating. Some of the areas for update included emerging evidence on social prescribing interventions, which often include an element of exercise referral. Another factor was a concern that the wording of the recommendations may be open for misinterpretation, resulting in the commissioning of exercise referral schemes for inactive but otherwise healthy people, which is not recommended in the guideline. See appendix A: summary of evidence from surveillance below for details of how these concerns have been addressed.

Views of stakeholders

Stakeholders are consulted on all surveillance decisions except if the whole guideline will be updated and replaced. Because this surveillance decision was to not update the guideline, we are consulting on the decision.

See ensuring that published guidelines are current and accurate in developing NICE guidelines: the manual for more details on our consultation processes.

Equalities

No equalities issues were identified during the surveillance process.

Editorial amendments

During surveillance of the guideline we identified the following issues with the NICE version of the guideline that should be corrected.

- Recommendation 2, bullet 2: the hyperlink to the 'Standard Evaluation Framework for physical activity interventions' should be amended to link to the archived version here.
- In the glossary section, the link to the Register of Exercise Professionals should be corrected to the updated link here.

Overall decision

After considering all evidence and other intelligence and the impact on current recommendations, we decided that no update is necessary at this time.

Appendix A: Summary of evidence from surveillance

2018 surveillance of physical activity: exercise referral schemes (2014) NICE guideline PH54

Summary of evidence from surveillance

Studies identified in searches are summarised from the information presented in their abstracts.

Feedback from topic experts who advised us on the approach to this surveillance review, was considered alongside the evidence to reach a final decision on the need to update each section of the guideline.

Exercise referral for people who are sedentary or inactive but otherwise healthy

Recommendation 1

Policy makers and commissioners should not fund exercise referral schemes for people who are sedentary or inactive but otherwise apparently healthy.

Primary care practitioners should not refer people who are sedentary or inactive, but otherwise apparently healthy, to exercise referral schemes.

Surveillance decision

This recommendation should not be updated.

Exercise referral for people who are sedentary or inactive but otherwise healthy

2018 surveillance summary

No relevant evidence was identified.

Intelligence gathering

A topic expert noted that there is emerging research on social prescribing that often contains elements of exercise referral.

Impact statement

It was noted that there is emerging evidence on the impact of social prescribing which can sometimes include exercise referral. We did not find any evidence in this area that would fit the scope for the guideline, however we will review this area at the next surveillance point.

New evidence is unlikely to change guideline recommendations.

Exercise referral for people who are sedentary or inactive and have a health condition or other health risk factors

Recommendation 2

Policy makers and commissioners should only fund exercise referral schemes for people who are sedentary or inactive and have existing health conditions or other factors* that put them at increased risk of ill health if the scheme:

- Incorporates the core techniques outlined in recommendations 7–10 of 'Behaviour change: individual approaches' NICE public health guidance 49 This includes:
  - recognising when people may or may not be more open to change (see recommendations 8 and 9)
  - agreeing goals and developing action plans to help change behaviour (see recommendation 7)
  - advising on and arranging social support (see recommendations 7 and 10)
  - tailoring behaviour change techniques and interventions to individual need (see recommendation 8)
  - monitoring progress and providing feedback (see recommendations 7 and 10)

- developing coping plans to prevent relapse (see recommendations 7 and 8).

- Collects data in line with the 'essential criteria' outlined in the Standard Evaluation Framework for physical activity interventions. Specifically: programme details, evaluation details, demographics of individual participants, baseline data, follow-up data (impact evaluation) and process evaluation.
- Makes the data collected available for analysis, monitoring and research to inform future practice.

Primary care practitioners should only refer people who are sedentary or inactive and have existing health conditions or other factors* that put them at increased risk of ill health to an exercise referral scheme if it conforms to the above criteria.

* For example, risk factors for coronary heart disease, stroke and type 2 diabetes.

Surveillance decision

This recommendation should not be updated.

The following editorial correction is needed for this recommendation:

- the hyperlink to the 'Standard Evaluation Framework for physical activity interventions' should be amended to link to the archived version here.

Exercise referral for people who are sedentary or inactive and have a health condition or other health risk factors

2018 surveillance summary

A pragmatic cluster RCT (1) (4 clusters, n not reported) examined the effectiveness of an exercise referral programme in patients with hypertension who were self-reported as physically inactive. The intervention lasted 16 weeks and was compared to brief physical activity counselling. Results indicated that at 24-week follow-up, there were no significant differences between groups for physical activity levels. However, participants attending more than 50% of the sessions in the exercise referral programme significantly increased their levels of moderate to vigorous physical activity compared to the comparison group.

A cluster RCT (15 clusters, n = 147) (2) examined the efficacy of a clinician-referred exercise programme for men with prostate cancer. The intervention lasted 12-weeks and comprised of 2 supervised gym sessions and 1 home-based session per week. The control group received care as usual. Results indicated that there was a significant difference between groups for levels of vigorous-intensity exercise but not for combined moderate and vigorous exercise. The intervention group were also significantly more likely to meet guidelines of undertaking more than 150 minutes of exercise per week.

An RCT (n = 422) (3) examined the effect of an exercise referral scheme for inactive

adults with at least one chronic condition. The intervention comprised of a 12-week exercise referral programme linked to community resources and included mechanisms to enhance social support. The control group received usual care for their primary care practice. Results indicated that at 15 month follow-up, the intervention group showed a significant increase in self-reported physical activity compared to the control group.

A systematic review (4) of 33 studies (n not reported) examined the barriers and facilitators around the adherence to exercise referral schemes. The main barriers to attendance included inconvenient timing of sessions, their cost and location. Other barriers reported were intimidating gym atmosphere, a dislike of the music and TV and a lack of confidence in operating gym equipment.

Intelligence gathering

It was highlighted that the second bullet point of recommendation 2 refers to an evaluation framework that has been archived.

Another expert noted that the current wording of the recommendations may allow some commissioners to justify funding exercise referral schemes for groups that the evidence shows are likely to be ineffective.

Impact statement

In general, the new evidence confirmed that exercise referral schemes can be effective at increasing physical activity in sedentary people with an existing condition. This is consistent with recommendation 2 which states that exercise referral schemes should only be funded for people who are sedentary or inactive and have an existing health condition or other factors that put them at increased risk of ill health.

Evidence was identified which highlighted several barriers to the uptake of exercise referral schemes by patients. Reported barriers included inconvenient timing of sessions, cost, location, intimidating gym atmosphere, a dislike of the music and TV and a lack of confidence in operating gym equipment. The guideline does not mention any barriers to adherence and uptake of schemes, however these barriers are likely to be addressed by following recommendation 8 in NICE guideline PH49 (Behaviour change: individual approaches) which covers ensuring interventions meet individual needs. NICE guideline PH49 is already cross-referred to in the guideline so it is unlikely that the new evidence will impact recommendations.

A topic expert noted that the second bullet point of recommendation 2 refers to an evaluation framework that has been archived. An editorial correction is proposed to amend the hyperlink to lead to the archived version of the framework. It was also noted that the wording of the recommendations could be improved to avoid commissioning exercise referral schemes for groups that the evidence shows are likely to be ineffective. We did not identify any evidence which suggests that the wording may be misinterpreted, however we have made a note of this concern and will review at the next surveillance point.

New evidence is unlikely to change guideline recommendations.

Collating and sharing data on exercise referral schemes

Recommendation 3

Public Health England should develop and manage a system to collate local data on exercise referral schemes. This system should:

- be based on the essential criteria outlined in the Standard Evaluation Framework for physical activity interventions (see recommendation 2)
- make these data available for analysis and research to inform future practice.

Surveillance decision

This recommendation should be withdrawn from the guideline as NICE public health guidelines no longer make recommendations directed at Public Health England.

Box 1. The role of structured exercise programmes in the management of, and rehabilitation following, a health condition

NICE recommends structured exercise programmes tailored to individual need to manage, and for rehabilitation after, certain health conditions, including:

myocardial infarction (see NICE clinical guideline 172 on secondary prevention)

stroke (see NICE clinical guideline 162 on rehabilitation)

chronic heart failure (see NICE clinical guideline 108)

chronic obstructive pulmonary disease (see NICE clinical guideline 101)

depression (see NICE clinical guideline 90 for adults)

low back pain (see NICE clinical guideline 88)

chronic fatigue syndrome/myalgic encephalomyelitis (or encephalopathy) (see NICE clinical guideline 53)

These structured exercise programmes vary in format, the mechanism of referral and content. They include components such as phase 3 and phase 4 rehabilitation activities and structured, tailored and supervised activities delivered by a specialist physical activity and exercise instructor (trained to level 4). They are outside the scope of this guideline.

Box 2. The importance of physical activity in promoting good health and preventing disease

NICE endorses the importance of physical activity as a way to promote good health and prevent disease. We have developed guidelines on physical activity for policy makers, commissioners and practitioners with a remit for increasing physical activity levels. Topics covered include:

Physical activity: brief advice for adults in primary care (NICE public health guidance 44). Specifically:

- recommendation 1 Identifying adults who are inactive
- recommendation 2 Delivering and following up on brief advice
- recommendation 3 Incorporating brief advice in commissioning
- recommendation 4 Systems to support brief advice
- recommendation 5 Providing information and training.

Walking and cycling (NICE public health guidance 41)

Promoting physical activity in the workplace (NICE public health guidance 13)

Physical activity and the environment (NICE public health guidance 8).

The absence of NICE guidelines on other physical activity interventions is because they have not been considered by NICE. It does not reflect a judgement on their effectiveness or cost effectiveness.

Glossary

Brief advice

'Brief advice' means verbal advice, discussion, negotiation or encouragement, with or without written or other support or follow-up. It can vary from basic advice to a more extended, individually focused discussion (see NICE public health guidance 44).

Inactive

'Inactive' is defined as not currently meeting the Chief Medical Officer's recommendation for physical activity as outlined in Start active, stay active: a report on physical activity from the four home countries' Chief Medical Officers (Department of Health 2011).

Level 4

Level 4 refers to the National Occupational Standards levels for exercise instructors. These are currently being reviewed. See The Register of Exercise Professionals for details.

Phase 3 and phase 4 rehabilitation activities

Phase 3 refers to the rehabilitation phase of a disease care pathway. This generally takes place after hospital discharge. It consists of structured exercise training, education and psychological support and

advice on risk factors. Phase 4 refers to long term maintenance of physical activity following completion of Phase 3. It consists of exercise classes in leisure centres and community settings.

Process utility

People benefit psychologically from physical activity. This short-term 'feel good' factor is referred to in economic terms as 'process utility'.

Sedentary

Being sedentary is not just a lack of physical activity (see 'inactive'). Sedentary behaviour involves activities that do not increase energy expenditure much above resting levels, for example, sitting, lying down, sleeping, watching TV and reading. Sedentary behaviour is an independent risk factor for chronic disease. People who achieve the recommended levels of physical activity can still be at risk if they spend too long being sedentary. (Evidence briefing: sedentary behaviours British Heart Foundation National Centre for Physical Activity and Health 2012).

Research recommendations

RR - 01 How effective and cost effective are different types of exercise referral scheme? Compare the relative effects of different models in controlled studies. Include health-related quality of life as an outcome. Compare exercise referral schemes that vary by:

- setting – for example, home-based, gym-based, community-based or outdoors
- intensity and duration – for example, a 12 week scheme involving 1 session a week, or a 6 week scheme involving 4 1 hour sessions per week
- the techniques used, for example, some use additional 'supportive' techniques such as 'motivational interviewing' and education sessions
- the target group, for example, people who are overweight and obese, people with raised blood pressure or cholesterol levels or those experiencing mild depression, anxiety or stress; or by age, gender, race or socioeconomic status
- other scheme characteristics including: design, content and delivery; referral mechanisms; choice of activity; cost and qualifications of instructors; and whether it is commissioned and delivered by an NHS, non-NHS or community-based organisation.

Summary of findings

No new evidence relevant to the research recommendation was found and no ongoing studies were identified.

Surveillance decision

This research recommendation will be considered again at the next surveillance point.

RR – 02 What factors encourage uptake of, and adherence to, an exercise referral scheme? Factors to consider include: design, content and delivery; referral mechanisms; choice of activity; qualifications and cost of instructors. Also identify any barriers preventing participation and factors that encourage it.

Summary of findings

New evidence relevant to this research recommendation was found but an update in this area is not planned. The new evidence indicates that the main barriers to exercise referral scheme adherence included: inconvenient timing of sessions, cost, location, intimidating gym atmosphere, a dislike of the music and TV and a lack of confidence in operating gym equipment. These barriers are likely to be addressed by following recommendation 8 in NICE guideline PH49 (Behaviour change: individual approaches) which covers ensuring interventions meet individual needs. NICE guideline PH49 is already cross-referred to in the guideline so it is unlikely that the new evidence will impact recommendations.

The new evidence mainly focussed on the content of the schemes and the barriers to uptake and adherence. More evidence is required on the design and delivery of the schemes as well as referral mechanisms and qualifications or cost of instructors.

Surveillance decision

This research recommendation will be considered again at the next surveillance point.

RR – 03 What factors encourage under-represented groups to participate in and complete an exercise referral scheme? What factors prevent these groups from participating? Under-represented groups include: people from black and minority ethnic groups, people with disabilities and those from lower socioeconomic groups.

Summary of findings

No new evidence relevant to the research recommendation was found and no ongoing studies were identified.

Surveillance decision

This research recommendation will be considered again at the next surveillance point.

RR – 04 What is the comparative effectiveness and cost effectiveness of exercise referral schemes compared with other interventions that aim to help people to become more physically active? Relative effectiveness and cost effectiveness should be compared in controlled trials.

Summary of findings

No new evidence relevant to the research recommendation was found and no ongoing studies were identified.

Surveillance decision

This research recommendation will be considered again at the next surveillance point.

References

1. Gallegos-Carrillo K, Garcia-Pena C, Salmeron J, Salgado-de-Snyder N, Lobelo F (2017) Brief Counseling and Exercise Referral Scheme: A Pragmatic Trial in Mexico. American Journal of Preventive Medicine 52(2):249–59
2. Livingston PM, Craike MJ, Salmon J, Courneya KS, Gaskin CJ, Fraser SF, et al. (2015) Effects of a clinician referral and exercise program for men who have completed active treatment for prostate cancer: A multicenter cluster randomized controlled trial (ENGAGE). Cancer 121(15):2646–54
3. Martin-Borras C, Gine-Garriga M, Puig-Ribera A, Martin C, Sola M, Cuesta-Vargas AI, et al. (2018) A new model of exercise referral scheme in primary care: is the effect on adherence to physical activity sustainable in the long term? A 15-month randomised controlled trial. BMJ Open 8(3):e017211
4. Morgan F, Battersby A, Weightman AL, Searchfield L, Turley R, Morgan H, et al. (2016) Adherence to exercise referral schemes by participants - what do providers and commissioners need to know? A systematic review of barriers and facilitators. BMC Public Health 16:227