

STEP BY STEP Final Report

LGMP Pilot – short description

1. Problem description:

The LGMP demonstration seeks to address two key problems. The first is the growing use of the private car, and related congestion, pollution and energy consumption problems. The Local Transport Strategy for West Lothian, the Council area in which Linlithgow is located, notes these as problems that should be dealt with by local transport actions. It is however true to say that in West Lothian congestion and pollution are not perceived as major problems by the majority of the local population, except for peak hour journeys to and from Edinburgh (which, at 24 km distant, is beyond “active travel range” for most people living in Linlithgow).

The second problem is poor public health. Coronary heart disease is higher in Scotland than in any other country in Western Europe and this is in part connected with a lack of exercise: only 33% of men and 25% in women take exercise three times per week or more. The Coronary Health Disease Strategy (Lothian Health Board, 1999) recognises the urgency of the need to increase rates of exercise in the population and recommends, amongst other ways of achieving this objective:

- local targeted health educational programmes. These programmes have been developed more recently to engage with individuals and groups to increase their motivation to act on the information provided by national campaigns;
- one to one advice on the need for lifestyle changes (smoking, diet, exercise); and
- one to one risk assessment also allows for the identification of those at greater risk of CHD due to hypertension, family history or diabetes so that lifestyle advice can be reinforced.

2. Description of the campaign / measure:

The LGMP pilot attempted to change the travel behaviour of patients at a doctor’s practice by providing them with information and, in some cases, with special appointments with medical staff in order to help them to identify ways in which they could make small changes in their daily life so as to incorporate more active travel.

The objectives of the LGMP pilot should be realised through the following actions which are in effect operational objectives. They are to:

- Attempt to expose all patients who visit the practice during the project period to publicity and awareness material about the links between health and active travel.
- Give a smaller group of patients (about 800) a pack of material on the above topic.

- Give a smaller group again (about 400) a pack of material and to make an appointment with them to discuss the material, and to attempt to help them set targets to incorporate more active travel into their daily life.
- Disseminate the results to other medical professionals.

In realizing these objectives, the key action can be summarized as providing patients with the material. This material gave patients the opportunity to draw up a self-help programme with specific targets for increasing the amount of exercise that they take. For those patients who had, and took up, the opportunity of a special appointment at the practice, this self-help programme was drawn up with the assistance of medical staff. It was the intention of the programme designers that patients would then work towards these targets for increased exercise by taking a steadily greater amount of active travel each week. The results of the focus groups showed that this very structured pattern of response to the material was in fact followed by only a minority of those who received the material; others claimed to react to it positively, but in a more ad-hoc way.

The main part of the project material is appended to the final report. However, in summary, it is structured around the following main points:

- Why physical activity is important and how much activity is required.
- The benefits that it can bring (including non-health benefits, such as reduced travel costs, or gym membership costs, from walking more).
- Ways to incorporate more activity into one's daily life.
- Advice on completing the self-help programme, such as how to set targets, and monitor travel behaviour.
- Some advice on equipment required and safety/security tips for active travel.

The material was written in simple but non-patronizing language. Its key message is that doctors recommend a minimum of 30 minutes exercise three times a week, and that this exercise can be made up of shorter periods e.g. 10 minutes three times a day, which are entirely suitable to be accrued through active travel. The team was aware that, at the time the material was being produced, medical opinion was swinging towards the need for five 30 minute periods of exercise each week. However, the decision was taken to stick with the message of three times per week since levels of physical activity in the Scottish population are extremely low and it was felt that a small increase, even if not to the new recommended level, would still be of benefit.

As noted elsewhere, some 800 patients received material from their GP, either in a consultation about another issue, or posted to them directly. A further 400 received an invitation from their GP to attend an appointment with their GP or nurse to go through the material and to work out their self-help programme for active travel. However, only around 40 patients actually took up this opportunity. It appears that there is a very strong tendency for this group of patients to attend the surgery for attention to what they feel is chronic illness; but to be much less willing to be referred by their own doctor for an appointment about a public health matter (as opposed to illness).

3. Who is the driving force behind it? Who is the beneficiary?

The main driving force behind the project is two of the GPs in the surgery in Linlithgow. Thanks to the project, they have been able to recruit the assistance of other GPs in the same surgery (there are eight) and practice nurses as well, in using campaign materials to encourage patients to adopt more active travel patterns. The surgery is assisted by a consultant (Napier University), responsible for evaluation methodology, but also design of publicity and awareness-raising materials. The key skills required are one-to-one health care and health promotion counselling, in which doctors and nurses are already trained. However, as noted in the “lessons learnt” chapter of the report, in retrospect it would have been helpful if the medical staff who were giving active travel counselling to patients had had greater training for this work, as it is not something that they had done before, and they had to adapt existing general public health improvement skills.

The beneficiaries are the patients themselves whose awareness has been raised by the material, and especially those who say that they have changed their travel behaviour in response to it. At a wider level, citizens of the wider area have all benefited, since a small reduction in car use has been effected by the demonstration. However, since little is known about the specific trips that have been reduced, it is impossible to make specific calculations about the resulting reduction in congestion and pollution.

4. Main slogan / statement:

The key slogan is “Walking to Work Out”. This is adapted from a campaign run several years ago at various workplaces in Glasgow, Scotland, called “Walk In To Work Out” (and then later released nationwide by the UK Department for Transport as a free publication). This slogan has been used to effectively brand the material produced for the LGMP pilot.

5. Results

The measurable outcomes of the pilot are as follows:

- Number of patients taking part in the programme
- Number of patients setting goals to change their travel patterns
- Number of other health centres that join the campaign
- Actual change in mobility patterns of patients

It should be noted that for much of this evaluation the project team was dependent on self-completion questionnaires and agreement by patients to participate in focus groups, both of which are subject to respondent bias.

In order to evaluate the effectiveness of the campaign material, a total of 1200 questionnaires were distributed by the medical staff along with the material itself. These were distributed by various means:

- By post.

- Given out by medical staff in consultations.
- Picked up in surgery waiting room.

184 completed questionnaires were returned, 168 of these including address details to whom a follow up questionnaire was then sent. Some 52 completed questionnaires were received back. In order to evaluate the materials and to explore their effects on respondents' perceptions and actual behaviour, a comparison of the 52 'before' and 'after' questionnaire responses was performed.

Over three quarters of the sample were female, compared with only 23% males. Further, 70% of females were aged between 34-55 years old, compared with 75% of males who were aged between 66-84 years (see Table 1). This reflects the fact that younger men are infrequent attenders at their doctor's, and how the questionnaires were distributed.

The initial stage of the analysis was to examine respondents' evaluations of the awareness-raising materials. A bullet point summary of the main findings, below, shows that nearly all respondents found the materials easy to read, nearly three quarters found it useful and nearly two thirds relevant to themselves.

The second stage of the analysis was to examine the effects of the materials on respondents' attitudes/perceptions towards various forms of exercise and to the amount of exercise that would be beneficial to them. A direct comparison with respondents' earlier (first questionnaire) and later responses (second questionnaire) to the perceived benefits of eight forms of exercise was performed (see Table 2). In all instances a greater number of respondents indicated that they thought each type of exercise would be beneficial to them. The greatest percentage change observed concerned 'mowing the lawn' and running (both 12% increases). Whilst no question was asked which directly aimed to understand whether patients were setting targets to do more exercise, it could be inferred that if they are now more aware of those benefits (as a result of the materials and the advice from their doctor) then they will on aggregate be aiming to do more exercise.

Table 1: Comparison of respondents' evaluation of the perceived benefits of exercise: before and after receipt of materials from GP.

Activity	Before materials	After materials
Mowing the lawn	65%	77%
Walking to the shop	92%	98%
Running	51%	63%
Walking, part of journey	94%	96%
Climbing the stairs	87%	88%
Swimming	81%	83%
Organised sport	60%	65%
Cycling to the shops	60%	66%

Some 60% of respondents' indicated that 'after reading the materials' they did think about changing their current exercise behaviour, and 42% indicated they did actually change their behaviour. Of those who indicated yes (they did change their

behaviour) some **90% of respondents stated that they had increased their physical activity**, of which the greatest increase was observed in relation to walking behaviour. Of those respondents who indicated they had changed their exercise behaviour, up to 61% indicated they had also changed their day-to-day travel behaviour. The greatest increase observed concerned walking for some journeys, rather than taking the car, or bus (61%) and to a lesser extent to getting off the bus early and walking the rest of the way (19%). There were no reported changes concerning cycling instead of using car or bus, or in any other ways. Thus, in conclusion, amongst those who responded to both questionnaires, there is a clear increase in sustainable travel behaviour as a result of the materials and/or the advice from their doctor.

To supplement the evaluation from the questionnaire, a number of focus groups were held with those that had received the material and/or advice from their doctor about taking more exercise. All focus group participants gave positive appraisals of the materials, reinforcing the conclusions of the questionnaire analysis regarding its readability, usefulness and relevance.

For the majority of participants the primary outcome of the materials appeared to be more informative rather than actually changing behaviour *per se*. For example, *“it was interesting and informative”* and *“useful guidance”*.

For other participants, receipt of the materials served to make them evaluate their current exercise behaviour or act as a reminder of what they should be doing. For example, *“its not stuff I did not know about, but did serve to refresh my memory”* and *“it has made me reflect on what I am doing right now”*.

In terms of actual behavioural change, approximately half of participants in each group stated the materials did actually make them change their exercise behaviour. As with the results obtained from the questionnaire analysis, the main change in behaviour concerned increases in walking. For example, *“I’ve started walking more and climbing the stairs for exercise”* and *“I walk a bit faster and a bit more”*. Again, mirroring questionnaire responses, two participants indicated they had started to get off the bus one or two stops earlier and walked the remaining distance.

In overall conclusion to the results, then, it can be seen that the materials and advice provided to patients at LGMP had a clear and positive impact on their sustainable travel behaviour.

6. Opportunities / barriers:

The key barrier that limited the success of the LGMP pilot was finding sufficient patients who, in the view of the doctors who were ultimately responsible for the demonstration, were appropriate subjects for the demonstration. Other barriers included:

- Ensuring that patients attended their special appointments with the doctor or nurse to discuss active travel.
- The lack of staff fully trained in travel behaviour change techniques.

- The many competing public health messages that doctors have to “dispense”, and how to prioritise these along with that from the STEP demonstration.

Clearly the resources provided by the STEP project were an opportunity, without which the demonstration is unlikely to have happened on as formal or as large a scale. Further opportunities for dissemination to both the public and to other health care professionals were realised in the following ways, in the latter stages of the project:

- Article in the local press.
- Sharing experience with other local active travel public health projects.
- Ensuring that the LGMP pilot became one of the case studies in a Scottish Government study on the links between transport and health.

7. Steps for implementation – Frequently asked questions:

As long as high quality literature is available, this project is not one that requires a detailed implementation process: it can start at any time. Clearly, publicity material and literature should be produced in sufficient quantity and pilot tested before a full print-run is undertaken. Staff need to be trained, particularly in having “conversations” with patients about their travel patterns and opportunities to make these more active. Finally, it is important to be flexible as patients may not respond as was anticipated, and new ways to reach them are required. For example, in the LGMP demonstration, material was sent out as well as given to patients, in order to reach those patients who come to the surgery less often.

Time of implementation:

It is better to implement a campaign like this when the weather and length of daylight hours are likely to be more favourable to active travel (although the former is difficult to guarantee in Scotland).

8. Cost / Benefits:

Effort (human resources – person hours and costs)

The costs of this project were:

Publicity materials €3,000

Nurse time hours €12,000

The benefits of this project were more difficult to quantify. A level of travel behaviour change was brought about, but since data on previous mode, trip length and cost are not available, a precise value cannot be put on the trips reduced. If it is assumed that the motorised trips that were reduced are typical of the averages for short trips (average 3km) West Lothian (as obtained from the Scottish Household Survey 2003), one motorised trip per week is eliminated as a result of the campaign, and travel behaviour change is sustained, then the annual benefit of the trips reduced equates to a saving of €105 to the user in reduced vehicle operating costs

(assuming a per km vehicle operating cost of €0.70), and a reduction of 0.025 tonnes of CO2 per year per user.

Awareness of the links between active travel and health was of course also raised but its benefits are unquantifiable with the limited data available in this study. The total annual cost to the UK economy of health problems related to lack of physical activity are estimated to be £8.2 billion (around €12 billion; source UK Government website <http://www.number-10.gov.uk/su/sport/report/02.htm>), but heroic assumptions would have to be made to estimate the possible impact of the LGMP pilot on this global figure.

9. Link and or article for more information:

More information can be obtained from the final report of the STEP BY STEP project which can be downloaded from the projects website <http://www.eu-stepbystep.net/>

More detailed information about the LGMP Pilot in the UK can be obtained from Tom Rye at Napier University, Edinburgh t.rye@napier.ac.uk