Green Health Prescribing: its role in Lothian’s COVID-19 recovery
Green health prescribing embedded across the system, targeted at people who can most benefit, resulting in reduced health inequalities, stronger communities and valued greenspace.

Thank you to the wide range of participants and contributors to this development project.

Rachel Hardie, Ian Mackenzie, Kate Barlow

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Foreword

As chair of the Greenspace and Health Advisory Group for Edinburgh and Lothians Health Foundation I am delighted to introduce you to this exciting report on Green Health Prescribing.

This year has been a challenge for us all with the fears and uncertainties of COVID-19. Whether working in stressful situations, isolated at home or recovering from illness, there has never been a more important time to connect to the healing powers of nature. Personally, I have found the regular walks, watching the seasons change, have been very therapeutic and volunteering in a local community garden has enabled me to feel connected with other people as well as learning new skills and lifting my spirits!

Nature can improve mental and physical health, reducing the effect of isolation and offering a gentle way to recover from this COVID-19 pandemic, which has impacted in a disproportionate way resulting in increased health inequalities. There are many different ways to connect to nature and many organisations that can offer constructive help. How do we identify those who might benefit most from this approach and how do we connect them to the green health activities on offer locally?

This report reinforces the case for green health prescribing and offers constructive ideas with a guidance framework for future planning as stepping stones towards encouraging this approach to become embedded across the health and care system. A network of enthusiasts has been established and I hope that others will join them in this important journey to improve people’s health and well-being and community resilience as part of the COVID-19 recovery strategy.

Dr Patricia Donald
Non-Executive Director
NHS Lothian
Executive summary

This development project was designed to explore green health prescribing in Lothian: raise its profile, understand barriers and enablers, share success stories and identify what needs to be in place to embed it across the health and care system.

The benefits of connecting to nature for people’s mental and physical health are widely understood. However, those who could most benefit are less likely to have the opportunity. COVID-19 both exacerbated this inequality and increased the need for that connection.

Green health prescribing uses the interaction between people and health and care services to identify those who could benefit most and connect them with nature. Encouraging that connection with nature can occur in a wide range of ways from suggesting a walk in the park, to signposting to local walking and gardening groups, to referral to a formal therapeutic programme.

What we did
Over 200 people from across Lothian and elsewhere in Scotland joined discussions during the project. We heard from people with lived experience, a wide range of providers of green and blue health activities, potential prescribers and enablers in meetings, interviews and workshops.

What we learned
We found huge enthusiasm for the potential of green health prescribing across the health and care system in Lothian and strong consensus around what needed to be in place, which was summarised into five Golden Threads.

Based on this consensus, the two pathways set out what needs to happen to achieve the vision of a model of green health prescribing embedded across the health and care system, which addresses health inequalities and results in stronger communities and more valued greenspace. They can be adapted for local use and include suggestions for measuring progress.
Here are the actions we think everyone can take to help deliver that vision.

1. Reflect
   on your own experience of connecting to nature and use this as a hook to start a conversation about green health prescribing with your peers, using the five Golden Threads to help share the learning from this project.

2. Join
   the Lothian Green Health Prescribing Network and help it grow and mature into an active and supportive space for collaboration and learning.

3. Connect
   with other people and organisations to develop local action plans using the Making the Case and Making it Mainstream pathways as frameworks.

4. Reflect
   continually on and measure your progress using the suggested approaches outlined in this report as a starting point, and share learning with the Network.

Champions are needed at every level: if you feel passionately about the benefits of nature and their potential in addressing health inequalities, please respond to our call to action. To join the Lothian Network, go to https://www.elhf.co.uk/what-we-do/greenspace/sign-up-for-our-greenspace-networks, and for more information, please email ian.mackenzie@nhslothian.scot.nhs.uk
The context for Green Health Prescribing

About this work

Pre-COVID-19, green health prescribing had already been identified as having huge potential. This project was established during the pandemic to help us understand the role that green health prescribing can play in Lothian’s COVID-19 recovery. Drawing on existing experience and learning, we have worked with a wide range of potential prescribers and providers to understand barriers and enablers and learn from success stories. Although the project has been framed as a way to support people most affected by COVID-19, the learning and suggested way forward apply equally to the pre–COVID-19 context.

Green health prescribing is a form of social prescribing: a way for health and care practitioners to connect the people they are supporting with a range of non-clinical sources of care and support in the community. It can be used across the spectrum of prevention, treatment and care to promote healthy behaviours, address existing physical or mental health concerns, and promote social connection.

The process of connecting someone to nature can range from suggesting a walk, to signposting to a walking group, to buddying the person along to an activity, to a formal referral to a therapeutic programme. Green health activities can range from watching birds out of your window, walking alone or in groups, community gardening to therapeutic woodland-based rehabilitation programmes; a key feature is that they happen in a natural environment. They don’t have to be green either – blue health activities like open water swimming have equal impact and may be more accessible for some. In this report, green health is used to represent blue health too and examples are given on page 8.

The scope of this project is represented by the blue dotted line shown in Figure 1 below. In order to target people with most potential to benefit, we have focused on the point when people seek support from the health and care system, including social care. The section of the Figure outside the blue dotted line, Public Health, refers to the huge potential benefit that connecting with nature has for the whole population. We recognise that this is really important and that population-level measures to promote connection with nature should be enhanced. However, this project has focused its resources on the interactions between potential prescribers, people in contact with the health and care system, and the full range of green health activities.

Figure 1 - Scope of green health prescribing project shown in dotted blue line (illustration adapted from Our Natural Health Service, NatureScot)
This report has been produced to support the Lothian Greenspace and Health Strategic Framework and has been funded by the Edinburgh and Lothians Health Foundation. The core project group comprised a Consultant in Public Health employed by greenspace scotland, Lothian’s Programme Manager for Greenspace and Health, and an Edinburgh Health and Social Care Partnership Public Health Practitioner. The breadth and depth of their experience and existing contacts helped us identify and have valuable conversations with a wide range of stakeholders.

Engagement began in August 2020 and continued through to March 2021. Initial discussions informed our decisions on the scope of the project and our process of engagement to ensure we heard from the full range of stakeholders, and collected and analysed the information in a way that allowed us to identify a way forward for Lothian. This report has been written to share learning from this development project and provide an approach to achieve the following vision and objectives:

**Vision**

Green health prescribing embedded across the health and care system, targeted at people who can most benefit, resulting in reduced health inequalities, stronger communities and valued greenspace.

**Objectives**

1. To raise the profile of green health prescribing with people who have the potential to enable it, and potential prescribers.
2. To improve understanding of barriers and enablers for green health prescribing across Lothian.
3. To create a shared vision for how green health prescribing could be developed to be more inclusive, sustainable and effective.
4. To agree approaches and actions required to embed green health prescribing in the health and care system.
Examples of nature based health activities

Therapeutic horticultural programme

**Redhall Walled Garden**

A young person was referred to SAMH’s therapeutic horticultural project in Redhall Walled Garden, Edinburgh by a third sector organisation.

The person was struggling with their mental health arising from issues relating to housing and employment. They had difficulty leaving the house, and were fearful of neighbours.

They took part in art classes and group gardening. Initially, they felt very anxious, but over time this lessened as they were made to feel part of the team and supported. The person gained from camaraderie and meaningful relationships, alongside informal peer support and networks, and learned machinery skills. They started to use public transport to get to the garden, something which had previously been out of the question. Through SAMH’s engagement with different organisations, they were rehoused and their home life became a lot more settled. They have improved mental health with less frequent and less severe panic attacks. Importantly, they realised that they had a voice.

Open water swimming coaching

**Swim for Good**

A 75 year old woman with diabetes started open water sea-swimming coaching in Edinburgh in August 2020 with the motivation of staying well in case she contracted COVID-19.

Aside from the diabetes, she had problems with sleeping. She now swims daily and reports her wellbeing has improved and sleep is less of a problem. Swim coaching has been crucial and meeting others has been important. “Sharing the learning, seeing how others are progressing too, is such a bonus. In a word it’s great fun... I can be gloomy and despondent about stiffness, pain and the ageing process but it really is counter-balanced with daily doses of being in the sea... Better late than never! I never regret a swim”.

Strategic context

In June 2019, NHS Lothian and Edinburgh and Lothians Health Foundation published their Greenspace and Health strategic framework. The strategy explored how to improve health, wellbeing and the environment through greenspace provision and use.1

There is a considerable and growing evidence base for the positive impact on people’s mental and physical health and social connectedness of being outside in greenspace and connecting with nature.2

The importance of that connection to nature, rather than simply being outside, has recently been examined in more detail by a Mental Health Foundation report which also cites the benefits to mental health of connecting to nature indoors.3

Increased provision of, and participation in, green health activities has the potential to reduce need for traditional healthcare, thus enhancing the sustainability of the NHS. Widespread engagement with green health activities supports all six of Scotland’s public health priorities agreed in 2018.4 It also supports the principles behind Realistic Medicine, health and social care integration and recent national strategies around physical activity, mental health and social isolation.5,6,7,8,9

Increased recognition of the health-improving potential of greenspace is used to drive strategies to enhance greenspace.10 Estimates of healthcare savings resulting from increased use of greenspace have been used to make the case for channeling further greenspace investment. Within Lothian, a recently published biodiversity and climate change assessment of the NHS estate makes the case for increased use of nature-based interventions, estimating a Return on Investment of 2.0 for therapeutic gardening in NHS grounds.4

In the year of COP26, there is a growing awareness of the need for action to address the Climate and Ecological Emergencies: green health prescribing supports this directly (e.g. reduced emissions resulting from active travel) and indirectly (increased appreciation of nature means people are more likely to want to protect it).12

Green health prescribing is a form of social prescribing: a way for health and care practitioners to connect the people they are supporting with a range of non-clinical sources of care and support in the community, for psycho-social, health, financial and other issues. The Scottish Parliament’s report on social prescribing for physical activity concluded that social prescribing should be seen as a valid and effective model for all sectors of health and care – statutory, voluntary and third sector.13

In addition to the strong evidence base for green health activities, the evidence for green health prescribing is emerging.14,15 It is one of the actions recommended in the Royal College for General Practitioners Green Impact for Health toolkit16, and promoted by the Centre for Sustainable Health Care through their Green Health Routes programme working with several GP practices.17 Four Green Health Partnerships were recently established in Scotland under Our Natural Health Service to develop a more strategic approach to green health prescribing.18

One of their objectives was to use green health prescribing to support those who could most benefit and use the interaction between the person and the health and care system as an opportunity to address health inequalities.

Within Lothian, whilst there were many examples of green health activity provision, and some examples of green health prescribing, it was agreed that a more system-level approach was needed to ensure more widespread use of green health prescribing. It was also agreed that whilst we recognize that many people could benefit from connecting with nature, it was important to focus on how to target people who could most benefit.

Our vision was that if green health prescribing could be seen as a valid model by all health and care practitioners across the system,19 more people would have the opportunity to benefit from connecting to nature, and if the people who could most benefit were given targeted support to engage in appropriate activities, health inequalities could be mitigated.
COVID-19 Context

Following onset of the COVID-19 pandemic in early 2020, initial concerns focused on supporting people most at risk of serious morbidity and mortality from the virus. In the first lockdown period, the health and care system had to shift overnight: non-urgent care and most face to face consultations stopped. The focus was on providing care and support to people directly affected by COVID-19.

However, the indirect health impacts from the control measures were soon identified. Mental health, physical health and social connections were all adversely affected by a combination of social distancing measures, financial insecurity, healthcare disruption, reduced physical activity and other mechanisms. There was universal consensus that the pandemic had “shone a light” on existing health inequalities and that, in order to limit the harm arising from COVID-19, we need to address the underlying causes of these inequalities.

It soon became clear that the need for interventions to support physical and mental health and address social isolation were needed more than ever. Weighing up benefits and risks, the reduced risk of virus transmission outside meant that green health activities were more likely to be allowed than indoor health-related activities.

There were an increasing number of reports that many people had started to appreciate nature more than before. The combination of working from home and good weather meant that many could enjoy their local greenspaces. As with the health impacts of the pandemic, however, access to greenspace during lockdowns was not equitable: older people, people in deprived communities and women were amongst those reporting reduced use. In addition, many of the supported green health group activities that were on offer prior to COVID-19 had to stop because of the pandemic control measures. In some cases, restricted provision was allowed to continue.

It was in this context that it was decided to take this project forward: there was an increase in need, and an increased awareness of the potential benefits; COVID-19 and its impacts were going to be around for some time; green health prescribing, if delivered thoughtfully, offered a hopeful option for supporting people and mitigating some of the widening health inequalities resulting from the pandemic.
We used an outcome mapping approach to structure the development and learning of this project. This approach was facilitated by Matter of Focus and we used their OutNav software. Our approach to planning, analysis and reporting has been collaborative and outcome-focused and has allowed us to:

- Develop a theory of change for our project informed by an understanding of the context.
- Agree an overall outcome map that shows how we think activities related to green health prescribing contribute to outcomes, and what needs to be in place to make this happen.
- Identify two clear pathways for achieving the outcomes we want to see.
Listening, learning and sharing: our conversations

We talked to a wide range of people to understand what green health prescribing means to them, and discuss its potential. Engagement began in August 2020 and continued through to March 2021. Initial discussions informed our decisions on the scope of the project, what our engagement approach should be and who we should be talking to.

Right at the start of the project, Midlothian strategic leaders agreed to explore the potential of green health prescribing across their health and care system. They understood the benefits in terms of addressing health inequalities and the climate emergency, and helped us identify key contacts across the system.

All our conversations were a two-way process: for some people it was more about us learning from them; for others, it was more about raising awareness of the potential of green health prescribing and encouraging their interest. These conversations took place in the following ways and summary reports for the workshops and interviews can be found here.

- Direct engagements – Over 70 direct engagements through phone and video calls were used to develop relationships and understanding. These were carried out by Dr Rachel Hardie. People were initially approached by email using the Project Briefing and asked if they wanted to meet to discuss it further. An initial list of contacts was drawn up at the start of the project, and gradually extended as one contact suggested others.

- Online workshops – a series of three workshops were designed to facilitate discussion and share knowledge. These focused on: enablers and barriers, success stories and developing a draft outcome map. Matter of Focus facilitated all three workshops and used break-out rooms to encourage participation.

- Interviews – 10 semi-structured interviews were carried out by a Wellbeing Practitioner with people with lived experience. The people were identified from the monthly Wellbeing group and Collective Voice, groups supported by the Wellbeing Service in Midlothian.

“It’s so nice to talk about something positive”
Who took part

The aim of the project was to hear the views of a wide range of people involved in or interested in green health prescribing. We spoke to the following groups (Who took part on page 14 shows how these groups were represented).

People who could most benefit

The Wellbeing Service Leads in Midlothian worked with us to design a semi-structured interview and sampling plan for getting the views of people who were being supported by them. They carried out interviews over the phone with 10 people who had the potential to benefit from green health prescribing.

People who had benefitted from green health activities were invited to share their stories and contribute to the first two workshops.

Potential providers: statutory, third and voluntary sectors

In total, we engaged with approximately 60 people who were potential providers of green health activities. This included:

- people who work for organisations that define themselves in terms of the green health activities they provide.
- people who work for organisations whose main purpose is defined in some other way but who offer green health activities.
- people who do not currently provide green health activities but who have the potential to add them to their range of support.

Potential prescribers: statutory, third and voluntary sectors

In total, we engaged with approximately 40 people who were potential prescribers of green health activities. This included:

- people who work in the statutory health sector who either currently prescribe green health activities to the people they support or who are interested in doing so e.g. GPs, practice managers, practice nurses, Rehabilitation Services, Wellbeing practitioners and Community link workers.
- people who work in the care sector, e.g. home care managers, self-directed support practice development.
- people who work in the third and voluntary sector who are interested in adding green health activities to the support they offer people, e.g. VOCAL, Red Cross, Volunteer Midlothian.

Enablers: strategic and policy leads, and people responsible for greenspace

In total, we engaged with approximately 100 people who were potential enablers of green health prescribing. This included people responsible for greenspace and greenspace policy, people responsible for public health policy and practice, strategic leads for population groups particularly impacted by COVID-19, strategic leads for primary and community based care and staff involved in the Green Health Partnerships.
We made the most of digital technology to bring people together. This meant that health practitioners could join us from their consulting rooms and we could get the right people in the virtual room together.

Who took part
The project spoke to a wide range of people and sought a balanced view across sectors and geographical areas.

Through interviews and pre-recorded videos we heard from those who could most benefit what was important to them, and the personal stories of people with lived experience of green health activities.

The project engaged with nearly 200 people. Potential providers and prescribers were equally represented. Enablers were an important group to include if green health prescribing is to become mainstream.

There was good representation from all of Lothian’s areas. Lothian offers a huge range of both green and blue prescribing opportunities from sea to summit and everything in-between.
How they felt about it

**Inspired and enthusiastic**

Despite, or possibly because of, the stresses and demands resulting from COVID-19 and associated control measures, there was a very enthusiastic response to this development project from a wide range of people, demonstrated by their willingness to give up time to join workshops and contribute to the emergent network.

“Looking forward to joining in something new”

At the workshops, in addition to the high number of attendees (much greater than expected), people continued to express their enthusiasm and commented on feeling inspired.

“I feel like we only scratched the surface but it was very energising”

Enthusiasm was also demonstrated by a number of people wanting to take this forward straight away, before the development project was completed. These are just two examples:

- As a result of a vision of Tai Chi in the park for isolated mums being shared at the first workshop, conversations between Mayfield and Easthouses Development Trust and the Midlothian Wellbeing Service resulted in funding being identified to support an instructor and health walks.
- After a meeting with the Thistle Foundation to discuss green health prescribing, they reflected on the positive impact of their previous woodland walks and organised a new session to start in January 2021.

People with lived experience who were interviewed were interested in and excited about the concept of green health prescribing, even if they had no previous experience of green health activities. The group who were interviewed may not be widely representative of people who could most benefit as they had all been supported previously by the Wellbeing Service in Midlothian and attributed increased confidence to that support. A summary report of the interviews with people with lived experience can be found [here](#).

“If you are doing it with others it becomes more like a communal experience. I would also like to share with other people (my knowledge) of Midlothian”

Throughout the project, there was a widespread willingness and interest to work in partnership across the prescriber-provider interface, and an appreciation of the opportunity to make connections.

Open to the approach to improving health and wellbeing, and addressing inequalities

There was widespread consensus that green heath activities have the potential to improve people’s health and wellbeing and address health inequalities. Some saw it as a potential solution to the pressure on the NHS: a lead Mental Health practitioner said they were open to green health prescribing if it resulted in reduced prescription of anti-depressants. Many identified its potential for improving staff health and wellbeing, as well as that of patients.

People who were interviewed focused on the social aspects and mental health benefits more than the physical health benefits, and highlighted the benefits of feeling more part of the community and being able to contribute.
Working it out together
The workshop summaries can be found here:
There was so much interest and enthusiasm for the project that we shaped the engagement to make the most of it. The initial two workshops were open to a wide range of people and a total of 120 people attended. As the work progressed, we held a smaller workshop focused on developing an outcome map and had discussions on specific topics. All of this engagement and learning fed into the development of the Golden Threads (Figure 2).

[Diagram showing the timeline and activities]

August 2020

Workshop: Barriers and enablers
Open discussion
Workshop: Stories of success
Interviews with people with lived experience
Online Microsoft Teams Network
Integrated Impact Assessment

March 2021

Golden Threads

Connecting people

Workshop: Outcome map development

Figure 2 - The enthusiasm for the project shaped the consultation and shared learning fed into the development of the Golden Threads.
3/What did we learn?

As context for the golden threads, this section outlines some important learning relating to language, the implications for shared understanding of such a wide range of green health activities (particularly in relation to matching people to the right one), and the wide scope of potential prescribers. In addition, it summarises learning about enablers and barriers and highlights the willingness of this project’s participants to connect with others.

We need to ensure we are all talking about the same thing

One key area of discussion was around the language and terminology of green health prescribing: currently multiple terms are used and there is confusion even amongst those working in the area. It was agreed that we need everyone to have a shared understanding and keep the language simple. At the first workshop a number of pros and cons of the term green health prescribing were identified.

<table>
<thead>
<tr>
<th>PROS</th>
<th>CONS</th>
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<tbody>
<tr>
<td>Makes sense to medical professionals</td>
<td>Too transactional, should be more about inviting people to experience a nurturing relationship with nature</td>
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<tr>
<td>Sets expectation of structured and funded solutions</td>
<td>Implies it has to be prescribed to benefit someone</td>
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<tr>
<td>Helps some people embrace it</td>
<td>Puts some people off</td>
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<tr>
<td>People take it more seriously if something is prescribed</td>
<td>Simply telling people to do something doesn’t lead to behaviour change</td>
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<tr>
<td>Could use prescribing for structured green health activities and more informal term of less structured activities?</td>
<td>Prescription might suggest only one referral route and limit potential for self-referral</td>
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<tr>
<td>Prescribing implies prescriber responsibility</td>
<td>Prescribing implies prescriber responsibility</td>
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Table 1 - Summary of the discussion of term “green health prescribing”
Many different green health activity providers engaged with the project, ranging from health walks, to community gardens, self-directed nature prescriptions and online support. Whilst it was seen as a positive thing that there was such a range of green health activities available, it was also a barrier as it was difficult for prescribers to be aware of, and understand, the full range. For example, some people confused the RSPB Nature Prescriptions pilot with this Green Health Prescribing project despite their differences in scope.

Examples were given where it was felt that support and activities might not match individual need. Some potential prescribers and specialist providers were concerned that more informal or generic providers might not be able to offer an appropriate level of support to people with complex mental health needs. Equally, informal providers, such as community garden groups, were concerned that they might be asked to support people whose needs were too complex for what they were able to offer, resulting in anxiety and stress amongst their volunteers.

It was agreed that there needed to be a better shared understanding and communication of people’s needs and what support activities, groups, projects and programmes can provide. Some examples of approaches to developing a shared understanding were identified such as:

- A paper from NatureScot in 2018, which considered the proposal for a kite-marking system for green health activities. However, it concluded that “limited awareness of local projects was the main barrier to healthcare professionals”, and that rather than a kite-marking system there should be improved information provision and greater understanding of the health benefits.

- Highland Green Health Partnership’s draft “Green Health Self-Assessment Matrix for outdoor volunteering” was discussed at their workshop in February 2020. The matrix scored activities based on physical effort (duration, cardiovascular and strength/balance) and mental effort (social connection and concentration/skills). The workshop concluded that it was a “useful discussion aid for those supporting individuals into outdoor volunteering opportunities such as link workers, support staff and other health practitioners”. The matrix will be posted on the Highland Green Health Partnership website www.thinkhealththinknature.scot once finalised.

- The Statement of Good Practice for outdoor therapy and outdoor mental health interventions published in 2019 by the Institute for Outdoor Learning (IOL). The model outlined in this statement was developed to “support organisations and individuals who provide and utilise services for mental health and wellbeing in an outdoor setting”. It identifies three zones of practice defined by levels of therapeutic and outdoor competence. Many green health activities considered during this project fall within Zone 1 and are not provided as formal therapy, but rather as activities which help to address common mental health problems such as mild anxiety, depression, loneliness and stress.

Key to all these approaches is better communication between potential prescriber and potential provider about the needs of people and what options there are for activities: good matchmaking!
We need to consider a wide range of potential prescribers

In terms of the scope of green health prescribing, there was consensus that potential prescribers were much wider than primary care: there was interest in the approach from a wide range of health practitioners (e.g. mental health, rehabilitation, weight management, diabetes, Allied Health Professionals), social care (e.g. exploring ways in which self-directed support can be used creatively), and third sector organisations like the Red Cross and carer support organisations. Across all sectors there was interest in exploring the full potential of green health activities.

There was much interest in the potential benefits of involving volunteers in the process, both in terms of the volunteer supporting the person accessing the green health activity, and the direct benefits to the volunteer of supporting the green health activity.

We know what helps and hinders

Our first workshop focused on enablers and barriers; a full report can be found here: https://www.elhf.co.uk/what-we-do/greenspace/green-health-prescribing-report. The aim of the workshop was to consider the factors that help and hinder embedding green health prescribing in current models of care. Matter of Focus facilitated this using the ISM tool. The Scottish Government developed the ISM tool for policy makers and practitioners whose work aims at engaging people and influencing their behaviours to deliver improved outcomes. ISM is based on ‘moving beyond the individual’ to consider all the contexts that shape people’s behaviours – the Individual, the Social and the Material. From the wide range of experiences represented at the workshop we identified the following factors in Table 2.

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<th>Factors at individual level</th>
<th>Factors at social level</th>
<th>Factors at material level</th>
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<tr>
<td>• Expectations of the interaction between people and the health and care practitioner</td>
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<td>• Practitioners’ time and skill to have a good conversation about what matters to the person.</td>
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<td>• Knowledge and understanding of benefits and the belief/confidence in the activities</td>
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<td>• The range and availability of green health activities locally</td>
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<td>• Motivation to suggest or take part</td>
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<td>• Previous experience of nature</td>
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<td>• The presence of role models, enthusiasts and champions</td>
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<td>• Personal connections – hearing about it from several different people</td>
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<td>• Existing health and psycho-social/financial issues, e.g. anxiety, mobility, travel costs</td>
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<td>• Activities that have a community presence and demonstrate benefit to community</td>
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<td>• Networks and relationships to match opportunities to need</td>
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<td>• Community-held, up-to-date information and shared knowledge.</td>
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<td>• Consistent terminology and differentiation between activities</td>
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<td>• Simplicity of access to activity</td>
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<td>• Shared understanding of the benefits</td>
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<td>• Understanding that people who could benefit most are often least likely to engage and may need tailored support to access or modified activity</td>
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<td>• Importance of peer support, role of volunteers and community based support</td>
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<td>• Understanding barriers for specific population groups, e.g. refugees whose first language is not English</td>
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<td>• Knowledge and understanding of opinion and strategic leaders</td>
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<td>• COVID-19 related restrictions generating anxiety</td>
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<td>• Availability and proximity of good quality greenspace</td>
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<td>• Availability and capacity of green health activity providers</td>
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<td>• Availability of local anchor organisations to support smaller community provision of green health activities</td>
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<td>• Flexible and sustainable approaches to funding</td>
<td></td>
<td></td>
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<tr>
<td>• Flexible approaches to activity provision, e.g. recorded walking tours</td>
<td></td>
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<tr>
<td>• “Professionalisation” of green health activity providers: this could improve trust from the prescriber perspective, but is also likely to create barriers to provision</td>
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<tr>
<td>• Organisational approach to risk and understanding of mitigation measures</td>
<td></td>
<td></td>
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<tr>
<td>• Understanding of benefits of embedding across system</td>
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</tbody>
</table>

Table 2 – Factors affecting embedding green health prescribing in current models of care
We need to make more connections

Right from the start of the project, we were clear that this wasn’t something new – green health prescribing was already happening across Lothian and we heard some great examples in our workshops. The issue was around spreading and embedding the approach. Throughout the development project, opportunities were identified in meetings, workshops and subsequently in Microsoft Teams to make connections between people to enable green health prescribing. These connections were sometimes between potential prescriber and provider, and sometimes they were about connecting people who could learn from each other or share resources. Sometimes the connections were made without the intervention of the project team (people contacting each other directly after a workshop). See Figure 3 below.

The project team were not always aware of what happened after these connections were made. Whilst some of the connections resulted in immediate solutions or learning, others will hopefully result in more long term partnership working and others are more strategic.

One of the hopes for the development project was that it would establish the basis for a network of people interested in developing green health prescribing. A decision was taken in November 2020 to establish an MS Team for Green Health Prescribing. People who had engaged with the project were invited to join. Membership has grown to 95 (on 29 March 2021), with the private MS Team hosted on an NHS Scotland Team account. It has five channels: the private MS Team hosted on an NHS Scotland Team account. It has five channels: the general, blue health activities, resources, networking and workshop feedback.

Activity on the Team varies considerably: there is no dedicated resource to promote the Team as a network. However, the number and range of people that have joined indicate that there is considerable potential for a mature and active network in Lothian.

“What a great group to be part of! I’m really chuffed to be part of this, we can all make such a big difference” (green space provider)

“I’ve really enjoyed what I’ve seen on the channel so far and am feeling inspired by a lot of the content” (GP)

To join the Lothian Green Health Prescribing Network, go to https://www.elhf.co.uk/what-we-do/greenspace/sign-up-for-our-greenspace-networks/

Figure 3 – A snapshot of some of the connections made during the project
Case study:

Connecting Rehabilitation Services with providers

From our first conversations with them, NHS Lothian Pulmonary and Cardiac Rehabilitation leads were open to exploring the potential of green health activities, both as part of existing programmes and as an alternative for people once they had completed programmes.

There were existing examples elsewhere in Scotland where this had worked and a meeting with North Ayrshire Green Health Partnership in January 2021 was very helpful in terms of exploring options. Rehabilitation Leads were asked for their hopes:

- Increase range of options for people once they have finished the programme, trying to tap into people’s interests, particularly gardening
- Run part of the Rehabilitation programmes outdoors
- Explore options for long COVID-19 patients who are often younger and frustrated at not getting outside so much

Leads identified the support they might need to achieve this, which included additional staff time, staff confidence, advice from experts and risk assessments.

Initial plans were laid and introductions made, resulting in:

- **Pulmonary:** “we had a really good visit to Saughton Park which would tick a lot of boxes for us. Good transport, toilets (which are open!!), flat and loads of seating. Our plan is to try something small when we are able to have a few patients together, perhaps walking to start with, but longer term running an outdoor exercise group (the bandstand was a good size).”
  Team Lead, Pulmonary Rehabilitation

- **Cardiac:** Health walks are starting from 1st April 2021, led by one of the Cardiac Rehabilitation physiotherapists. In the first instance they will be offered to people who are feeling anxious, low in mood or socially isolated after a cardiac event. They plan to pilot for 20 patients. If it is beneficial they will look to work with Paths for All and CHSS who have offered to train them on leading health walks.
  Team Lead, Cardiac Rehabilitation
As the project developed it became clear that there were key ingredients to successfully developing green health prescribing. Five Golden Threads started to emerge during the first two workshops and became a useful way to frame and communicate our thinking. They were validated at the outcome mapping workshop.

Three cross-cutting foundations describe the conditions needed for green health prescribing to be inclusive, effective and sustainable, and two parallel pathways summarise what needs to happen next to embed it across the system in Lothian. The two pathways, making the case and making it mainstream, underpinned by the foundations, are strongly connected and interdependent. They can be used at local or Lothian-wide level as templates to agree an approach and develop action plans.

**Figure 4 - Golden Threads for developing inclusive, effective and sustainable green health prescribing**
One response from an interviewee sums it up: \textit{not everyone has the same capabilities and availability of time... there is no one size fits all really.}

\textbf{“Power of place”}

Community-held shared knowledge within local, place-based area networks were seen as essential building blocks. Several people mentioned the power of first-hand experience, hearing local success stories, having local role models, and hearing about it directly from several different people, especially trusted sources.

There was a big focus on the importance of community in developing the potential of green health prescribing: the need for local activities embedded in the community, using existing assets (such as parks, vacant land for growing projects, the NHS estate), delivered in partnership with local organisations, matched to local need, supported by community anchor organisations, e.g. Community Councils, local community trusts, faith groups.

All these factors mean that trust builds, relationships strengthen, and opportunities are identified.

With enhanced green health prescribing there is the potential for a positive feedback loop to emerge resulting in stronger, more resilient communities. First, as people who take part in green health group activities become more confident, take more control of their lives, make connections and learn new skills, they can go on to strengthen community-based activity by volunteering themselves. Second, with resources and support to spot gaps in community provision, and support to people to create new groups and provide informal support in their neighbourhoods, the capacity of green health activities can be increased.

Much has been learned about community resilience during the pandemic. A report outlining the response of 15 community organisations based in Edinburgh concludes that their responsiveness and flexibility, combined with a collaborative approach to working in partnership together, had a huge impact on vulnerable populations. These findings are likely to be widely applicable to community organisations: realising their potential as partners in delivery of green health prescribing is key.

\textbf{First Foundation:}

\textbf{Person and community centred}

\textit{“No one size fits all”}

In the workshops there was considerable discussion and consensus around the need for a person-centred approach to green health prescribing, and good conversations were deemed essential.

Good conversations are at the heart of a person-centred approach: they focus on “What matters to you?”, rather than the traditional “What is the matter with you?”. The person and the practitioner each share what they want to talk about, and use that shared understanding about what matters to agree a plan. Building on their work with Lothian’s House of Care Collaboration, Midlothian Health and Social Care Partnership have commissioned a series of Good Conversation workshops aimed at practitioners from a wide range of settings: this reinforces the case that good conversations are key to person-centred care.

Evidence emerging during the project showed that “feeling pressured to visit nature by friends/family, or more formally by a ‘green prescription’ from a medical professional, may be inadvertently detrimental”.

The study concludes that there needs to be: “Careful techniques to discuss accessing nature as a means of self- or supported-management” (i.e. good conversations).
There is evidence that people who could most benefit may be least likely to be offered and engage with green health prescribing.\(^{34}\) There is a danger that instead of reducing health inequalities, green health prescribing, delivered in the wrong way, could widen them. An Integrated Impact Assessment (IIA) was carried out for this project in February 2021 to consider the needs for green health prescribing of different groups particularly affected by COVID-19. A preparatory review considered evidence of use of greenspace during lockdown, and barriers identified during this project and from published literature. Recommendations from the IIA will shape the future pathways for green health prescribing and help to ensure that health inequalities are reduced. They include actions to improve our understanding of who is benefitting from green health prescribing, increasing awareness of the potential to improve employability and reduce poverty, ensuring good representation of key groups in the network and increased emphasis on the positive impact of green health prescribing on the environment.

Second Foundation:
Focused on health inequalities

“\textit{I haven’t got the right kit}”

During the workshops, attendees heard numerous examples of potential barriers to engagement with green health activities, and also many potential solutions such as volunteers who buddy people along to their first session (see Workshop 1 report [https://www.elhf.co.uk/what-we-do/greenspace/green-health-prescribing-report]). If prescribers are trying to identify the most appropriate green health activity for someone, they not only need to take account of the nature of that activity, but also the factors which might affect the person’s ability or motivation to engage with that activity such as their confidence levels, potential anxiety about group settings or having the right kit, child care responsibilities, mobility, and access.

There was agreement that we need to identify who could benefit most, especially in light of COVID-19, and assess what’s available for them in terms of capacity and appropriateness. We need to think about the potential for inequalities from someone’s first interaction with health and care to how they might access and engage with a range of green health activities: are there barriers that could be overcome with targeted action, what additional support might be needed?
This message is supported by a recent key report from The Conservation Volunteers (TCV), drawing on evidence gathered before and during the pandemic, which recommended long term (five year) core funding of activities to ensure stability and continuity of provision.37

Another recent report from the Royal Society of Edinburgh identified resources as a major barrier to social prescribing, with additional pressures arising from COVID-19.38

The previously cited Scottish Parliament report on Social Prescribing13 was equally clear:

\[ \text{social prescribing cannot be seen as a cost-free alternative...Systems and processes need to effectively support people to participate in and organisations to deliver this essential preventative action.} \]

Security of funding and uncertainty about future provision were identified as important barriers by both prescribers and providers in the workshops. Prescribers expressed concern that they might suggest someone went to a green health activity which no longer existed. Funding security would enable more innovative and collaborative approaches to provision. Many providers shared that they spent too much of their time balancing small short term budgets. An example of good practice was shared from Edinburgh’s Thrive strategy for mental health, where three third sector green health providers, Edinburgh and Lothian’s Greenspace Trust, Cyrenians and Redhall Walled Garden (SAMH) have been funded for at least five years (see Case Study on page 28).
First Pathway:

Making the case

This is the “thinking” pathway.

Throughout the development project, we acknowledge that we’ve largely been talking to the converted and we need to think wider than that – if more people are to benefit, more health and care practitioners need to understand the potential and have confidence in green health prescribing. The same goes for strategic leads who can influence future funding of green health activities.

The aim of this pathway is to ensure that a wide range of people develop a shared understanding of what green health prescribing is, what its potential is (particularly for addressing health inequalities), champion it, and work in partnership to develop sustainable approaches to delivery. The pathway breaks this down into manageable steps and recognises the importance of people’s reactions to discussions. Ultimately, if the pathway went as planned, local areas would have a shared vision and community ready to take it forward, and an increased appreciation of the value of green health activities and greenspace by people across the system. The case would have been made!

<table>
<thead>
<tr>
<th>What we do</th>
<th>Who with</th>
<th>How they feel</th>
<th>What they learn and gain</th>
<th>What they do differently</th>
<th>What difference does this make?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learn: engage with range of people to understand what green health activities currently exist, and what the potential of green health prescribing is.</td>
<td>People who could most benefit from improved access to green health activities</td>
<td>Inspired and enthusiastic</td>
<td>Understand what is available and possible, and the benefits</td>
<td>Champion green health prescribing at every level</td>
<td>We have a shared vision and a community of people ready to take green health prescribing forward in Lothian.</td>
</tr>
<tr>
<td>Communicate: clearly articulate the benefits and challenges</td>
<td>Potential providers: statutory, third and voluntary sectors</td>
<td>Open to the approach to improving health and wellbeing, and addressing inequalities</td>
<td>Recognise that support and activities must match individual needs</td>
<td>Work in partnership to develop sustainable models of care</td>
<td>Green health activities and the green space they rely on are valued more, enhanced and considered across the system.</td>
</tr>
<tr>
<td></td>
<td>Potential prescribers: statutory, third and voluntary sectors</td>
<td>Confident it is the right thing to do and that it is possible</td>
<td>Understanding of the value of embedding it in a system-wide approach and what needs to happen</td>
<td>Enablers: strategic leaders, funders and people responsible for greenspace</td>
<td></td>
</tr>
</tbody>
</table>

Figure 5 – Making the case pathway sets out the stepping stones to ensure that green health prescribing activities are valued and understood.
Second Pathway:
Making it mainstream

This is the “doing” pathway.

It needs to happen in parallel with making the case. We need to build momentum by starting a network of people who are talking, sharing resources and ideas, connecting, and building partnerships. We are seeing this already through the connections people have made during the project and the nearly 100 people who have joined our MS T eam. Some people from outwith the NHS are struggling to access the MS T eam, and there needs to be agreement on the governance arrangements and most appropriate digital platform for networking and sharing information.

The network needs to actively collaborate and work in partnership across sectors to identify what needs to happen to enable those most in need to have access to green health activities - what are the barriers, what can be done? If it is to be mainstreamed, people from across the health and care system need to see themselves as potential prescribers. Most of the action probably needs to take place at Health and Social Care Partnership or locality level.

By mainstreaming green health prescribing, and targeting it at those who could most benefit, it is hoped that people’s health and wellbeing and community resilience will be as good as it can be. In addition, if more people are experiencing the benefits, green health activities and green space will be more valued.

Figure 6 - Making it mainstream pathway sets out the stepping stones to make green health prescribing a “normal” part of the system
Case study:
How Thrive Edinburgh is taking a system-wide sustainability approach and making green health prescribing mainstream

Four Thrive Welcome Teams (integrated statutory and third sector teams working with people in distress and mental ill health) were established in 2020 as part of the Thrive Edinburgh strategy. Staff meet with individuals to explore through good conversations what the person has identified is important to them and then help to facilitate this.

Third sector agencies across the city were invited to collaborate and submit joint proposals to provide a range of Thrive Collective support including green and active initiatives and programmes. The Thrive Physical Activity and Green Spaces Partnership comprising Edinburgh Leisure, Edinburgh and Lothian’s Greenspace Trust, SAMH and Cyrenians were awarded a five year contract (which can be extended by three years) to deliver a range of programmes in places and spaces across the city. Some of these planned programmes built on well-established programmes including Healthy Active Minds, Branching Out and the horticulture programmes at SAMH Redhall Walled Garden and the Cyrenians Community Garden at the Royal Edinburgh Hospital.

Working in partnership takes time, time to get to know one another, to understand strengths that each can bring, to embrace diversity and difference and build trust and respect. This is the key reason we wanted to offer long term funding commitments to our third sector Thrive collective colleagues so that relationships could be nurtured, could grow and thrive, increasing the opportunities for our citizens”

Dr Linda Irvine Fitzpatrick, Strategic Programme Manager, Thrive Edinburgh

How the Thrive Physical Activity and Green Spaces Partnership will contribute to the Thrive outcomes:

- People have choice and control – The Partnership will offer a wide range of outdoor activities at a variety of times and locations across Edinburgh. From sociable walking groups to working independently in a community garden. Through person-centred conversations with participants, people can choose activities that suit their needs.
- People are recovering, staying well and can live the life they want to lead – The Partnership will encourage participants to get outside, build healthy habits into their routines, and make sustainable lifestyle choices. By supporting and motivating people to make changes, the Partnership believes that this will support people to recover, stay well and live fulfilling lives beyond the Partnership programmes.
- People feel connected and have positive relationships – The Partnership’s activities connect participants to their local community by using local greenspaces and developing positive peer networks with other local people.
- People have opportunities to learn, work and volunteer – The Partnership will provide complementary services which give participants opportunities to learn new skills, gain qualifications, improve their employability and train as volunteers. There are plans to develop volunteering opportunities that will enable previous participants to use their experience to support others through the recovery process.
What needs to happen next

This work has brought into sharp focus both the level of enthusiasm and the need for green health prescribing across Lothian. The engagement has allowed us to identify what helps and hinders, share success stories and agree pathways to embed green health prescribing across the system. Through this work we have heard about the demand for this approach to support people and services to recover from COVID-19 and it has steered us towards understanding what action is needed.
Call to action

Based on the learning from this project, here are the actions that we think everyone can take to help deliver the vision:

- Reflect on your own experience of connecting to nature and use this as a hook to start a conversation about green health prescribing with your peers and use the five Golden Threads to help share the learning from this project.

- Join the Lothian Green Health Prescribing Network and help it grow and mature into an active and supportive space for collaboration and learning.

- Connect with other people and organisations to develop local action plans using the Making the Case and Making it Mainstream pathways as frameworks (Table 3).

- Continually reflect on and measure your progress using the suggested approaches outlined on page 33 as a starting point, and share learning with the Network.

Share the learning

Together we need to share the learning from this report and use the five Golden Threads to inform the development and delivery of green health prescribing at community, locality, Health and Social Care Partnership and Lothian-wide level. During all our discussions we need to keep in mind the three foundations: person and community centred, focused on health inequalities and system-wide sustainability. We need to consider the stepping stones from the pathways and think about how these contribute to the final outcomes.

Each of us needs to reflect on our own experiences of connecting to nature and use this as a hook to start a conversation about green health prescribing with our peers. Building on this we can start to disseminate the key messages summarised by the five Golden Threads with strategic and operational colleagues.

Building on the enthusiasm to create networks

We need to build on the enthusiasm that this project has tapped into and create networks to support each other to deliver more green health prescribing. We have demonstrated that the will and enthusiasm exist and we need to create the right conditions and connections to nurture it. To illustrate this ongoing interest, the May 2021 edition of the Lothian Prescribing Bulletin covered this project in depth, promoting green health prescribing as an opportunity to prescribe “a breath of fresh air” as an alternative to medicines.

Collectively we need to think broadly across the spectrum of green health providers, potential prescribers, strategic leads, and people responsible for greenspace to overcome the barriers that individuals experience. It is clear from this project that there is huge value in bringing people together and this needs to continue. In just a few months during the development project people have made connections and new partnerships have formed based on the discussions we have facilitated.

We hope to secure funding for a Green Health Prescribing coordinator to support networks of providers and prescribers across Lothian. These networks would share learning, connect people up, identify funding opportunities to support the Making the Case and Making it Mainstream pathways. All of this can happen locally but a coordinator would accelerate the process and join people up more effectively across Lothian, for example by organising regular networking events to celebrate and share new partnerships.
Putting the pathways into practice

Our co-created pathways provide a map of the stepping-stones needed to achieve the vision of green health prescribing embedded across the system, targeted at people who can benefit most. We can now use these to facilitate development of projects, programmes and strategies that share a common goal, language and understanding of green health prescribing. These pathways can be used at all levels – from commissioning models for Lothian-wide services to local project development – and in any setting – from individual meetings to large network events. Table 3, below, shows how the pathways can be used in more detail.

They were used in this way at a meeting arranged in February 2021 to discuss taking green health prescribing forward in Midlothian. The discussion, framed around the pathways, resulted in a range of suggestions around terminology, scope, potential prescribers and building on existing initiatives. The next stages for Midlothian include a base-line mapping exercise to establish post COVID-19 provision of green health activities and identify potential for expanded capacity or new activities, establishing a system of referrals from Wellbeing practitioners to the Ranger service and strengthening strategic engagement across the system.

There are two options for implementation of green health prescribing: a bespoke system specific to green health activities, or one that integrates green health prescribing into the generic social prescribing approach. Our recommendation is that an integrated approach is more likely to be consistent with the Golden Threads that emerged during this project, but it is clearly up to individual areas to decide what works best for them.

Tracking progress

We need to continually reflect on and measure progress, and the pathways act as a useful framework for this. The development of the pathways is based on the outcome mapping approach to evaluation. This means that the pathways themselves can be used as a framework for monitoring future green health prescribing. Each stepping-stone can be measured against success criteria to allow an objective assessment of progress towards outcomes. During this project the Integrated Impact Assessment recommended that we consider how information to monitor progress can be captured and used. The following examples for the Making it Mainstream pathway on page 33 provide a starting point, but each area needs to develop their own approach suitable for the local context and partners.

The pathways were created in a software package OutNav which facilitates collection and analysis of qualitative and quantitative sources of evidence and has a reporting function. Funding to allow ongoing use of this software would enable progress with the pathways to be monitored.
<table>
<thead>
<tr>
<th>Making the Case</th>
<th>Communicate: clearly articulate the benefits and challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learn: engage with range of people to understand what green health activities currently exist and what the potential of green health prescribing is</td>
<td>Identify who needs to be convinced of the benefits and what evidence they need to see</td>
</tr>
<tr>
<td>Identify what is already happening in your area, where the gaps are, and use that as your starting point</td>
<td>Make sure that everyone understands the terminology and it works for you and your partners</td>
</tr>
<tr>
<td>Encourage everyone to share what they understand by green health prescribing, what the scope could be, who should be prescribing – it is important not to make assumptions about people’s understanding</td>
<td>Use local success stories to bring the benefits to life and make the case for long term funding</td>
</tr>
<tr>
<td>Ask everyone to share what they think the impact could be: for physical and mental health, social connections and community resilience</td>
<td>Be realistic about the challenges and share lessons learned where things haven’t worked out as planned</td>
</tr>
<tr>
<td>Spread the word – involve a range of people other than the “usual suspects”</td>
<td>Identify the strategic leads who represent key population groups impacted by COVID-19 and think about how they are represented</td>
</tr>
<tr>
<td>Ask everyone to share the motivations and challenges specific to their sectors</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Making it Mainstream</th>
<th>Facilitate: work together to remove barriers and accelerate change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connect: build networks of people and organisations that deliver green health prescribing</td>
<td>Combine existing learning, such as this project, with your own understanding of enablers and barriers, thinking about the individual, social and material contexts</td>
</tr>
<tr>
<td>Start with existing networks, including the one established during this project on MS Teams, and build outwards from there connecting with people that share your vision</td>
<td>Consider which enablers and barriers are most relevant for the groups of people you want to target. Involve people with lived experience in the discussion</td>
</tr>
<tr>
<td>Think about what people would gain from the network: making connections, learning, sharing resources, sharing stories of success</td>
<td>Some barriers may need to be addressed outwith the green health prescribing network, but it's still important to be aware of them (e.g. people who have very low confidence may not be in the right place to consider green health activities now)</td>
</tr>
<tr>
<td>Use the networks at local level to act as match-makers connecting prescribers with providers, identifying where this is most needed and facilitating partnerships</td>
<td></td>
</tr>
<tr>
<td>Focus on the power of place: word of mouth, personal connections, activities embedded in the community and supported by local community anchor organisations</td>
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</table>

Table 3 - How the pathways can be used to develop a local action plan for green health prescribing
Examples of measurement approaches for Making it Mainstream pathway stepping-stones

Connect

What we do:

- **Connect**: number and range of people joining network; network activity; maturity of network (using tools such as the Network Maturity Matrix and Network Health Scorecard).\(^{41}\)
- **Facilitate**: use checklists to support reflection on addressing barriers, e.g. those outlined on Natural Devon’s website;\(^{42}\) extent to which success stories are shared and lessons are learned.

Who with:

analysis of engagement by sector: provider, potential prescriber and enabler, people who could most benefit.

How they feel:

using qualitative data from quotes, reflective practice, interviews.

What they do differently:

more people experience green health prescribing and it is targeted at those in most need.

- **Data at point of “prescription”**: focus on subsets, e.g. people referred from Community Link Workers (CLWs) and Wellbeing practitioners. Current datasets are not very helpful: we need better data, which reflects as a minimum the characteristics of people who are referred, and what activities they are referred to. IT solutions to improve data collection for social prescribing are being explored within Lothian (personal communication, Peter Cairns).

- **Data at point of activity**: informal activities may not collect engagement data. More formal programmes may collect it. If data are collected by providers, there would also need to be an agreed process for sharing, analysing and interpreting it. It is unlikely that datasets collected by a range of providers would be consistent and comparable across a system.

- **Data reflecting reduced use of traditional support**: if more people experience green health prescriptions to support their health, we could expect there to be a reduction in pharmaceutical prescriptions for certain conditions. It might be possible to explore this in more depth for specific cohorts of patients, e.g. those people suffering from mild anxiety and depression.

What difference does this make?

People’s health and wellbeing, and community resilience: one way to measure this is to use Person-reported Outcome Measures which ask people to complete a short survey. The Common Outcomes Framework of England’s Social Prescribing guidance (Annex J)\(^{43}\) recommends using ONS\(^{44}\) or PAM\(^{45}\)\(^{46}\). The guidance recognises that some activity providers already use SWEMWBS\(^{47}\) and Wellbeing Star\(^{48}\) and if so they shouldn’t stop using them. It also suggests a frequency of measurement: at point of referral to CLW (baseline), and every six months for at least a year.

Green health activities and the green space they rely on are valued more, enhanced and considered across the system: a recent Nature Connection Index has been developed\(^{49}\), a simple six-item measure suitable for use in children and adults. This measure could be used to monitor population’s connection with nature over time, as well as with individuals to monitor the impact of engaging with an activity.

The extent to which green space and green health activities are included in health and care strategic plans, and the extent to which health is referenced in greenspace development plans also reflect this outcome.
Conclusions

Despite taking place during the pandemic, this development project has demonstrated widespread support and enthusiasm for building on existing green health prescribing practice, particularly in relation to addressing health inequalities and supporting people most affected by COVID-19.

Approximately 200 individuals (people who could most benefit, potential prescribers, providers and enablers of green health prescribing) engaged in thoughtful discussions identifying enablers and barriers and sharing success stories. Nearly 100 people joined an emerging network which is starting to share resources and ideas. Many helpful connections have been made within Lothian and with partners across Scotland.

Two parallel and connected pathways have been developed which focus on “making the case” and “making it mainstream”. The pathways incorporate all the learning from the project, and provide a generic framework for action which can be used in local areas to take green health prescribing forward with a range of partners.

Having understood the potential, two health service providers and a health and social care partnership started developing their approach to green health prescribing before the end of this project; they are being supported by the project core group. The report is published at a critical point in the pandemic when infections are starting to be brought under control, vaccination coverage is increasing and restrictions are starting to relax. We hope that strategic leads and other enablers across the system seize this opportunity to develop green health prescribing as part of their COVID-19 recovery strategy.
Other useful resources
Resources shared on the Lothian Green Health Prescribing MS Team (but not referenced in the report)

Local Resources

West Lothian leaflets
(‘Your Green Escape Plan and Green Health Prescription’) which could be adapted for local context (contact Integrated Care Pharmacist, Stewart.McNair@nholothian.scot.nhs.uk).

First Edinburgh Greenground map
https://helenilus.com/2020/10/22/the-first-edinburgh-greenground-map/

Urban Nature Maps of Edinburgh
https://www.urbangood.org/collections/folded-maps/products/edinburgh-urban-nature-map

East Lothian
Harbour Medical Practice YouTube video with Dr Peter Churn exploring opportunities for improving mental health outside.
https://www.youtube.com/watch?v=iCC4RKEYDCE

Green spaces

Edinburgh’s Thriving Green Spaces strategy
https://www.thrivinggreenspaces.scot/

Creating community spaces for patient wellbeing
https://www.property.nhs.uk/creating-community-spaces-for-patient-wellbeing-stakeholders/

Better Outside
With restrictions now starting to cautiously ease, greenspace scotland has developed Better Outside – to encourage and support our greenspaces to be used more for activities that would normally take place inside. Better Outside is a web-based resource which covers several themes, and includes advice, technical info and real life inspiration from a wide range of organisations. One of the themes is health and wellbeing and this section has three examples from Lothian!
https://www.greenspacescotland.org.uk/health-and-wellbeing-outside
Blue health activities

The benefits of open water swimming
Report and analysis into four surveys circulated among open water swimmers
October 2020-February 2021.

Social prescribing

Dr Peter Cairn’s blog

A common outcomes framework for social prescribing

A standardised quality assurance tool
https://www.socialprescribingnetwork.com/quality-assurance-consultation


Social prescribing for health and wellbeing, Bromley by Bow Centre
https://www.bbbc.org.uk/services/social-prescribing-for-health-and-wellbeing/

Lothian green health prescribing examples

RSPB Scotland nature prescription pilot in Edinburgh

https://www.youtube.com/watch?v=7xGdTZc2ZO&feature=youtu.be

Cycling UK All Ability Bike Centre
https://www.cyclinguk.org/edinburgh-all-ability-bike-centre

Dr Peter Churn
Harbour Medical Practice
GP led health walks Paper
https://bjgp.org/content/70/690/29

Mental health benefits of getting outside
https://www.youtube.com/watch?v=iCC4RKEYDCE

Media links

Should gardening be prescribed?
https://www.bbc.co.uk/sounds/play/p03y9wz9

Countryfile: New Year, New me
https://www.bbc.co.uk/iplayer/episode/m000r793/countryfile-new-year-new-me

Could cold water hold a clue to a dementia cure?

Midlothian charity worker shares her story of wild swimming
https://www.theson.co.uk/fabulous/0431065/wild-swimming-saved-my-life/

My GP gave me a ‘nature prescription’ – it saved my life
https://www.telegraph.co.uk/health-fitness/mind/gp-gave-nature-prescription-saved-life/

South Queensferry Medical Practice ‘My doctor prescribed rambling for lockdown anxiety.’
https://www.bbc.co.uk/news/uk-scotland-edinburgh-east-fife-5691fi66?xtor=ES-2ll-%5b43729_PANUK_DIV_I7_NCA_indiascovidcrisis_RET_ABC%5d-20210429-%5bbebcnews_mydoctorprescribedramblingforlockdownanxiety_newscoronavirus
National resources

NatureScot
Our Natural Health Service - this initiative shows how Scotland’s natural environment is a resource that can be used to help tackle some of our key health issues. It aims to bring about a step change in the use of nature-based solutions to deliver health outcomes. [https://www.nature.scot/professional-advice/contributing-healthier-scotland/our-natural-health-service](https://www.nature.scot/professional-advice/contributing-healthier-scotland/our-natural-health-service)

This animation has some useful facts in it: [https://youtu.be/ea7Mi76v5mU](https://youtu.be/ea7Mi76v5mU)

greenspace scotland
Works with a wide range of national and local partners on the planning, development, sustainable management, use and evaluation of greenspaces, green networks and green infrastructure. Activities include: developing and sharing practice, research and knowledge management, policy and funding advocacy, partnership development and support, training and pioneer projects. They also provide bespoke consultancy, training and support to national, regional and local organisations. [https://www.greenspacescotland.org.uk/](https://www.greenspacescotland.org.uk/)

TCV
The Conservation Volunteers. A wide range of TCV activities provide opportunities to improve physical and mental health and wellbeing through physical activity and social interaction. TCV’s Green Gym programme, provides an alternative to traditional gym or fitness activities. Green Gym improves health and wellbeing through group-based physical activity with a purpose. [https://www.tcv.org.uk/scotland](https://www.tcv.org.uk/scotland)

Social Farms and Gardens
A UK wide charity supporting communities to farm, garden and grow together. Their vision is people and communities reaching their full potential through nature-based activities as a part of everyday life. [https://www.farmgarden.org.uk/your-area/scotland](https://www.farmgarden.org.uk/your-area/scotland)

Scottish Forestry
The woods for health programme supports people to get moving by connecting them with trees, woods and forests and woods in and around towns. Championing outdoor access to enable more people to improve their health, wellbeing and life chances includes Branching Out which is an innovative development for adults who use mental health services in Scotland. For each client, the service consists of around three hours of activities per week in a woodland setting, over 12 weeks. [https://forestry.gov.scot/forests-people/health-strategy](https://forestry.gov.scot/forests-people/health-strategy)

The Venture Trust
Support people to gain the life skills, stability and confidence needed to reach their potential. *“Through person-centred support in communities and experiential learning in the outdoors we challenge individuals to reflect on beliefs, attitudes and behaviours so they can unlock skills and learn new, more positive, ways of approaching situations.”* [https://www.venturetrust.org.uk/](https://www.venturetrust.org.uk/)

Alzheimer Scotland
Provide a wide range of community activities across Scotland, that provide opportunities for people to participate in activities that increase and, where possible, improve physical, mental and emotional wellbeing for people living with dementia. Including walking and allotment groups. [https://www.alzscot.org/living-with-dementia/getting-support/community-activities](https://www.alzscot.org/living-with-dementia/getting-support/community-activities)

Health in Mind
Scottish charity promoting positive mental health and wellbeing. It provides services across Lothian and has a wellbeing resource section of the website [https://www.health-in-mind.org.uk/wellbeing-resources/winter_wellbeing/d227/](https://www.health-in-mind.org.uk/wellbeing-resources/winter_wellbeing/d227/)

SAMH (Scottish Association for Mental Health)
Has many resources relating to connecting to nature and being outside including [https://www.samh.org.uk/about-mental-health/self-help-and-wellbeing/five-ways-to-better-mental-health](https://www.samh.org.uk/about-mental-health/self-help-and-wellbeing/five-ways-to-better-mental-health) and [https://www.samh.org.uk/documents/TOPTENTIPS_1.pdf](https://www.samh.org.uk/documents/TOPTENTIPS_1.pdf)

Paths for All
A Scottish charity championing everyday walking with a widerange of initiatives and resources [https://www.pathsforall.org.uk/resources](https://www.pathsforall.org.uk/resources)

Cycling UK
In addition to the All Ability Bike Centre in Edinburgh, Cycling UK have delivered a successful WheelNess project in Inverness, collaborating with partner organisations to identify people who could benefit. [https://www.cyclinguk.org/blog/life-changing-stories-three-years-wheelness](https://www.cyclinguk.org/blog/life-changing-stories-three-years-wheelness)


30. https://nhsforthvalley.org/media-item/greenspace-initiatives


41. Source4Networks, ‘a free platform committed to curating and sharing the most comprehensive and best knowledge around network leadership in health, social care and charity sectors’. https://www.source4networks.org.uk/knowledge/