HEALTH AND SPORT COMMITTEE

SOCIAL PRESCRIBING OF PHYSICAL ACTIVITY AND SPORT

SUBMISSION FROM Cycling UK in Scotland

Cycling UK in Scotland and our projects related to social prescribing for cycling

Cycling UK is a charity and works to inspire and help people to cycle and keep cycling, whatever kind of cycling they do or would like to do. Our projects in Scotland are focused on addressing inequalities in transport and towards anyone needing a bit of extra support to get riding, such as older people, people with complex health conditions, and people with disabilities. www.cyclinguk.org. Cycling UK’s projects in Scotland do not fit a tight definition of ‘social prescription’ (see below), however, two projects work closely with GPs and NHS Health Care Professionals.

- **WheelNess** in Inverness started by accepting referrals from health, social care, community groups, education and from individuals themselves. In its second year, referrals are accepted from specific agencies only (who offer participants continuing, appropriate support).
- **Health Revolutions** in Edinburgh and the Lothians works with those living with severe and enduring mental health conditions. Participants are fully supported by project workers/medical staff.

Cycling and Health

A large body of evidence shows that cycling as physical exercise is good for health. For example, cycling to work is linked with lowering the risk of developing cancer, and cardiovascular disease[^1], psychological wellbeing[^2], and with less work absenteeism[^3], compared to commuting by car or public transport. It improves fitness and indicators of health such as body mass index, obesity and blood pressure[^4]. Furthermore, “the [health] benefits of bicycling completely overwhelm any concern over pollution exposure of bicyclists.”[^5]

Does social prescribing for physical activity increase sustained participation?

Social Prescribing is defined as a means of enabling Health Care Professionals (HCPs) to refer patients to a link worker. The link worker can provide them with a face to face conversation during which they can learn about the possibilities and design their own

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[^1]: Celis-Morales Carlos A. (et al.) Association between active commuting and incident cardiovascular disease, cancer, and mortality: prospective cohort study. April 2017. [http://www.bmj.com/content/357/bmj.j1456](http://www.bmj.com/content/357/bmj.j1456)
[^2]: Martin, A (et al.). Does active commuting improve psychological wellbeing? Preventive Medicine. [http://dx.doi.org/10.1016/j.ypmed.2014.08.023](http://dx.doi.org/10.1016/j.ypmed.2014.08.023)
personalised solutions, i.e. ‘co-produce’ their ‘social prescription’. Our projects in Scotland have received positive feedback from participants (see Appendix 1) and participants to WheelNess (a rolling programme) continue to use the bikes loaned to them 12 months on. However, our projects have not yet been formally evaluated to understand the impacts in terms of sustained physical activity after the project.

A Cycling UK project in West Yorkshire called Cycle for Health⁶ has established 26 referral routes and the 874 participants have all seen improvements in mental health. 89% of attendees had increased their cycling activity levels - 57% cycling more than once per week. Six weeks after the project ended 74% showed an overall increase in their cycling levels compared to when they first started and 78% indicated they were exerting less effort indicating an improvement in fitness.

Who is best placed to make referrals?
Cycling UK’s experience (and anecdotal evidence gathered from a GP consulted with), is that sustained participation in physical activity is much more about the skills, experience and attitudes of the project staff and volunteers, peer support, and the removal of traditional barriers to physical activity, rather than source of referral. Relationships and support of a community are most important. However, our experience shows that:

- NHS Scotland and healthcare providers are in a great position actively to promote riding a bike or walking to people in their care.
- People listen and take advice from those they trust or have strong relationships with. This might be a HCP but can also be friends, family, peers or support workers.
- People may need to hear consistent messages from several sources before they consider or act on it. For example, a HCP interviewed as part of the WheelNess evaluation suggested that participants might need to hear about the programme from her (a GP), a friend already on the programme and a third sector organisation before they applied.
- One GP expressed the view that direct referral to behaviour change programmes is less effective than self-referral and was not convinced ‘prescribing’ or direct referral was more beneficial than signposting. This anecdotal opinion is not necessarily supported by academic research⁷. The GP further noted however, that a person-centred approach may reveal the initial contact is best made by the HCP (with the patient’s consent), if, for example, the patient lacks confidence. Cycling UK’s Cycle for Health project found that completion of the 12 week programme by participants increased when they were referred through a link worker rather than self-referring. More research is needed to understand the efficacy of social prescriptions vs. signposting.

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Screening and brief intervention for obesity in primary care: a parallel, two-arm, randomised trial
Barriers and how are they being overcome.
Lack of the following factors can be a barrier to prescribing physical activity or to patients being able to cycle for physical activity. These factors have been identified by Cycling UK in Scotland and Dr Katie Walter\textsuperscript{8}, a GP in Inverness who has been involved in Cycling UK’s Wheelness project since its inception.

- **Role of link workers.** GPs often struggle to advise patients about physical activity or use the tools available\textsuperscript{9}, and cannot keep up to date with what third sector projects are local to them and how they change over time. The link worker’s role as a ‘signpost’ to projects providing access to physical activity is therefore essential. More link workers are needed to ease and encourage the referral of people in need to the right project in their area.

- **Confidence in good governance and efficacy.** HCPs need to feel confident that they are referring patients to well-run and effective projects. Link workers, with knowledge of projects are key to providing confidence. Cycling UK’s WheelNess project was established as a collaborative project with a number of public and third sector organisations and this approach has been valued in gaining the respect of the community particularly as it embedded monitoring and evaluation into the program from the start.

- **Appropriate attitudes to risk.** Concerns around clinical governance needs to be balanced against a pragmatic approach to risk. Walking and cycling are common activities and it is imperative that projects do not stumble from a risk averse approach that creates a barrier by insisting on layers of health and safety which are inappropriate to the level of risk. For example, an insistence on certain safety equipment which is not mandated by law (e.g. cycle helmets, high vis jackets) will be a barrier to participation for some. Respecting people’s autonomy and allowing participants to accept risk is a vital step to supported self management.

- **Valuing third sector providers.** All HCPs and NHS institutions need to value third sector providers and recognise that they are professionals. Without attitudinal shifts, better communication, and de-medicalisation of treatment plans, barriers will remain. For example, securing necessary NHS ethical approval for research and evaluation of referrals to a third sector provider can be very time consuming. Cycling UK in Scotland has been attempting to secure permission to undertake evaluation with NHS patients in NHS Lothian premises, for the Health Revolutions project since November 2018, and this approval decision remains outstanding.

- **A person-centred approach.** A greater emphasis on the whole person is needed to recognise all the determinants of health. For each individual patient this involves understanding behavioural change needs, being non-judgmental, and motivational rather than prescriptive. Ensuring patients are given ‘real’ choice and treated as equal partners in this process is key, rather than simply assigning them to (limited) services available – regardless of capacity, capability, goals, aspirations and motivation.

\textsuperscript{8} Dr Katie Walton, Cairn Medial Practice, Inverness.
\textsuperscript{9} Chatterjee et al. GPs’ knowledge, use, and confidence in national physical activity and health guidelines and tools. August 2017. \url{http://bjgp.org/content/early/2017/08/14/bjgp17X692513}
• **Effective resourcing.** Third sector projects need to be resourced effectively and work with statutory provision and the individual themselves to ensure the suite of interventions offered is in a mix that is right for the person in receipt of the ‘prescription’. Organisations who are providing the services ‘prescribed’ should have clear, evidence-based eligibility criteria; and be funded adequately to meet the needs of the demographic their project is suitable for. There are material differences in terms of resource need (staff qualification/training/experience; staff to participant ratio; level of risk assessment) between a programme designed to work with ‘mainstream’ needs, and a programme to support people that have multiple vulnerabilities, such as those with severe and ensuing mental health conditions; learning disabilities; substance misuse issues; or chaotic lifestyles. Projects also need to meet the needs of the participants, sometimes in novel ways. For example, Cycling UK’s WheelNess project seeks to address the needs of participants and provides a bicycle to those who do not have access to one on a long-term loan basis.

• **Using appropriate terminology.** The terms cycling and sport can be a barrier. Our experience is that it is better to use the terms physical activity and ‘riding a bike’.

• **Benefits implications.** Several participants interviewed as part of the WheelNess evaluation who were receiving health-related benefits or pensions expressed extreme concern about whether their benefits would be reduced if they were seen to be riding a bike or being physically active.

• **Feeling safe on the roads.** Tackling hostile road conditions is a priority because they put existing cyclists at risk and deter many others including children and young people. For social referrals for cycling and walking to be effective and have long-term impact Government must address the following issues:
  - **Cut car use / traffic volume:** a DfT evidence review\(^{10}\) stated, “In order to increase levels of physical activity, it is necessary to reduce use of the car.” Cutting traffic, particularly in urban towns and cities where other travel options are available, makes cycling and walking more attractive. Measures are needed to change behaviour and encourage alternatives to driving.
  - **Boost cycle-friendly infrastructure:** the highway network and its junctions must be planned, designed and improved with cyclists in mind.
  - **Lower vehicle speeds:** driving at high speed deters people from cycling, so implementing lower speed limits, especially 20 mph in urban areas, is vital.
  - **Law enforcement:** policing and penalising bad driving and poor car parking is equally essential, so effective traffic law and enforcement has a major role to play too.
  - **Create better built environments:** planning applications for new developments should always prioritise the need for people to be physically active in their daily routine.

**How should social prescribing for physical activity be monitored and evaluated?**

• A mixed methodological approach is needed – quantitative data alone is insufficient to show ‘what really matters’ to participants. Furthermore, monitoring and evaluation must

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be co-produced – participant ‘buy in’ is very important to ensure that what matters to the participant is recorded (rather than what HCPs think matters).

- Monitoring and evaluation should be done in a light touch way – not cumbersome or burdensome. We believe that the benefits in terms of improved health cannot be questioned. Evaluation should therefore focus on the process, and how sustained the physical activity is for the participants.

A detailed example of monitoring and evaluation criteria for the Cycling UK’s Health Revolutions project can be seen in Appendix 2.

For more information contact:
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Appendix 1

Results from Cycling UK’s WheelNess project in Inverness.
Unpublished results.
Project started: April 2018
No. of participants: 157
Results 2018/2019 – During the Course of the Intervention:

- Participant’s main mode(s) of transport altered, with journeys by foot and bus being replaced by journeys by bicycle.
- Participant’s gained confidence in dealing with basic bike maintenance such as altering saddle height; fixing punctures and using brakes and gears. Confidence cycling through town traffic has increased, as have levels of knowledge about accessing safe cycling routes and feelings towards motorists have also improved. Isolation appears to have reduced as does transport poverty.
- Seventeen discrete and recurring benefits of the WheelNess programme were identified by both participants and support staff as tabulated below:

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<th>Benefit noted</th>
<th>Frequency of response</th>
<th>Example comment(s)</th>
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| Fitness / physical health improvement  | 35                    | “I’ve got a hip impingement and they’re talking about they’re going to do surgery on it – the last thing I’ve got time for! But actually, being on my bike, has helped.”
|                                        |                       | “And it’s good for my fitness and for keeping my weight down. I’ve got the weight that I want to lose, and I want to keep it off and all that. Be able to run around.” |
| Improved mental wellbeing              | 33                    | “Sometimes, I go out and think and other times, I just don’t want to think. I just want a clear mind and I’ll just take in the noises around me and it’s just quite nice… I just want to clear my mind and I’ve felt so |
much better this last couple of weeks. Honestly. Like, a different person!”

| Shared family / partner experiences | 25 | “The kids love going on one of mummy’s adventures!”
| | | “It makes me kind of more able, although I’m not, it kind of makes me equal to him [partner] a bit.”

| Independence / freedom / choice | 21 | “I think it gives you back independence that’s taken, you’re not having to wait on a bus. You’re not have to be dependent on others in that sense. It gives you a wee bit of freedom.”

| Increased confidence / self esteem | 19 | “Before I got my bike, I lacked confidence but feel I have gained so much from getting back out there.”

| Mobility aid | 8 | “The most we’ve done is 40 minutes, which, for me, is amazing! I can only drive for about 20 or 25 minutes because when I drive, I tense up.”

| Commuting / everyday travel | 8 | “I can use the bike for volunteering too, because originally, New Start, was two buses to get to. So, that whole thing of getting from one place to another.”

| Fun! | 7 | “I still get goose bumps thinking about it”

| Managing emotions | 6 | “Cycling is my new coping strategy. It’d been life changing!”

| Respite / ‘me time’ | 5 | “It lets you switch off from life for a while. You just need to pay attention to the path or the road”

| Meeting people | 4 | “The opportunities for socialising are great!”
| | | “I also love the way my trike makes people smile. It’s a good feeling!”

| Safety / harm reduction | 4 | “From a safety perspective, people could be an hour between finishing their work and catching a bus. So, it [the WheelNess programme] enables them and empowers them.”

| Weight loss | 3 | “I think the programme is fantastic as cycling has helped improve my fitness, I have even started running again and I have lost 5kgs so far.”
| | | “I’ve lost weight without really changing my diet.”

**Results from Cycling UK’s Health Revolutions project in Lothians**
Results unpublished.
Project started: September 2018
No. of participants: c. 30 patients/participants and similar number of support staff (who also ride the bikes and have developed skills and confidence)

- Most patients/participants enjoy the cycling sessions. This conclusion is drawn from:
  - Self-reporting
  - Observation – for instance, one patient went from being silent on the rides to singing loudly and ringing the bell on his bike repeatedly!
  - Repeat/regular attendance – these sessions are optional, and many patients/participants have not missed an opportunity to get out on the bikes.
- Participants in community settings report increased confidence and self-efficacy and reduced social anxiety.
• The social aspect of the ‘bike club’ is appreciated by participants in the community setting.
• All participant’s bike skills have improved dramatically e.g. decision-making re safety; changing gears; steering. The ‘Stepping Out’ group have gone from wobbling around the car park to completing a 10-mile ride in the rain! (observation from Cycling UK staff)
• Patients/participants engage with their surroundings when riding the bikes; they notice nature etc. – they present as relaxed and ‘in the moment’.

Appendix 2
How should social prescribing for physical activity be monitored and evaluated?

Cycling UK in Scotland would like to monitor and evaluate Health Revolutions as outlined below, however this is dependent on the securing of ethical approvals.

1. Quantitative data analysis
   a. number who attended the sessions and from where
   b. demographic data - ages; sexes; conditions (physical and mental health)
   c. medications (Patient Requested Medication – PRM – levels can be an indication of levels of distress/mental wellbeing)

2. Qualitative data analysis:
   a. Post-session survey (participants supported to complete)
      i. Have you been to Bike Group before?
      ii. What was your favourite part of today’s group?
      iii. Is there anything about today’s group that you didn’t like, or thought that we could do better next time?
      iv. Can you tell us how you feel after today’s group – a word or sentence is fine! (e.g. happy; relaxed; tired; energised; proud of myself etc.)
      v. Do you think you will come back to another Bike Group?
      vi. If there’s anything else you would like to tell us, please do so below!
   b. Very informal interviews with those participants happy to talk to researcher/evaluator. The conversation would really just be a chat to find out what went well; what could be done differently/better if we get the opportunity to run the intervention in other (similar) settings; what the participants enjoyed/didn’t enjoy; if they found anything difficult/challenging; how cycling made them feel etc.
   c. Very informal interviews with support staff/OTs/AHPs/nurses etc. who could reflect on any impacts/changes they might have witnessed in participant’s presentation (anonymised) – whether patients are keen to go to the cycling sessions; whether they appear relaxed/happy/calm after a session etc.
   d. Feedback from Cycling UK staff on how the sessions ran; how the participants engaged etc.