Sheffield Hallam University | Centre for Regional Economic and Social Research

University of Exeter

University of Sheffield

National Evaluation of the Preventing and Tackling Mental Ill Health through Green Social Prescribing Project

Final Report - March 2021 to June 2023

January 2024

Department for Environment Food & Rural Affairs | NHS | Office for Health Improvement & Disparities | National Academy for Social Prescribing | Natural England | The National Lottery | Sport England | Department for Levelling Up, Housing & Communities | Department of Health & Social Care

National Evaluation of the Preventing and Tackling Mental Ill Health through Green Social Prescribing Project

Final Report

March 2021 to June 2023

Prepared for the Department for Environment, Food & Rural Affairs (Defra)

Please cite as:

Haywood, A*[1] Dayson, C*[2] Garside, R*[3] Foster, A*[1] Lovell, R*[3] Husk, K*[4] Holding, E*[1] Thompson, J*[1] Shearn, K*[2] Hunt, H.A*[3] Dobson, J*[2] Harris, C*[2] Jacques, R*[1] Witherley, D*[2], Northall, P*[2] Baumann, M*[2] Wilson, I*[2.] **National Evaluation of the Preventing and Tackling Mental Ill Health through Green Social Prescribing Project: Final Report.** *January 2024*. Department for Environment, Food and Rural Affairs (London).

University of Sheffield *[1] Sheffield Hallam University*[2], University of Exeter*[3] University of Plymouth*[4]

This report, and the accompanying briefing, summary and appendices documents, are published by Defra (Defra Project Code BE0191) and are available from the Department's Science and Research Projects Database at https://randd.defra.gov.uk. Whilst the research was commissioned by Defra, the views expressed reflect the evaluation findings and the authors' interpretation; they do not necessarily reflect Defra policy.

Authors

This report was prepared by the GSP National Evaluation Team.

University of Sheffield:

- Annette Haywood
- Alexis Foster
- Eleanor Holding
- Richard Jacques
- Jill Thompson

University of Exeter:

- Ruth Garside
- Harriet Hunt
- Kerryn Husk
- Rebecca Lovell

Sheffield Hallam University:

- Chris Dayson
- Matt Baumann (Associate)
- Julian Dobson
- Cathy Harris
- Phil Northall
- Katie Shearn
- Ian Wilson
- Dawn Witherley

Acknowledgements

With many thanks to Veronica Fibisan, Merryn Kent, Sarah Ward for administrative support.

Thanks to all the Test and Learn sites for their ongoing engagement with the Evaluation Team, and to all those who provided questionnaire, interview and monitoring data, and participated in workshops. Thanks to the National Partners for helpful comments on a previous draft of this report. Thanks to members of the steering group for useful discussion during the evaluation process.

Abbreviations

CCGs	Clinical Commissioning Groups
CICs	Community Interest Companies
COVID-19	Coronavirus Disease 2019
Defra	Department for Environment, Food & Rural Affairs
DES	Network Contract Directed Enhanced Service
DPIA	Data Protection Impact Assessment
G/B S	Green/Blue Space
GP	General Practitioner
GSP	Green Social Prescribing
The project	The Preventing and Tackling Mental Ill Health through Green Social Prescribing Project
ICS	Integrated Care System
IMD	Index of Multiple Deprivation
HCP	Health Care Professional
HSC	Health and Social Care
HWB	Health and Wellbeing
LW	Link Worker
MH	Mental Health
NBSP	Nature-based Social Prescribing
NHS	National Health Service

NHSE	National Health Service England
ONS4	Office of National Statistics (ONS) four subjective wellbeing questions
PCNs	Primary Care Networks
PTs	Programme Theories
QoL	Quality of Life
SCHARR	Sheffield Centre for Health and Related Research
SHU	Sheffield Hallam University
SP	Social Prescribing
SPSS	Statistical Package for the Social Sciences
T&L (site)	Test and Learn (site)
ToC	Theory of Change
UNEX	The University of Exeter
VCSE	Voluntary, Community and Social Enterprise Sector or Organisation
VFM	Value for Money
WP	Work Package

Contents

Executive Summary

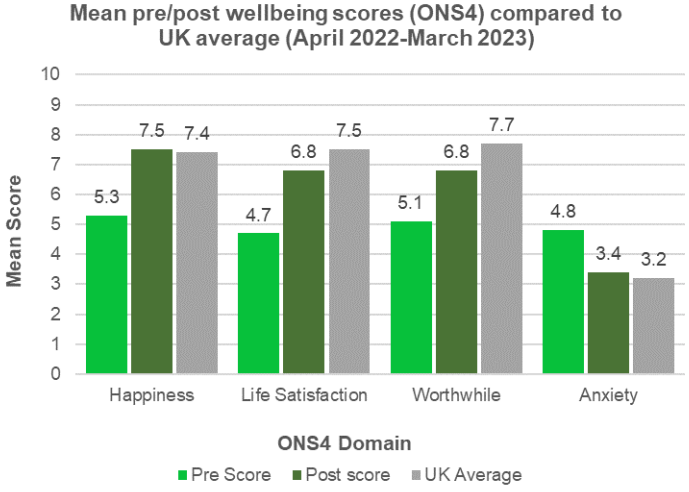
Key statistics about the Green Social Prescribing Project

- **8,339 people with mental health needs** supported to access nature-based activities.
- 57% of participants were from the **most socio-economically deprived areas**.
- 21% of participants were from **ethnic minority populations**.
- There were statistically significant **improvements in wellbeing** (ONS4) following participation:
  - *Happiness* increased from an average of 5.3 to 7.5.
  - *Life satisfaction* increased from an average of 4.7 to 6.8.
  - Feeling that *life is worthwhile* increased from an average of 5.1 to 6.8.
  - Levels of *anxiety* reduced from an average of 4.8 to 3.4.
- In one pilot **depression symptoms reduced** from 8.1 to 5.6 and anxiety decreased from 11.1 to 8.5 (Hospital Anxiety and Depression Scale).
- In another pilot **levels of physical activity increased** from 84% to 95%.
- Estimated **social return on investment of £2.42 per £1 invested** by HM Treasury Shared Outcomes Fund and national partners. If resources leveraged by the Test and Learn sites are included, the estimated social return on investment is **£1.88 for every £1 invested** in the project overall.

The **National Evaluation of the Preventing and Tackling Mental Ill Health through Green Social Prescribing Project** (GSP Project) was a two-year £5.77m cross-governmental Shared Outcomes Fund initiative **to improve the use of nature-based settings and activities to improve mental health and wellbeing**. The main evaluation findings are as follows.

A. Outcomes for people with mental health needs

Overall, **8,339 people with mental health needs were supported to access nature-based activities** through the seven GSP Project Test and Learn pilots. Importantly, the GSP Project was able to **reach a broader range of people compared to many other social prescribing initiatives**, including children and young people aged under 18, ethnic minority populations (21%), and people from socio-economically deprived areas (57% in IMD deciles 1-3). Participants experienced **improved wellbeing when accessing nature-based activities**, indicating that GSP can have a positive impact. Across the pilots there were **statistically significant improvements in wellbeing for each of the ONS4 wellbeing domains** after accessing nature-based activities through the GSP Project.



Prior to accessing nature-based activities participants' ***happiness***, ***anxiety***, ***life satisfaction*** and feeling that their ***life was worthwhile*** was much worse than the national average (April 2022-March 2023). After accessing nature-based activities this had **improved so that their *happiness* and *anxiety* was in line with the national average,** and the **gap to the national average for levels of *life satisfaction*** and feeling that their ***life was worthwhile*** **had narrowed significantly**.

B. Value for money

The **average cost per participant engaged in nature-based activities was £507**. This means that compared with other mental health interventions, such as behavioural activation, Cognitive Behavioural Therapy (CBT), early intervention for psychosis and collaborative care for depression, **nature-based activities are a relatively cost-efficient way to support people across a wide spectrum of mental health needs**.

In total the **Test and Learn pilots leveraged £1.66 million** in matched funding, including **from their local health system,** to deliver their projects, **and a further £1.31m to continue their projects in 2023/24** after the GSP Project funding had ended. When the pilot matched funding and in-kind resources were combined, it amounted to an **extra £2.98m**: an **additional 52 pence (£0.52) for every pound (£1) invested in the project by HM Treasury Shared Outcomes Fund and national partners**.

Although a full cost benefit analysis was not attempted due to the complexity of the GSP projects and the limitations and partiality of the data that was available, WELLBYs (Wellbeing Life Years) were used to estimate **the value of improvements in individual life satisfaction** experienced following participation in nature-based activities. The central estimated value of WELLBYs created through the GSP project was £14 million. This means that the estimated social return on investment of the GSP project was £2.42 per £1 invested by HM Treasury Shared Outcomes Fund and national partners. **If resources leveraged by the Test and Learn sites are included, the social return on investment was estimated to be £1.88 of wellbeing for individual participants for every £1 invested[1] in the project overall.**

C. Key learning how to scale and spread Green Social Prescribing

i. **There is a need for new commissioning and procurement arrangements to ensure that nature-based providers can be embedded within health service delivery and the wider social prescribing landscape.** This requires ending precarious, short term and piecemeal funding for voluntary, community and social enterprise (VCSE) organisations. The GSP Project demonstrated how advocacy, at different levels (local, regional, national), and co-designed approaches to addressing funding challenges, can lead to more joined-up commissioning processes that mean green providers can work together on funding bids.

ii. **When political and strategic influence is directed to support GSP it can lead to shifts in policy and budgeting.** Cross governmental commitment nationally has provided critical leadership support and funding for GSP. Locally, GSP project leaders have influenced local practices, systems and cultures and leveraged additional funding to support GSP. There is now greater connection and understanding between parts of the system in relation to GSP, allowing priorities to become aligned and for power imbalances between sectors to be lessened.

iii. **It is necessary to grow and develop nature-based providers to ensure there are a range of appropriate, diverse, geographically spread GSP opportunities.** Connectivity between nature-based providers and the social prescribing system (i.e., Link

[1] It is important that a full social-cost benefit analysis of the GSP project in Green Book terms includes all resource inputs, including those leveraged by the Test and Learn sites, as well as central government expenditure.

Workers) was sometimes limited, leading to low levels of referral. This can be improved through better communication, targeted funding and investment for nature-based providers, co-design of referral pathways and the introduction and maintenance of "trusted provider" information resources. Support for nature-based providers to work together to develop collective funding bids is also critical.

iv. **There is a need to remove barriers and create aligned structures, to ensure coherence and clarity of roles and responsibilities across the system.** Multiple interdependencies are necessary for the GSP system to 'work'. The lack of alignment of ambitions, systems and processes poses challenges to delivery and addressing these was a key component of all seven pilots. Collaborations between relevant partners were built, and efforts made to clarify roles and responsibilities. Steps were taken to agree shared ambitions, ways of working and indicators of success. However, some of the most important systemic misalignments such as sustainable funding and investment will take longer to address.

v. **Improvements to the gathering and sharing of data about GSP outputs and outcomes are necessary to build confidence in the efficacy of GSP.** There is a persistent perception at local and national level that evidence for GSP is not sufficiently compelling or rigorous and a lack of agreement around what evidence is needed. The complexity of GSP poses multiple data collection challenges. Training, guidance, and payments to support data collection were provided but these challenges remained. It is likely that data collection and reporting will remain challenging for smaller VCSE organisations regardless of the support provided. Technical solutions offer some hope and securing funding for these to be implemented consistently was seen as a vital milestone for some pilots.

vi. **There is a need to improve information flow and feedback loops between providers, Link Workers, referrers and funders to create more efficient and effective pathways.** Relationships between providers, Link Workers, referrers and funders can be fractured and dispersed, with reliance on key individuals. Participants can drop-out or disengage across social prescribing pathways if they are not appropriately supported. The GSP Project legitimised collaborative activity between the health and VCSE sector but in many cases referral feedback loops (between community and health services and back again) remained underdeveloped and reliant on personal relationships. Improving understanding and communicating about what levels of need can be supported by which activities was an important enabling factor along with 'Active' link working, where people are accompanied to the first session.

vii. **Mutual accountability and shared problem-solving is necessary to enhance service users' experiences, but this requires trust and respect so that people understand and are aware of how different actors in the system may operate.** Initially, there was a lack of mutual awareness and understanding between GSP partners, particularly between the NHS and VCSE sectors, leading to few referrals through formal social prescribing referral routes and a lack of partnership working and coordination. To overcome this the GSP project invested in partnership activities including, co-design, provider networks, trusted provider schemes, taster sessions, training, and outreach to nature-based providers. Innovative funding approaches such as green health budgets were also explored. Challenges to these activities' success included limited capacity, balancing meaningful co-production with a need to 'get things done' in short timescales, building shared understanding, keeping provider lists and directories up to date, stretched Link Worker capacity, and the severity of participant need.

viii. **Building referrers' capability, opportunity, and motivation to refer to GSP will improve access to appropriate green opportunities.** At the start of the project, many pilots reported a lack of clarity around what activities were available to whom and how referrals could be made. Link Worker provision is fragmented with multiple employers and little coordination or data sharing. Link Workers were often unaware of the specifics of GSP. Self-referral was the most common route to nature-based activities across all pilots. Pilots provided training and taster sessions to increase awareness. Nature-based

providers offered peer support, buddying and befriending to support people to engage in activities, and pilots undertook work to understand specific needs and barriers. However, Link Worker capacity remains stretched, and support for other modes of referral – such as self- or community-referral - will be important.

ix. **Equitable access to appropriate green opportunities requires decision making through an inequalities and instructional lens.** Not all nature-based activities are culturally appropriate or relevant for some communities and meaningfully engaging under-represented groups can be challenging, particularly when they do not have ready access to green spaces. Pilots worked to harness existing local and national networks with strategic partners to explore approaches to tackling inequalities and target key groups. They also developed public communications to promote the benefits of green activities to a diverse audience. Dedicated activities and groups were established to meet the needs of diverse groups, including ethnic minority communities. These efforts demonstrated that significant commitment and resources are needed to meaningfully explore inequalities in access and provision and facilitate meaningful engagement of people most likely to experience health inequalities.

x. **User voice can ensure green social prescribing is person-centred by illuminating the changes needed across the pathway.** The involvement of people with lived experience of mental ill health or service use was an ambition for all pilot sites but involvement strategies appeared to be underdeveloped. There were some examples of co-production and involvement, for example around funding decisions, and the inclusion of a person with lived experience on the national Partnership Board was novel. A small number of pilots involved people with lived experience in their design, delivery, and governance, and one included such people in its review and quality assurance process. There was little resource to support involvement, and it is unclear the extent to which people actually influenced decision making.

xi. **Ensuring service users have a positive experience across the GSP pathway is vital if numbers of referrals are to increase.** In each pilot there were examples of service users disengaging with GSP at different points of the social prescribing pathway. Barriers to engagement included poverty, a lack of access to transport or equipment, and deterioration in mental health status. These barriers may disproportionally affect marginalised groups. Pilots worked to understand levels of participant need and potential barriers, providing tailored support, such as buddy schemes, and a consistent contact for users across the pathway. Practical barriers such as transport and kit/equipment were addressed. Training for nature-based providers to support mental health referrals and recording the capability of providers to address different needs in directories, can help ensure referrals are made to appropriate providers.

1 Introduction

The report is the final output from the **National Evaluation of the Preventing and Tackling Mental Ill Health through Green Social Prescribing Project.** The evaluation was undertaken by a consortium led by the University of Sheffield working with the University of Exeter, the University of Plymouth and Sheffield Hallam University on behalf of the Department for Environment, Food and Rural Affairs (Defra). This report builds on the Interim Evaluation Report, which covered the period September 2021-September 2022 and was published in January 2023 (Haywood et al., 2023).

1.1. Overview of the GSP Project

The **'Preventing and Tackling Mental Ill Health through Green Social Prescribing Project'** (GSP Project) was a two-year £5.77m cross-governmental initiative focusing on how systems can be developed to enable the use of nature-based settings and activities to promote wellbeing and improve mental health. Funding was provided through **HM Treasury's Shared Outcomes Fund** which supports pilot projects to test innovative ways of working across the public sector, with an emphasis on thorough plans for evaluation. The GSP Project was one the first round of projects delivered through Shared Outcomes Funding between 2020-21 and 2022-23.

Partners in the GSP Project included: Department for Environment, Food and Rural Affairs (Defra), Department of Health and Social Care (DHSC), Natural England, NHS England, NHS Improvement, Public Health England (and later the Office for Health Improvement and Disparities – OHID), Sport England, Department for Levelling Up, Housing & Communities (DLUHC) and the National Academy for Social Prescribing (NASP). At the core of this programme were seven Test and Learn sites across England, that tested how to embed green social prescribing into communities to:

- Improve mental health outcomes.
- Reduce health inequalities.
- Reduce demand on the health and social care system.
- Develop best practice in making green social prescribing activities more resilient and accessible.

In 2020 Integrated Care Systems (ICS) and Sustainability and Transformation Partnerships (STPs) were invited to become 'Test and Learn' (T&L) sites for the project. The aims were to *'establish what is required to scale up green social prescribing at a local system level and take steps to increase patient referrals to nature-based activities.'* The pilots, and the evaluation were to help identify what works in shared policy making and delivery across multiple sectors and scales, clarify how barriers to delivery could be overcome and which enablers help improve outcomes of better mental health and 'value'.

The GSP Project was promoted to ICS and STPs with ambitions to: provide opportunities to work collaboratively to embedded green social prescribing within the wider developing social prescribing at individual, community and whole systems levels; address the 'under-utilisation' of greenspaces for health outcomes; opportunities to 're-frame' how greenspaces, and the activities run in them, can support better health and wellbeing; and finally, to scale up provision of greens social prescribing, aid recovery form COVID-19, and health reduce inequalities in health.

The objectives of the T&L pilots were to:

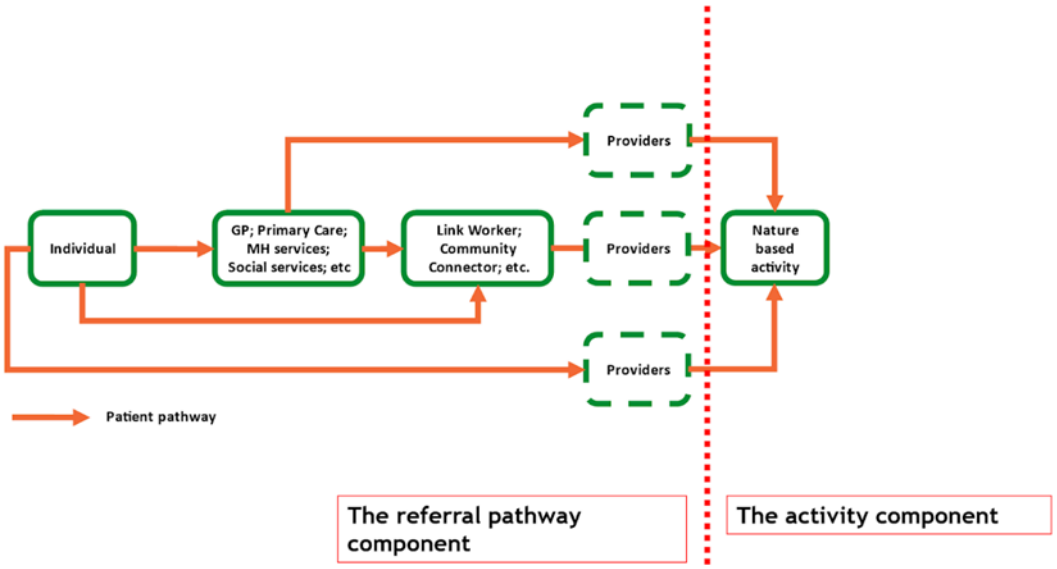
- Understand and address system barriers to scale up effective green social prescribing across England.
- Understand actions and behaviours required from different stakeholders to sustainably embed effective green social prescribing delivery models as part of the wider health and care landscape.
- Develop location specific plans which set out the activities, support and resource required to scale up green social prescribing and how this could be measured.
- Implement targeted and co-designed interventions to scale up green social prescribing.
- Increase patient referrals to nature-based activities to help people's mental health.
- Increase join-up, collaboration and shared learning between the health and environment sectors.
- Inform the development of national and local implementation strategies for social prescribing.

Successful applicants from the expression of interest stage were invited to set out their relevant experience. They were then asked to articulate how, through whole system partnership approaches, their proposal would help to address health inequalities and support COVID-19 affected populations. Applicants were also asked to make clear: how the pilot would be systematically embedded, and how it would be further developed and expanded beyond the Test and Learn programme; how applicants had identified communities of need (primarily relating to high deprivation, health inequality, and/or COVID-19 impact); how they would track progress on the delivery and measure outcomes; the extent of partnership working and how this would be maintained and governed; and finally, their commitment to evaluation and learning through the programme.

1.2. What is Green Social Prescribing?

For this evaluation, Green social prescribing (GSP) was defined as the *practice of supporting people to engage in nature-based interventions and activities to improve their mental health*. Social prescribing Link Workers (and other trusted professionals in allied roles) connect people to community groups and agencies for practical and emotional support, based on a 'what matters to you' conversation. There are four 'pillars' of social prescribing that Link Workers connect to: physical activities, arts/cultural activities, debt and other practical advice, and nature-based activities. There are many different types of nature-based activities and therapies that people may reach through a social prescription and include: conservation and other hands-on practical environmental activities; horticulture and gardening; care farming; walking and other exercise groups in nature; and more formal talking therapies based in the outdoors. There are two key components to GSP, a) the referral pathway and b) the activities people are referred to (Figure 1).

Figure 1: A simplified GSP pathway with the two key components highlighted



The majority of mental health policies recognise the role of the environment, whether social or physical, in determining health. Importantly, there is an awareness that the environment, and specifically the natural environment, is not just a source of threats to health (e.g., air pollution or biological hazards) but has the ability to promote good health. This has resulted in an increasing interest in using the natural environment as a setting for health promotion and care. During COVID-19 lockdowns, exercise outside has been seen as an essential for health and wellbeing for all. A Lancet publication identified providing 'green space and subsidised sport and recreation facilities' as a contributory action in addressing health inequalities (Tobias, 2017) and providing equitable access to urban greenspaces is one of the contributory Sustainable Development Goals. However, there is an incomplete picture regarding how, when and where natural environments could be best used to improve health outcomes.

Social prescribing offers an opportunity to link individuals at risk of, or experiencing, mental ill-health with nature-based interventions to improve mental wellbeing. There is a growing body of evidence suggesting that many of the common activities offered have the potential to improve health outcomes (Annerstedt & Währborg, 2011; Bragg & Atkins, 2016; Husk et al., 2016b; Ohly et al., 2016). However, this approach is predicated on an understanding of the community assets and existing models that could support this approach, as well as on the identification of suitable financing models. Public sector financial pressures on budgets to manage accessible green space have led to the development of innovative models for their financing and management. These models aim to exploit the wide range of benefits urban green spaces can provide to society (Cryle et al., 2017), which include general wellbeing and mental and physical health benefits.

Previous work undertaken on behalf of Defra has highlighted the range of nature-based interventions available in different localities in terms of scale, type and populations that use them (Garside et al., 2020). We identified a number of key elements that needed to be in place for nature based social prescribing to be successful: coordination of nature based social prescribing within wider systems of health; where this is additional and complementary to other services; if appropriate and informed referrals are made; where there is adequate information sharing between stakeholders; there is clarity in the aims and process of the nature based interventions; where nature based activities are evidence based and theoretically driven; and provider organisations have adequate skills and capacity to design and deliver suitable

nature based social prescribing offers. See Section 5 for more detail on the evidence relating to GSP.

Despite the increasing interest in the use of social prescribing, and more specifically nature-based interventions for mental health, the evidence base is patchy and limited in quality and extent (Husk et al., 2016b). The review by Bragg and Atkins found limited evidence of the extent of nature based mental health provision and that effort is needed to a provide a *'comprehensive picture of the scale and nature of green care for mental healthcare in the UK'* (Bragg & Atkins, 2016) and our own work has identified few high-quality evaluations from nature-based activities working in the UK context (Husk et al., 2016a).

1.3. Overview of the GSP Evaluation

The evaluation of the GSP project aimed to assess processes, outcomes and value-for-money, to inform implementation and future policy and practice and the contract was managed by Defra on behalf of the wider group of partners from national Government Departments and external agencies. It sought to improve understanding of what works, for whom, in what circumstances and why. The project included an in-depth evaluation in the Test and Learn (T&L) sites together with lighter touch investigation into green social prescribing in a range of other locations, to provide comparison and learn more about how green social prescribing can be scaled up in a wider range of contexts. The evaluation also produced learning to support the national partners roll out and scale up of GSP. The evaluation contract was awarded in April 2021 and concluded in June 2023, with the majority of data collected between September 2021 and April 2023 (Haywood et al., 2023).

The evaluation had four specific aims:

- **Aim 1**: To understand the different systems, actors and processes in each T&L site and how these impact on access to, and potential mental health benefit from, GSP.
- **Aim 2:** To understand system enablers and barriers to improving access to GSP, particularly for underserved communities.
- **Aim 3:** To understand how GSP is targeted at particular groups, including underserved communities.
- **Aim 4:** To improve understanding of how to successfully embed GSP within delivery and the wider social prescribing policy landscape.

1.4. Purpose and structure of this report

This report is the final formative and summative output from the evaluation. It addresses all four evaluation aims, incorporating findings across the entire evaluation period. It details the activities, constraints and challenges faced by those who are working to promote and scale up GSP which the Test and Learn project sought to address, as well as providing examples of the impacts and outcomes achieved in different contexts and the mechanisms and processes associated with generating these changes.

The remainder of the report is structured as follows:

- **Chapter 2:** Describes the evaluation methodology, providing an overview of the evaluation approach, a brief description of each work package, and our approach to synthesising key findings and learning.

- **Chapter 3:** Outlines how the GSP Project was implemented, describing the range of work undertaken at different levels of the project (i.e., T&L site and national partner activities), reflections on work being undertaken in non T&L site areas, and shows understanding of patterns of referrals to nature-based activities.
- **Chapter 4:** Provides the main findings and key learning about how to scale and spread GSP. It presents a series of pathways to change (programme theories) and examples of significant changes achieved by the project to illuminate how different types of change can be brought about in different contexts.
- **Chapter 5:** Discusses the outcomes of the GSP Project for people with mental health needs, drawing on data collected by the Test and Learn sites on individual outcomes such as mental health and wellbeing.
- **Chapter 6:** Discusses the value for money of the GSP project, describing how value for money can be conceived in the context of complex whole systems projects and providing analysis of the inputs (costs), outputs and outcomes at different points along a 'typical' GSP pathway.
- **Chapter 7:** Provides reflections on the GSP national partnership, including challenges, achievements, and perceptions about the benefits of working in a more joined-up way.
- **Chapter 8:** Presents conclusions and provides recommendations for policy and practice.

2 Methodology

This chapter provides an overview of the methodology for the evaluation. It outlines the general principles underpinning the approach before providing detail about the data collected and analysis undertaken for each of the evaluation work packages. Overall, the evaluation engaged with an extensive range and number of participants, including:[2] 20 representatives of the national government partners; 118 public sector stakeholders and nature-based providers in the Test and Learn sites (qualitative); 17 public sector stakeholders and nature-based providers in non-Test and Learn sites (qualitative); 142 Link Worker and 201 nature-based provider responses to the questionnaires, 13 nature-based providers and three social prescribing Link Worker teams who provided data for the value for money analysis; and 3,387 individuals who provided quantitative outcome data through their engagement with nature-based providers and the Test and Learn sites.

2.1. Overview of the approach

The evaluation utilised a mixed method, realist informed approach, to gain an in-depth understanding of what works, for whom, in what circumstances and why (Pawson & Tilley, 1997) to inform how GSP can be embedded more successfully within a) the wider social prescribing system and b) the wider health and care system, focussing on NHS Integrated Care Board (ICB) footprints. Evidence was collected to address the current lack of evidence on the best ways to design and deliver GSP to achieve mental health and wellbeing outcomes by assessing processes, outcomes, and value-for-money at different levels, in different places, and according to different contexts.

The evaluation was designed to be iterative and developmental so suited a flexible, multi-method approach that focused on understanding the delivery of shared outcomes and transformative processes across multiple sectors and spatial scales. The emphasis was on identifying barriers to and enablers of change and how these were able to improve outcomes and deliver better value for citizens. The evaluation design was informed by Treasury and Defra guidance on evaluation, complexity, and economic evaluation (HMT, 2018, 2020a, 2020b, CECAN, 2019) and was guided by the following principles:

a) **Theory-based:** Theories of change were developed with each Test and Learn site, and the national partners to understand in detail what they intend to achieve, and the processes involved. Elements of these were combined into an overarching theory of change to inform future spread and scale of GSP. For this final report, 11 realist programme theories were developed in the form of if/then statements and elaborated upon to explain key learning about outcomes and system change.

[2] Note that some will have participated in two waves of data collection, and in multiple work packages, so there is potential for these headline figures to include an element of double counting. However, the figures are provided to illustrate the scale and breadth of the data collected throughout the evaluation.

b) **Complexity informed:** We developed a shared understanding of the evaluation purpose, considering different stakeholder perspectives (i.e., national partners, Test and Learn sites, nature-based providers); formed a deep understanding of the GSP system and project goals in each Test and Learn site; and integrated these within a flexible design which adapted to changes in context.

c) **Using mixed methods:** We applied a mix of evaluation methods concurrently (Tashakkori & Teddlie, 2010), encompassing qualitative methods involving a range of stakeholders and quantitative analysis of monitoring data in a process specifically designed for this evaluation. We also carried out cross-sectional questionnaire surveys of nature-based providers and Link Workers, thus ensuring a variety of context-appropriate data were collected across the evaluation to capture evidence relevant to different stages of the Theories of Change. To develop the programme theory, a 'following the thread' technique was used to synthesise the evidence (Moran-Ellis et al., 2006) by identifying a finding in one source (in this case the qualitative evidence from WP3B – see below) and exploring how it related to evidence collected for other parts of the evaluation.

d) **Co-produced:** Working closely with Defra, the national partners, and the pilot sites we designed and implemented an evaluation plan that met the evaluation purpose and evidence requirements of different stakeholders, including where this required compromise (for example in the collection of quantitative data). Members of the evaluation team were embedded in each Test and Learn site to ensure the evaluation remained relevant and responsive to the needs and circumstances of key stakeholders for the duration of the programme.

e) **A focus on equity:** Given the broader ambition of project partners to reduce health inequalities and improve health outcomes, it was important to explore how the GSP Project tackled the uneven distribution of the social determinants of health (Marmot et al., 2020). Evaluations of social prescribing projects often focus heavily on medical outcomes and lack attention to the impact of interventions on the social determinants of health, such as housing and finances (Polley et al., 2020b). Given the clear link between the social determinants of health, inequalities, and mental health outcomes we bridged this gap in evidence by including this as a key outcome of interest within the evaluation.

The remainder of this section provides detailed information about each of the main evaluation work packages that involved primary data collection.

2.2. Work Package 1: Scoping: design and development of the evaluation framework

2.2.1. Purpose and objectives

During the first few months of the evaluation (March 2021-July 2021) we worked with T&L sites to understand current and planned processes, partners, aims, and target groups as well as any local evaluation activity and outcomes collection. The results were written up in a scoping report which was delivered to Defra and the national partners in July 2021. We also collaboratively refined plans for each work package of the evaluation. The core research questions that guided the scoping phase are:

- What are the objectives of a) the seven T&L sites and b) the national partners?
- What are the nested systems and structures in place and/or being developed in each area?
- What will be considered as success locally and nationally?

- What is the underlying theory of change driving a) the national partnership and b) the seven pilot sites?
- What routine and bespoke monitoring and evaluation data is being collected and what are the access constraints?
- What local evaluation activities are planned for each T&L area?

2.2.2. Summary of methods used

Extensive conversations, meetings, and workshops with key people in the Test and Learn sites as well as meetings with national partners, and Defra as the evaluation's funder. We also completed or planned workshops with sites to develop Theories of Change for each Test and Learn site (as part of WP2), as well as with national partners (as part of WP5).

Work Packages 3A and 5 were the ones most extensively revised in response to learning from this scoping phase.

2.3. Work Package 2: Evidence Synthesis

2.3.1. Purpose and objectives

The purpose of this work package was to be able to inform the evaluation team and the test and learn sites about relevant research, as well as to inform the development of local theories of change which could then be synthesised into generic theory of change for GSP at the site level. We undertook light touch, rapid and pragmatic evidence review / identification to inform the activities of the sites and the wider evaluation team and local partners. We collated an initial reference list of more broadly relevant research and documentation which was shared with the Test and Learn sites. ToCs were co-developed with the sites, and with the national partners.

2.3.2. Summary of methods used

Realist review aims to explain what makes a complex policy, program, or intervention work, in which aspects, for whom, in what context, to what extent, and why. It does this by constructing theory to describe the functioning mechanisms, contexts or programs which generate particular outcomes. It uses a range of evidence to try and articulate how a programme or activity works in particular contexts (typically articulated as "what works for whom in what circumstances"). Targeted searches, together with review team knowledge, were used to identify evidence relevant to our emerging Programme Theories. We also used targeted searches to identify relevant research for key questions relating to the evaluation and report writing. This included for example, identifying material relevant to working with and evaluating whole systems approaches, as well as keeping abreast of wider social prescribing literature.

We used existing knowledge of resources and additional targeted searches and citation chasing to produce an online resource of relevant references for Green Social Prescribing which was collated here and shared with the Test and Learn sites.

We conducted workshops with all but one of the Test and Learn sites to develop theories of change for the locality. One site had recently undertaken this for themselves and did not feel it was useful to revisit this. Theories of change were developed at online workshops with key stakeholders from the site management groups. Initial drafts were collated by the evaluation team and circulated for comment to participants, before finalising. These theories of change can be seen in the Appendices.

2.4. Work Package 3A: quantitative data collection in the Test and Learn sites

2.4.1. Purpose and objectives

WP3A focused on supporting the Test and Learn sites to develop data monitoring processes and to understand delivery of GSP. The objectives of WP3A were to:

1. Understand where the gaps are, challenges and potential solutions to data collection and linkage across the system.
2. Understand who accesses GSP and how.
3. Explore the nature of support that service users received.
4. Use data collected by the Test and Learn sites, explore whether service users accessing GSP experience improvements in their mental health and wellbeing, and the impact of support.

When the project was commissioned, it had been anticipated that the focus would be on Objectives 2-4. However, during the scoping phase. It became apparent that a substantial part of WP3A would need to be focused on Objective 1. This is because without supporting the system to develop solutions to some of the data monitoring challenges, then it would not be possible to undertake Objectives 2-4.

2.4.2. Summary of methods used

WP3A comprised three different elements including:

- Baseline and follow-up questionnaires with social prescribing Link Workers and nature-based providers based in the Test and Learn sites.
- Significant National Evaluation team resource to provide capacity building support to Test and Learn sites to develop data monitoring processes within the GSP system.
- Quantitative analysis of monitoring data collected by the Test and Learn sites.

The work package was initially resourced as a secondary quantitative analysis. However, we introduced the questionnaire and capacity building to meet the needs of the national partners. This has involved a significant additional researcher resource than was commissioned. This should be taken account of for future evaluations in terms of the input GSP needs to develop the collection and use of monitoring data. In the following sections we describe the different elements in turn.

Questionnaire of Link Workers and nature-based activity providers

We have undertaken a baseline and follow-up questionnaire across the seven Test and Learn sites to explore both delivery and perceptions of GSP and to capture how these may have changed during the project. The questionnaire was aimed at both Link Workers and nature-based activity providers as key stakeholders within the GSP pathway.

The rationale for undertaking a questionnaire alongside the Embedded Researchers was to enable us to sample a wider number of people, identify themes for the Embedded Researchers to explore further and to provide contextual information regarding delivery and perceptions about GSP (Mathers et al., 2009). Some Test and Learn sites had already undertaken mapping work and distributed their own questionnaires. However, it was felt utilising one standardised questionnaire across all seven sites would provide a more consistent data set.

The baseline questionnaires were developed based on the findings of the scoping report and the research questions and outcomes stakeholders were interested in (see scoping report for further information). For example, we had a number of questions about types of nature-based providers to map the provider landscape. The follow-up questionnaires asked questions based on emerging themes from the evaluation including whether there had been an increase in referrals from Link Workers or mental health services, what changes people had experienced and what GSP related activities they had participated in. One version of the questionnaire was developed for completion by people in Link Worker related roles (referred to as Link Workers below for simplicity). Another was developed for nature-based activity providers. A different questionnaire was used for Link Workers to nature-based providers to capture relevant information but with some consistent questions across both. Whilst there are multiple stakeholders involved within GSP, Link Workers and nature-based activity providers are two key parts of the pathway, within their roles they can provide perspectives on other parts of the pathway. For example, Link Workers may discuss the engagement of primary care practice staff.

The questionnaires were developed in conjunction with national partners, with draft questionnaires being circulated several times to obtain feedback. We piloted the questionnaire with contacts known to the National Evaluation team who did not work within the Test and Learn sites. Through the piloting process, we improved the clarity of some of the questions. We added additional questions such as whether delivery was in rural or urban settings. Another suggestion was to embed the Participant Information Sheet within the questionnaire, which was a useful piece of feedback and something that we did. The feedback from piloting was reassuring, with people feeling the questions were answerable. Based on feedback, and to encourage completion, we minimised the length of the questionnaires, prioritising key information that could be generated from the questionnaires rather than from other parts of the evaluation. We used a mixture of open and closed questions to build up both a quantitative understanding of the issues whilst also providing the opportunity to receive more descriptive feedback.[3]

Sampling and recruitment

We undertook the baseline questionnaire in January 2022 and the follow-up questionnaire in February 2023. The questionnaires were developed within an online management system (Qualtrics) so that people could complete the questionnaire online. Qualtrics was used because it is approved software for the University of Sheffield. It meets the required data security and information governance process standards needed to undertake health research. Through using Qualtrics, an online link was generated. People clicked on the link to complete the questionnaire.

Sampling for both the baseline and follow-up questionnaires was opportunistic and relied on the networks of Project Managers and the Embedded Researchers. Due to the conditions of Defra's Data Protection Processes, we were unable to collect contact details on the baseline questionnaire to be able to contact people directly to complete the follow up questionnaire. Project Managers at the Test and Learn sites were sent an introductory email and the questionnaire links in January 2022 and February 2023. The Project Managers were asked to circulate this amongst their networks. Project Managers were kept updated about the questionnaire response rates for their sites and asked to recirculate the information several times to encourage completion. Project Managers were involved in circulating the questionnaires because of their role as leading the sites and thus having the dissemination networks. Alongside the Project Managers, the Embedded Researchers also promoted the questionnaires with their

[3] Copies of questionnaires are available on request.

site contacts, for example at meetings. For both questionnaires, there was at least a six-week recruitment window.

The questionnaire was completed online. However, if preferred, people were given the opportunity to complete the questionnaire over the telephone or as part of an online meeting. Should they have any queries, potential respondents were provided with the National Evaluation team's contact details (Alexis Foster).

A Participant Information Sheet was provided both with the introductory email and embedded within the questionnaires. People were asked to read this and tick a box within the questionnaire to consent to participating. It was also explained that completion of the questionnaire was deemed as providing consent. None of the questions were mandatory, so respondents only needed to complete the questions they felt comfortable with or able to.

Sample size

Due to data protection issues, we were unable to match baseline and follow-up responses. This meant that we could not compare individual changes between the baseline and follow-up. For example, when we look at whether people have an awareness of GSP, the change between baseline and follow-up is whether there is a greater awareness of the programme generally rather than whether individuals have gained an improved awareness.

There was a considerably lower response rate for the follow-up than baseline questionnaires cumulatively across the sites. This was for a number of reasons. Firstly, this may be partly because Link Workers were being asked to complete multiple questionnaires for different research projects so there was an element of overload and uncertainty as to whether they had already completed the questionnaire. Secondly, due to our ethical permissions, we were unable to directly contact people who had completed the baseline questionnaire. Thirdly, some people were disheartened that there had not been an extension to the national evaluation. Fourthly, turnover rates of Link Workers may mean that newer workers may not have been as aware of GSP. Whilst it was disappointing to have lower response rates for the follow-up questionnaires, especially from Link Workers, it is not a critical issue as the purpose of the questionnaires was to collect experiences of GSP which could be triangulated with findings from other work packages. It is worth noting that in some sites, there was an increased number of responses, and this may be due to developed networks within the sites between GSP and different stakeholders. In the tables below we describe the proportion of responses from each site. It is unknown the response rate of questionnaires as a total of Link Workers or nature-based activity providers within each site as this information was not available.

Table 1: Proportion of responses between sites to the nature-based activity provider questionnaire

Site	Baseline Response (n=119)	Follow-up Response (n=82)
T&L1	28 (23.5%)	28 (34.1%)
T&L2	23 (19.3%)	10 (12.2%)
T&L3	8 (6.7%)	1 (1.2%)
T&L4	21 (17.6%)	22 (26.8%)
T&L5	12 (10.1%)	3 (3.7%)
T&L6	20 (16.9%)	5 (6.1%)
T&L7	3 (2.5%)	13 (15.9%)
National	4 (3.4%)	0 (0%)

Table 2: Proportion of responses between sites to the Link Workers questionnaire

Site	Baseline Response (n=91)	Follow-up Response (n=51)
T&L1	20 (22.0%)	9 (17.6%)
T&L2	19 (20.9%)	24 (47.1%)
T&L3	9 (9.8%)	0 (0%)
T&L4	14 (15.4%)	7 (13.7%)
T&L5	16 (17.6%)	2 (3.9%)
T&L6	11 (12.1%)	5 (9.8%)
T&L7	2 (2.2%)	4 (7.8%)

Analysis

Each questionnaire was downloaded from Qualtrics into an Excel file. The Evaluation Team undertook data cleaning of the responses so that the dataset was ready for analysis. Descriptive analysis of the fixed-answered questions was undertaken in specialist statistical analysis software packages (SPSS and Stata) (Field, 2013), for example, calculating percentages of people who delivered activities within rural or urban settings. Subgroup analysis at a specific site-level was not undertaken because this would lead to small samples, making it difficult to explore patterns within the data. Furthermore, the purpose of the questionnaire was to understand issues arising generally across the GSP project, with the Embedded Researchers responsible for focusing on drilling down issues on a site-specific basis.

Our original intention was to undertake some relationship analysis, for example exploring whether there were differences in capacity between certain types of organisations. However, generally we did not undertake this relationship analysis because the sample was not large enough. We undertook some comparison of differences between the baseline and follow-up questionnaire. For example, to see if there was a change in whether people felt the GSP project was worth giving time to. However, due to the sample size, we focused on narrative reflections of relationships between the data, using the free-text responses to build our understanding of arising issues and through triangulation with data from other parts of the GSP evaluation.

The open-ended questions were initially analysed using simple thematic approaches guided by the conceptual model developed in previous work (Garside et al., 2020).

The responses were tabulated and evidence relevant to the key themes were extracted. Elements of commonality and contradiction were sought to address the key research questions.

Supporting GSP to develop routine monitoring systems

Alongside primary data collection such as questionnaires, the Evaluation Team also invested significant time in capacity building to help sites to develop data monitoring processes. Providers will often record data on service users such as their demographics, referral routes and outcomes, partly for their own case management reasons, but also to collect information on behalf of commissioners for performance management reasons (Foster et al., 2020). The Evaluation Team sought to collate and analyse this information. However, because historically individual Link Workers and nature-based activity providers have had their own monitoring systems and requirements for information, there was little consistency in what was being collected nor established variables for GSP. Therefore, the National Evaluation Team supported the national GSP programme and Test and Learn sites to develop routine data monitoring processes (Foster et al., 2022). This involved multiple phases including:

1. Working with GSP national partners to identify which variables may be useful to inform the programme and to operationalise these. For example, deciding how to identify if people accessing GSP had mental health issues.
2. Developing data monitoring tools e.g., spreadsheets.
3. Working with Test and Learn Project Managers to balance the proposed GSP monitoring variables with local priorities and processes.
4. Support local Link Workers and nature-based providers with developing data monitoring systems taking account of their specific contexts.

This part of the study process was described in detail within the interim report (Haywood et al., 2023) including the development of guidance on recommended variables for sites to collect to provide intelligence on who is accessing GSP, the support they received and the impact of GSP on people's health and wellbeing.

Quantitative analysis of monitoring data collected from Test and Learn sites

This part of the work package involved secondary analysis of the monitoring data collected by Test and Learn sites. This data was collected by Link Workers and nature-based providers as part of their day-to-day work rather than service users participating specifically in a research study. The exception was one Test and Learn site who was undertaking a Cohort study where service users were recruited to provide data.

As the research team was reliant on the sites to collect data, the variables collected differed between sites. For example, whilst the evaluation's preferred outcome measure was the ONS4, some Test and Learn sites had chosen to collect a different outcome measure. This is discussed further within the interim report.

Sampling

Collection of monitoring data was opportunistic, and reliant on Project Managers and the nature-based providers and Link Workers within their site to provide data. For example, Project Managers requested that organisations they had given grants to collected monitoring data as a condition of the grant. We have only received monitoring data for about a third of people that accessed GSP.

Receiving and cleaning the data

Sites provided data in Spring 2023. The latter was provided when sites finished nature-based provider delivery for the national GSP project. For example, in one site this was the middle of February as that was when their grant programme finished. The last possible date of collection was 31/03/2023 because that was when the national programme finished. Some of the activities were continuing past this date through other funding sources so not everyone had finished attending their nature-based activities at that stage.

The data provided and analysed was from throughout the duration of GSP. The findings from this latter analysis are presented within this report. These findings supersede the data reported in the September 2022 interim report.

Where relevant, the Project Managers sent data in Excel spreadsheets. Due to a lack of resources at the individual Test and Learn site level to collate and clean the data, this task was often undertaken by the Evaluation Team. For example, many of the sites sent individual spreadsheets for each nature-based activity provider, which included handwritten data. The Evaluation Team were willing to undertake the additional data co-ordination and cleaning work because of the pressures that Project Managers were experiencing. For example, we had to spend a considerable amount of time cleaning data and collating site level data from different nature-based providers. However, it is important to note that this was beyond the resource activity of the evaluation contract and another evaluation provider may not have been willing to do this, meaning that much of the data would not have been analysed.

Project Managers sent the quantitative data lead (who was based at the University of Sheffield) the spreadsheets by email, in a password protected file. Upon receipt, the researcher saved the files to the secure drive and deleted the emails and attachments.

As part of the data cleaning process, an individual Master File was produced for each relevant site, where individual organisation data was collated within the Site-Specific Master file. Data cleaning was undertaken of the files in Excel. This included ensuring that any data made sense e.g., addressing any potential data anomalies A key part of cleaning was replacing postcode data with IMD deprivation codes This involved recording postcodes with the IMD deprivation decile to understand whether service users were living in areas of socio-economic deprivation (MHCLG, 2019) after cleaning, the data was transferred into R (statistical analysis software) for analysis.

Received monitoring data

In this section we explain what data we received from the sites in Spring 2023 that we utilised for the analysis. Please note, there were various levels of completeness of different variables. For example, referral source was generally well completed whereas there was little consistent information provided about the amount of support that service users received.

Table 3: Summary of data received on people accessing Link Worker services

T&L Site	Data Provided (Max number of sample, number differed per variable)	Notes
1	224	• Data being collected through a cohort study with Link Workers recruiting participants on behalf of the local evaluators. • Participants are people that are referred to nature-based activities and consented to being part of the study. • Data was limited by the variables and categories decided by the local evaluators which differ from the National Evaluation. • Data was more complete because it was specifically collected for a service evaluation rather than for routine monitoring purposes.
2	88	• Data provided in June 2022, but no further data provided in 2023 because the Project Manager focused on collecting nature-based provider data. • Provided data on people who are referred onto nature-based activities rather than all people accessing link worker services. • Data drawn from some localities but not all parts of the site. • Demographic data was more complete than date or outcome data.
3	0	• No suitable Link Worker data provided.
4	3830	• Some data provided from a Joy dashboard (n=3830) on demographics and whether signposted. • Whilst information was provided on the organisation signposted to, it was not possible to calculate whether it was a nature-based referral as this would have required manual coding, which was beyond the scope of the evaluation. • No outcomes data provided.
5	0	• Site operates nature-based Link Workers, where people referred to nature-based activities were supported by a Link Worker to engage in nature-based activities alongside more generic Link Workers. • Data was primarily from nature-based Link Workers. Data was provided in July 2022 with a sample of n=393 with data collected on a range of variables. See interim report for detail (Haywood et al., 2023). The site was unable to provide an update In Spring 2023, reporting that as the sample got bigger it was too complex to distinguish the Link Worker service users from the nature-based provider clients. For this reason, the data was not included in the final report because the Link Worker role in T&L differed to the other sites.
6	0	• No Link Worker data was provided as the site experienced difficulty getting permission for providers to share the data with the GSP project.
7	0	• No Link Worker data was provided because the Project Manager is working with other stakeholders in the region to develop data monitoring systems through a technology platform and agreeing a region wide core data set. They may work with NHS England on this.

The quality of data collected at the Link Worker stage of the GSP pathway has not improved throughout the GSP programme. Project Managers have found it difficult to obtain data from Link Worker data they do not have any contractual links with services and rely on good will, and Link Worker workload is high. Furthermore, Link Worker data systems are currently being developed through both national and local initiatives. Whilst it has been difficult to access Link Worker data, GSP has resulted in many of the Project Managers working with providers to improve Link Worker data systems. This has had a tangible impact on the GSP programme. So, the programme has had an important impact on supporting the development of Link Worker data monitoring systems, highlighting the impact of the programme beyond green social prescribing. Outside of green social prescribing, there is considerable work being undertaken on developing Link Worker data monitoring systems which will be of benefit to green social prescribing longer-term. A key improvement that is fundamental for green social prescribing is the need for an automated way of distinguishing if a Link Worker has made a green referral. This is because to date it would need to be extracted manually through looking at each onward referral organisation name, which is not a feasible method for multiple participants.

Table 4: Summary of nature-based activity provider data received

T&L Site	Data Provided (Max number of sample, number differed per variable)	Number of pre and post ONS4 Measures	Notes
1	224	172	• Data is collected through a cohort study with Link Workers recruiting participants on behalf of the local evaluators. • As Link Workers track information it is difficult to fully separate the Link Worker and/nature-based activity data. • Data was available for 224 service users. Numbers have increased from 69 in July 2022. • Data variables e.g., age categories were chosen by the local evaluation so some differences to the National Evaluation. • Pre and post ONS4 data collected for 172 service users. This has increased from 27 service users in July 2022. • The ONS4s are different to the other sites as the pre/post is from the start of the Link Worker support to the end of nature-based provider support. In contrast, the other sites collected ONS4 data from the nature-based activity.
2	880	80	• Data collated on 880 service users accessing GSP funded nature-based activity. Increased from 540 service users in July 2022. • Site collected the Evaluation variables and some additional variables including caring status. • Pre and post ONS4 data collated on 80 service users. Increased from 20 in July 2022.
3	117	0	• Some variables provided are mainly related to demographics. • Did not provide post outcome data so it is not possible to explore any improvement in mental wellbeing.

4	99	0	• Data provided on 99 service users accessing funded nature-based activity providers. This has increased from 0 service users in July 2022. • No ONS4 wellbeing data provided as the site used the UCL Wellbeing Umbrella measure. This was the choice of the site because it had been selected by local partners as most appropriate for their locality.
5	635	46	• Data provided on 635 service users accessing funded nature-based activity providers. This has increased from 45 service users in July 2022. • Data provided on many of the Evaluation variables including demographics and support received. • Completed pre and post ONS4 outcome data for 46 service users. This has increased from 39 in July 2022.
6	369	156	• Data provided on 369 service users accessing GSP funded nature-based activity providers. This has increased from 196 service users in July 2022. • Data provided on many of the Evaluation variables including demographic and support received. • Pre and post ONS4 outcomes data collected for 156 service users. This has increased from 105 service users in July 2022.
7	1180	723 (Happiness and anxiety domain only)	• Data provided on 1180 service users accessing funded nature-based activity providers. This has increased from 480 service users in July 2022. • Data returned for less than a third of funded nature-based activities. • Data provided aligns with sites' own data monitoring decisions e.g., people from ethnic minority background or not, Under 18, 18-65, over 65 etc rather than the National Evaluation variables. • Pre and post ONS4 outcomes data collected on 723 service users (for two of the questions). This has increased from 299 service users in July 2022.

The amount of monitoring data has increased considerably from that reported in the interim report for the previous year. This has been the result of a considerable input of time and resources from the National Evaluation Team and the Project Managers. Nature-based providers are still struggling with the collection of ONS4 (or other wellbeing measures). It may be that alternative methods such as an external research study is needed to support collection of outcome measures.

Analysis of the monitoring data

Summary statistics were used to describe the characteristics of the people accessing GSP and their journey. Statistics were undertaken on both a site specific and GSP project level to provide both site specific and overall statistics. For categorical variables the frequency and percent of participants was presented. Continuous variables, such as the time between referral and receiving support were summarised using the mean and standard deviation, median and Interquartile Range (IQR) and range. Data was analysed on both a site basis but also cumulative across the GSP programme. For the latter, different sites were included in each of the analyses because sometimes sites would need to be excluded if they did not collect the relevant variables or use the same categories as the rest of the sites. For example, T&L1 did not use the same age categories as the other sites meaning they could not be included in the main cumulative analysis.

ONS4 outcome measures (Life Satisfaction, Worthwhile, Happiness, Anxiety) were summarised at baseline and follow-up. The distribution of each score was described by reporting the number and percentage of participants who recorded each possible value on the outcome scale. The average score was described using the mean and median and the variability was described using the standard deviation and interquartile range. The primary analysis described the change in score for those participants with both a baseline and follow-up score using a paired samples t-test, reporting the mean change, 95% confidence interval and P-Value. A secondary analysis categorised the scores into low, medium, high, and very high (Life Satisfaction, Worthwhile and Happiness scores) and very low, low, medium, and high (Anxiety scores). For those participants with both baseline and follow-up scores, these categories were compared using McNemar's test. These enabled us to explore how mental wellbeing had changed both across the population but also on an individual service user level (the latter was only possible for service users who had completed a pre and post measure).

Two sites collected the Nature Connectedness Index. This was analysed using a similar approach to the ONS4 outcome measures. However, a Wilcoxon signed rank test was used to compare the scores between pre and post timepoints due to the skewed distribution of the difference in scores. The mean change in ONS4 outcome measures from each site were then combined using a random effects meta-analysis to produce an overall estimate of the change. One site collected binary outcomes on a change in physical activity in the last seven days. This was a binary measure of Yes/No. We used McNemar's test for paired data to compare people's physical activity levels pre and post accessing GSP.

2.5. Work Package 3B: qualitative research in the Test and Learn sites

2.5.1. Purpose and objectives

The qualitative research in the Test and Learn sites aimed to provide depth and detail throughout the evaluation, both informing and complementing the other work packages. The work package set out to explore the following broad questions:

1. What are the key characteristics of each Test and Learn site?
2. What are the different Test and Learn sites trying to achieve? What is their measure of 'success'?
3. To what degree are systems and success reliant on specific elements of the local context? What are these elements?
4. How well are the expectations/needs of each actor met within each system?
5. Are the active components of each Test and Learn site consistent within, and across areas?

2.5.2. Approach

Using programme theory

The qualitative data collection and analysis was broadly informed by realist evaluation methods (Pawson & Tilley, 1997) using an embedded researcher approach. A realist informed approach was considered the 'best fit' to explore the overarching questions, giving us a sense of 'what works for whom in what circumstances' by exploring the context, mechanisms, and outcomes of the seven text and learn sites.

Following a realist approach, initial programme theories, based on existing evidence-based theories (Shearn et al., 2017) and the scoping stage of the evaluation, informed the first wave of data collection. Programme theories are a set of statements about

what works, for whom and in which circumstances. Thus, programme theories explore the possible impacts of various mechanisms, or activities in different contexts. Once the initial programme theories were drafted by the embedded researchers, they were used to inform the interview topic guide and schedule.

Embedded researcher approach

An embedded researcher approach (Gradinger et al., 2019; Hazeldine et al., 2021) was chosen to enable the development of trusting relationships between the evaluation team and the Test and Learn sites. Each Test and Learn site was assigned a specific embedded researcher (ER) who worked with the Test and Learn site throughout the duration of the evaluation. The ERs worked with the Test and Learn site project managers from the outset, ensuring clear communication regarding the aims and objectives of the evaluation and feeding evaluation findings back to the project managers and their teams at key points throughout the evaluation. This approach meant that the evaluation was a reciprocal process between the ERs and the Test and Learn sites and ensured that the evaluation team were able to explore issues in depth and detail. One initial step in this process was through the co-development of theories of change (ToC) for each site, with ERs facilitating the workshops, drafting the ToC and meeting with the Test and Learn teams at various points during the evaluation to reflect on how the ToC may have evolved.

Working with specific Test and Learn sites, ERs gained access to team meetings, informal conversations, and site documents and were able to collect large quantities of ethnographic data. This was a strength of the approach. However, the approach was also time and labour intensive and generated a lot of data from multiple sources as is later discussed.

ERs met on a fortnightly basis to exchange experiences of data collection and discuss emerging reflections on analysis, next steps, and programme theory.

Methods

Data collection and analysis was an iterative process, with the first wave of data feeding into an amended programme theory and identifying potential gaps in our knowledge. This was then used to inform the second wave of data collection.

Data were collected via a number of different methods:

- Formal interviews.
- Observations of key meetings.
- Informal conversations and reviewing documents.

2.5.3. Realist informed interviews

Realist informed interviews were conducted with key stakeholders. The key stakeholders to be interviewed were identified from the programme theory and in discussion with project managers. They included GSP providers, programme management staff, referrers, Link Workers, volunteers, and service users across the seven Test and Learn sites. Interviews were conducted at two main points during the evaluation:

- The first wave of interviews were conducted by the embedded researchers between January and May 2022.
- The second wave of interviews were conducted between January and March 2023.

In total 118 interviews were undertaken during the evaluation. Table 5 shows the total number of realist informed interviews undertaken within each Test and Learn site during the first and second wave of data collection. Table 6 shows the breakdown of stakeholders interviewed. In some cases, a stakeholder was interviewed in wave one and wave two to discuss significant changes, developments, challenges and facilitators.

Interviews were primarily undertaken over the telephone/video conferencing for ease of access. They lasted between 20 minutes and one hour. All interviews were transcribed verbatim.

Table 5: Number of stakeholder interviews undertaken by T&L site

Test and Learn site	Wave one Jan--May 2022	Wave two Jan-March 2023
T&L1	9	6
T&L2	12	10
T&L3	10	9
T&L4	5	5
T&L5	10	9
T&L6	11	4
T&L7	11	7
TOTAL	**68**	**50**

Table 6: Stakeholder interview participants

Wave one	Wave two
• 20 project managers • 3 mental health service system leaders • 7 clinicians • 5 social prescribing leads • 20 green activity providers • 1 local authority manager • 5 commissioners • 2 Link Workers • 1 local evaluator • 3 NHS strategic level employees • 1 service user representative	• 12 project managers • 3 mental health system leaders • 2 social prescribing leads • 10 green activity providers • 2 local authority • 2 commissioners • 2 Link Workers • 4 NHS strategic level employees • 3 voluntary sector strategic leads (nb 1 interviewee had been interviewed in relation to their previous role) • 1 public health lead • 9 service user representatives

2.5.4. Observation of key meetings, informal conversations and documentary analysis

Throughout the evaluation, the embedded researchers engaged in ethnographic data collection activities including participation and observation of Test and Learn site meetings, informal conversations with Test and Learn site staff and analysis of Test and Learn site reports and documents. Included in the Test and Learn site documents were the Test and Learn site case studies. Each Test and Learn site was committed to collecting at least one service user case study each quarter. We included review of these case studies in our final analysis with any pertinent data feeding into the refined programme theories.

Data from participating in, or observing, meetings and informal conversations were recorded by the ERs in field work diaries, whereby the ERs would make notes in the field and write up fuller notes following observation or by completing an observation template informed by the evaluation research questions. These activities resulted in large amounts of physical data but, and perhaps more importantly, ERs were also able to develop key insights due to the embedded nature of their roles. These key insights were invaluable in the development and refinement of the programme theory as we sought to answer the broader evaluation questions.

Data analysis

Data collection and analysis was an iterative, rather than staged process with ERs exploring their data within the context of their own Test and Learn sites and feeding this into subsequent interviews/other forms of data collection. However, there were two key points when collective data analysis was undertaken:

- After the first wave of interview data had been collected ERs met as a team on a number of occasions between May and November 2022 and undertook collective data analysis exercises and programme theory refinement. This then fed into a whole team meeting to discuss next steps.
- After the second wave of interview data had been collected, ERs met as a team at the end of January 2023 and then at the end of February 2023 to reflect on data and this fed into the final whole team analysis meeting in March 2023.

The data analysis process involved the ERs initially looking at their own site-specific data before coming together to look at patterns and themes across and within sites. Following the first round of interviews, initial transcripts were thematically analysed, and a coding framework developed between the ERs. The initial coding framework covered:

- Sustainability.
- Sufficient green activities and assets.
- Structures and processes.
- Interconnectivity (between funders and providers and between referrers and providers).
- Mutual awareness and understanding.
- Buy in (from referrers and Link Workers).
- User influence (in structures and processes).
- (User) Pathway experience.
- Data and measuring impact.
- Underserved populations.

Following this, ERs analysed the interview transcripts and written observations against the coding framework. The initial findings from this stage of the research are reported in the interim report (Haywood et al., 2023).

The initial findings were then taken to a whole team meeting in December 2022. During this meeting the team undertook participatory analysis of the findings against the programme theories. This exercise enabled us to identify gaps in our knowledge, look for threads across and within sites and amend the programme theories. Following this meeting, ERs developed a new interview schedule and questions informed by the programme theories.

Following the second wave of data collection, interview, observational and documentary data were analysed against the programme theory framework, culminating in a whole team meeting in March 2023. During the whole team meeting, further participatory analysis was undertaken, linking WP3b data to the programme theory and considering how data from the other WPs may align with this. Further amendments and refinements were made to the programme theory. ERs also reflected on what changes had occurred within their Test and Learn sites that they considered to have had the most significant impacts. ERs then charted their data against individual analysis tables with an example of the headings shown below.

Table 7: Final analysis table example

Programme theory	Context - why was change needed?	What has happened? Description of change (or lack of)	Activities	What supported change?	What inhibited change?	Evidence of change (or lack of change)	Links to other programme theories	Quotes

The analysis tables were then used by the synthesis team to develop programme theory narratives (as shown in Chapter 4).

2.6. Work Package 4: light touch investigation in non-Test and Learn sites

Work package four comprised light touch investigation of GSP systems and activities in 13 additional non-Test and Learn sites (i.e., areas and projects not in receipt of funding through the Green Social Prescribing Project). The purpose of this work was to develop an understanding of the added value of the project and to identify the transferability of key learning from the pilot sites (and vice versa). By understanding the variety of systems, interventions, activities, funding and commissioning models, capacity and capabilities associated with GSP in areas that have not been involved in the national programme, and therefore not had access to additional resources and support to develop GSP, this work package captured important contextual information to help inform recommendations about the scaling up of GSP.

The evaluation questions for this work package were:

- What is the make-up of the local GSP system in each area?
- What key strategies and development plans are there around GSP in these areas?
- What local data is being collected on the scale, scope, reach and outcomes of GSP activity in these areas?
- How do these sites' GSP systems evolve and develop relative to the Test and Learn sites?
- What barriers and enabling factors exist in these areas and do they compare/contrast with areas that are part of the GSP programme?

Findings were analysed separately (reported in the appendices) and then mapped against the programme theories discussed in Chapter 4 to enable their integration with wider evaluation findings.

2.6.1. Sampling and Methods

Work package four utilises a qualitative research design involving interviews with key actors in the sample locations. Locations were identified through a purposive sampling strategy supported by the national partners. Criteria included:

- Areas that had applied for national Test and Learn funding but had been unsuccessful.
- Areas where the national partners were aware of organisations or groups seeking to or interested in growing or rolling out GSP.
- Areas where the Evaluation Team were aware of organisations or groups seeking to or interested in growing or rolling out GSP.
- Examples of other sources of investment in GSP (for example through NASP Thriving Communities, or the National Lottery Community Fund).

Other sampling considerations included geography (including areas not covered by the programme such as London), demographic and economic characteristics. The seven areas selected as case studies are summarised in Table 8.

Data was collected at two time points: January-March 2022 and January-March 2023. At time point one social prescribing stakeholders from seven different areas were interviewed. At time point two, stakeholders from ten different areas were interviewed. Each area interviewed at time point one was invited to take part at time point two but only four areas took up this opportunity, predominantly because the interviewee has moved on to another role. The second interview explored how things had changed in the intervening 12 months. To offset the loss of three areas at time point 2, a further six areas were identified and invited to participate in an interview.

In total, 17 interviews were conducted in 13 non-test and learn areas with a lead green social prescribing stakeholder from that area. Interviewees represented a range of organisations including local sport and physical activity partnerships, local authorities, national nature charities and local charities who were green social prescribing providers. Data was analysed thematically to identify the key features of the local social prescribing system, the current approach to green social prescribing, and the challenges and enabling factors associated with embedded and scaling green social prescribing. For sites in which follow-up interviews were undertaken comparison was made to identify changes and developments over time, including factors associated with progress (or lack thereof).

Table 8: Overview of participating non-test and learn areas and data collected

Non TL Site No	Interviewee	Area	Interview timing	
			2022	2023
1	Local sport and physical activity partnership lead	North-west	X	X
2	Health and wellbeing lead for local sport and physical activity partnership	West Midlands	X	
3	Green social prescribing lead within local wildlife trust	West Midlands	X	X
4	Social prescribing provider organisation (VCSE)	East	X	X
5	Parks and health partnership manager within local authority	London	X	X
6	Nature and wellbeing project manager, national charity	National	X	
7	Founder of nature-based provider	East	X	
8	ICS social prescribing lead (NHS) and green social prescribing network lead (VCSE)	East		X
9	National charity programme manager working on green social prescribing development across London	London		X
10	ICS social prescribing lead	Yorkshire		X
11	Director, nature-based provider	South East		X
12	Manager, country park	East		X
13	Green space lead, local sport and physical activity partnership	West Midlands		X

2.7. Work Package 5: National Partnership

Work package five was focussed on the GSP National Partnership and the work undertaken by national partners, collaboratively and independently, to deliver against the key objectives of the GSP project. Specifically, this work package aimed to provide a facilitated learning environment in which national partners could receive and take stock of the learning from the project on an ongoing basis. This was felt to be important as the Shared Outcomes Fund requires Government departments and wider partners to work differently from 'business as usual'. As such it is hoped that the findings of this work will also provide evidence and learning on the experiences and outcomes of cross-sectoral partnership working that can be shared with other Shared Outcomes Fund projects and across Government more widely.

The work package comprised two main components:

1. Qualitative interviews (n=19) with representatives of the national partners undertaken at two time points: December 2021-January 2022 (n=10); March-May 2023 (n=9). During the first interview, participants were asked to reflect on the key learning from the first nine months of the GSP project. The second interview asked participants to reflect on the whole project, focussing on summative

reflections about challenges, benefits, and key learning at a local and national level.

2. A series of five two-hour workshops to critically reflect upon key issues pertaining to the future of national action to encourage take up of Green Social Prescribing, building on learning and evidence emerging from the evaluation and other evidence work packages. A draft Theory of Change for how the National Partnership might support roll out Green Social Prescribing nationally was partially created and is included in the interim report. As national action to follow on from the GSP project including any future funding for GSP is uncertain it was not possible to further develop the Theory of Change beyond the early ideas of national partners shared in the interim report.

2.8. Work Package 6: Value for Money

This work package focussed on understanding the Value for Money of the GSP project. In keeping with the evaluation methodology our approach was informed by current thinking about economic evaluation in the context of realist and whole systems concepts such as the mechanisms and pathways through which change may occur. Our approach was also informed by an understanding about what types of quantitative data would be available at different levels and the capacity of Test and Learn sites and nature-based providers to collect additional data to inform this work.[4] This required a bespoke methodology that draws on but was not beholden to economic evaluation approaches set out in the HMT Treasury Green Book (HMT, 2018). However, it is important to note that the strength of the analysis presented is limited due to the absence of comprehensive and consistent collection of activity, output, and outcome data at all levels of the GSP project.

Our approach aimed to demonstrate the range costs of GSP and nature-based interventions in absolute terms but also in relation to key benefits (outputs and outcomes. It involved collecting the following common data points, where available, at three different levels:

- **Costs and inputs**: the value and source of key resources required to deliver the project and the activities to which they were allocated.
- **Outputs:** the number of people supported to participate in nature-based activities through the GSP project.
- **Outcomes:** the number of people reporting an improvement in mental health or wellbeing after accessing nature-based activities through the GSP project; assigning a monetary value to outcomes, where possible.

Data were collected toward the end of the GSP project (January-April 2024) to cover the full 24-month duration.

Given that the overall aim of the project was to develop and grow GSP to prevent and tackle mental ill-health, the output and outcome measures were selected to reflect this goal. Although this represented a simplified picture of outputs and outcomes compared to what the GSP project actually delivered and achieved, these varied quite widely by partner and site and information was not collected on a systematic basis. Detailed descriptions and discussion of the range of things the GSP project delivered and the

[4] See Appendices for an in-depth discussion of the data collection challenges encountered during this project and the implications for the evaluation and project delivery.

individual and system level outcomes it achieved are embedded through the other sections of the report.

The three levels at which data reflected the main components and mechanisms of the GSP and 'typical' social prescribing pathway were:

1. The **GSP project**, covering the national partnership and the Test and Learn sites.
2. **Nature-based providers** who received referrals of participants through involvement with the local Test and Learn sites.
3. **Social prescribing Link Workers** who made referrals to nature-based activities.

Multiple sources of primary and secondary were utilised to develop a broad understanding of costs, inputs, outputs, and outcomes at each level. Where possible and meaningful, sources of comparison data and evidence were identified and included in the analysis. An overview of the data sources relied upon at different levels is provided in tables nine to 12.

Table 9: Description of value for money data sources

Source	Description
Project management data	Management information collated by NHS England Social Prescribing Team from each Test and Learn site for their monitoring of the GSP Memorandum of Understanding (MOU). Cost/expenditure provided for each site covering the full two years of the GSP project under the following headings: infra-structure; project Management; co-production; nature-based providers; developing green networks; local evaluation; training and development; admin and comms; ICT; contingency.
Project monitoring data	Data collected by the Test and Learn sites to monitor outputs (no of referrals etc) at a project level and individual outcome change (mental health, wellbeing etc). See work package 3a methodology for a full description of these data and how they were collected.
Social prescribing Link Worker exemplars	Three social prescribing Link Worker providers in three different Test and Learn sites provided information about the cost of providing their service, the number of Link Workers employed, and the number of referrals received. This was supplemented with qualitative information about how costs were allocated and the context and assumptions underpinning their service model.
Nature-based providers	Thirteen nature-based providers in six Test and Learn sites completed a value for money template. The template covered: a description of their nature-based activity, the sources of income and funding to deliver the activity, the costs associated with delivering the activity (capital, staffing, other operative costs), outputs and outcomes. For outputs and outcomes providers utilised existing individual level data collected for the GSP project monitoring framework – see work package 3a methodology.
Alternative care costs	Initial discussions with three Test and Learn sites and national partners identified a number of possible alternative care options to GSP but also revealed that there were no obvious or direct comparators to nature-based activity in most areas. A desk-based review of secondary sources revealed a range of care sources and their costs.

Table 10: Overview of input and cost data level, sources, and comparison

Level	Source of cost data	Comparison
GSP project	Project management data (n=7)	N/A
Test and Learn sites		Between site comparisons
Social prescribing Link Workers	Exemplars from the Test and Learn sites (n=5)	
Nature-based providers	Provider level value for money template (n=13)	Range of alternative care costs identified by sites and extracted from NHS unit cost data sources

Table 11: Overview of output data level, sources, and comparison

Level	Source of output data	Comparison
GSP project	Project monitoring data	N/A
Test and Learn sites		Between site comparisons
Social prescribing Link Workers	Exemplars from the Test and Learn sites (n=5)	
Nature-based providers	Provider level value for money template (n=13)	Range of alternative care costs identified by sites and extracted from NHS unit cost data sources.

Table 12: Overview of outcome data level, sources, and comparison

Level	Source of outcome data	Comparison
GSP project	N/A	
Test and Learn sites		
Social prescribing Link Workers	N/A	
Nature-based providers	Provider level value for money template (n=13)**	N/A

Outcome valuation was undertaken from the perspective of individuals accessing nature-based activities through the GSP project using a WELLBY approach. WELLBYs - short for 'Wellbeing-adjusted Life Year' - are a way to consistently measure and value improvements in wellbeing, first introduced in 2020 in HMTs Wellbeing Supplementary Guidance (HMT, 2021). This defines a WELLBY as a change in *life satisfaction of one point on a scale of 0-10, per person per year (ONS4*

measure). It recommends a value of £13,000 per WELLBY with a lower estimate of £10,000 and an upper estimate of £16,000 (2019 prices).

According to the HMT Green Book, WELLBYs are most likely to be appropriate where there is evidence that wellbeing fully captures all the outcomes affected by a project or programme and may be particularly relevant when the direct aim of the policy is to improve the wellbeing of a certain group, such as through mental health services. Given the aim of the GSP project to tackle and prevent mental ill-health, the WELLBY was deemed to be an appropriate methodology, particularly given the absence of data on health service utilisation.

Our approach to calculating WELLBYs involved the following stages. Note that for each stage a lower range, central and upper range estimate was produced:

1. Determine the number of individuals who accessed a nature-based activity via the GSP project from project management data.
2. Estimate the mean change in life satisfaction. This was estimated using project monitoring data by calculating the mean individual level change in life satisfaction scores for individuals with a baseline and follow-up assessment.
3. Calculate an annualised figure for the total number and value of WELLBYs produced. Computed by multiplying the estimated mean change in life satisfaction by the number of individuals who accessed a nature-based activity via the GSP project.
4. Calculate a reduced figure for the total number and value of WELLBYs produced based on the length of time over which outcomes were measured. This reflects HMT Guidance that the value of a WELLBY should be calculated over a full year. Currently, there is no evidence about how long outcomes last, so we have not extrapolated beyond the end of the intervention to prevent overclaiming.
5. Calculate (social) return on investment by dividing the total value of WELLBYs created by the number of participants in nature-based activities.

Note that because there is no comparison group for this evaluation an assessment of net additional WELLBYs (i.e., the number of WELLBYs gained by GSP participants compared to individuals not accessing GSP) was not undertaken.

An overview of the key data values utilised are provided in Table13.

Table 13: Overview of data and values for WELLBY calculation

Stage	Values			Data source
	Lower	***Central***	***Upper***	
1. No of individuals accessing GSP	8,339			Project Management Data
2. Change in life satisfaction*	0.7	1.7	2.6	Project Monitoring Data
3a. Total number of WELLBYs	5,837	14,176	21,681	
3b. Total value of a WELLBY**	£10,827	£14,076	£17,324	HMT Treasury Wellbeing Guidance for Appraisal
4. Time discount***	0.12 (£1,299)	0.17 (£2,393)	0.23 (£3,985)	Project monitoring data

*ONS Life Satisfaction measure. 95% confidence intervals applied to estimate upper and lower range. N=554.
**Drawing on HMT guidance (uprated to 2022 prices)
***The mean time between pre and post outcome measures varied considerably between test and learn sites and was dependent on the type and length of nature-based activity. The majority of post outcome measures were collected between 6 weeks and 12 weeks following referral, so this range had been used to derive the lower, central and upper estimates

2.9. Synthesising key findings and learning

To produce synthesised key learning from the work packages, we drew on realist approaches to develop programme theories, illustrating the activities and actions (mechanisms) through which particular outcomes were achieved (or not) in various Test and Learn site contexts. These were developed by researchers in WP3b in the form of If-Then statements, based on the learning from the embedded researchers through their interviews, formal observations and embedded activities in each of the Test and Learn sites over the course of the project. These programme theories added additional interpretive analysis to the descriptive themes identified in the Interim report (Haywood et al., 2023) and augmented by subsequent data collection. We then used a "following the thread" approach to explore and incorporate relevant findings from other work packages. At a two-day full team meeting, we worked through each of these emerging programme theories, refining the way they were conceived and the language used to describe them. For each programme theory, researchers from WP3a, 3b, 4, 5 and 6 then offered information from their findings which helped to support, refine or refute it, as well as existing research evidence which could help elucidate the concepts. These were gathered on post-it notes and photographed and informed the write up. In addition, WP3b researchers used a spreadsheet for each programme theory to provide more detail on the context of the site, activities/changes over the GSP programme, and any factors that supported or inhibited change, and the outcomes from these activities. These were synthesised across Test and Learn sites for each programme theory, together with relevant findings from other work packages.

What was delivered by the GSP Project?

3

This section describes what was delivered by the GSP project and provides context for the evaluation findings. It describes the ambitions of the T&L programme at the national scale. It then focuses on the seven T&L pilot sites. The ambitions, priorities, theories of change for the local T&L pilots are described. This is followed by details of the delivery strategies of the T&L sites, focusing on leadership and partnerships, the resources, and activities of the sites. The context and activities of non-T&L areas is described. The section ends by focusing on patterns of referrals to nature-based providers.

3.1. Context

In the initial bid documents, and related to the focus of the funding call, the T&L sites all highlighted a number of significant challenges faced in their localities. These included:

- Mental and other health challenges.
- Inequities in health relating to socio-economic status, ethnicity, age, gender and sexuality, and geographical in comparison to national average and between areas in their localities.
- COVID-19 recovery.
- Overburdened health and social care systems and staff, including Link Workers.

All T&L pilot sites had GSP 'happening' in their areas. In some areas it was described as 'well established' (e.g., T&L7), in other areas it was considered to be still establishing as a mainstream practice. However, GSP and linked systems lacked strategic coherence, in terms of a clear understanding of the ambitions through to efficient delivery, across the T&L sites at the beginning of the programme. T&L5 reported that GSP was not mainstreamed and embedded within key systems, noting that the offer was fragmented, with inequities in who was able to access it. Those areas that had undertaken audits of GSP referral pathways, such as T&L5, found patchy referral rates, some lack of understanding (and even negative attitudes) amongst key stakeholders, and a lack of alignment of key systems. A lack of 'robust' evidence indicating whether GSP was effective, and in relation to how to scale up and/or out of good practice, was also highlighted.

Nature based providers had been delivering health promoting activities in nature for many years, however they faced several specific challenges in contributing to the social prescribing system. These related to sustainable and predictable funding, capacity issues including the reliance on volunteer work forces, a lack of understanding and integration with the local social prescribing pathways, and, in some areas, a lack of support and coordination to meet the needs of the health systems. A key challenge identified by a number of the T&L sites was the perceived low level of referral to GSP via Link Workers.

The GSP programme was also happening against a context of wider systems change, especially in relation to health and social care.

Many sites also, and relatedly, highlighted the perceived underutilisation of natural environments as a health resource, and were seeking contributory actions to deal with adaptation to and mitigation of climate change and its impacts in their localities.

3.2. The GSP Test and Learn programme

As a response to the challenges described above, the 'Preventing and Tackling Mental Ill Health through Green Social Prescribing' Project, a two-year £5.77m cross-governmental initiative, focused on the development of systems to enable the use of nature-based settings and activities to promote wellbeing and improve mental health.

Integrated Care Systems (ICS) and Sustainability and Transformation Partnerships (STPs) were invited to become 'Test and Learn' (T&L) sites with the intention to test how to embed green social prescribing across localities. The specific aims were to:

- Improve mental health outcomes.
- Reduce health inequalities.
- Reduce demand on the health and social care system.
- Develop best practice in making green social activities more resilient and accessible.

Seven sites across England were selected to become Test and Learn pilots.

3.3. What did the national partners do?

In keeping with the goal of the HM Treasury Shared Outcomes Fund to test innovative ways of working across the public sector, the GSP Project involved a number of Government departments, non-departmental public bodies, a National Lottery distributor, and independent charities. Key partners in the GSP Project were: Department for Environment, Food and Rural Affairs (Defra), Department of Health and Social Care (DHSC), Natural England, NHS England, NHS Improvement, Public Health England (latterly OHID), Sport England, Department for Levelling Up, Housing & Communities (DLUHC) and the National Academy for Social Prescribing (NASP).

The project governance structure was adapted during the delivery of the project, but at its conclusion it included a high-level Programme Board (combining external stakeholders and senior government officials), a Steering Group (with operational oversight) and several working groups focussing on topics such as communications.

Although each partner played an active role in project governance and aspects of national project delivery such as policy and strategy development, a number of partners also played a specific role in the operation of the project:

- NHS England provided oversight of and support for the Test and Learn sites, led the development of a GSP toolkit to support future scale and spread, and contributed £500,000 in funding.
- Defra commissioned and managed the evaluation and led on project governance.
- Natural England embedded a regional advisor in each of the Test and Learn sites to support engagement with the environment sector. 0.5FTE for each regional advisor with additional FTE (manager) from the national team.
- Sport England supported the Test and Learn sites through the involvement of their strategic, county level affiliates and grant distributors the 'Active Partnerships' and provided £500,000 in funding.
- DHSC led a programme of national research, including several directly commissioned projects to address identified evidence needs in relation to outcomes and economic impact. This included studies to understand perceptions of GSP amongst the public and clinicians, and an assessment of the national GSP provider landscape. DHSC also worked with the National Institute for Health Research (NIHR) to commission three feasibility pilots for randomised control trials associated with GSP and nature-based interventions (one about angling for veterans with PTSD, one on outdoor swimming for mild to moderate depression, and one about nature-based activities for people with mild to moderate depression) and a research project on ethnic minorities and GSP. Once completed, these studies will have an opportunity to apply for funding for a full trial, pending the outcome of peer review.
- National Academy for Social Prescribing (NASP) supported the Test and Learn sites through its network of regional advisors and 'Thriving Communities' projects and contributed £500,000 in funding.

In addition to bringing financial resources to the GSP project the national partners also committed large amounts of staff time to support delivery, governance, and strategy development. A key focus of the partners' collaborative work was the development of future strategy to support the scale and spread of GSP, including the development of a toolkit based on key learning from the project and inclusion of GSP in key cross-government strategies (discussed further in Chapter 4).

It is important to recognise that the national partners were also key actors in the Test and Learn sites themselves, notably through the support provided by NHS England. Key elements of their role included strategic engagement and leadership through regular meetings with Test and Learn site leadership teams and supporting them to work and think differently about their approach to systems change. There were also other activities including presentations and support at site events to provide the national picture, validate the work and provide national endorsement for GSP with senior leaders in Integrated Care Systems (ICS) and other partner organisations.

National partners were also involved in significant levels of 'behind the scenes' briefings and awareness raising with their own organisations. Within the NHS, for example, this related to the Greener NHS, Mental Health Teams, Children and Young People's Mental Health Teams, and Strategic Transformation Team. Where possible, they were also able to link colleagues from these teams to the Test and Learn sites to provide information about their workstream. The partners have also engaged regularly with the All Party Parliamentary Group for Health and the Natural Environment to raise awareness of the GSP Project within Parliament.

Advocacy and policy positioning was also a key feature of the national partners' work, which has enabled them to get GSP included as case studies or embedded in cross governmental policies or strategies. For example: GSP is mentioned in the current

update on the Mental Health and Wellbeing Strategy (10 Year Mental Health and Wellbeing Plan); is an explicit commitment in the Environmental Improvement Plan; and is included as a case study in the NHS England Statutory Guidance to Integrated Care Systems, the Levelling Up Parks Fund and the Fourth Annual Loneliness Report which reviews progress since the strategy was launched in 2018. Social prescribing, including GSP, is also expected to be included in the forthcoming Major Conditions Strategy which will signal the government's intention to improve care and outcomes for those living with multiple conditions and an increasing complexity of need.

Finally, the partners have undertaken a range of wider advocacy and awareness raising activities around GSP including the development of a series of assets and resources such as films, case studies, GSP collaboration platform, a soon to be launched 'Green Hub' on NASP website, a GSP toolkit and an advocacy toolkit. They have also supported a number of GSP communications campaigns associated with key events such as national and international Mental Health Awareness Weeks, National Gardens Week, Chelsea Flower Show, Earth Day, and COP26. Other key activities included the GSP Project 'One Year On' event to showcase the learning from the first year of the project and the hosting of community of practice sessions for Test and Learn sites and external parties interested in learning about GSP.

3.4. What did each GSP Test and Learn site do?

3.4.1. Ambitions

The ambitions of the T&L pilot sites were plural, with complex nested objectives (see Table 14: T&L pilot sites ambitions).

Most T&L sites aimed to raise the profile of GSP and affect systems change to join up health and social care systems with nature-based providers, to connect more people from more diverse populations with nature and reduce health inequalities (Table 14). A key aim was to improve the referral pathways, increase the numbers of and appropriateness of referrals, while ensuring adequate flexibility to respond to the dynamic context in which GSP (and SP more widely) happens. Increasing the capacity, knowledge, skills, and networks of the green providers was a primary ambition of all T&L sites. Most T&L pilot sites were also keenly aware of the need to ensure that GSP is sustainable, particularly in relation to the complex mechanisms of funding for nature-based activities and providers. For some sites there was an intention to consider how long-term funding could be secured.

All sites aimed to increase GSP. This was to be directly through the specific funding, using GSP T&L pilot funds, of delivery in key target areas or for specific groups (see following section). The ambition to increase GSP was also to be achieved through the critical foundational pathways of strengthening the system, addressing issues such as funding and referral pathways. A key consideration was to ensure equity in take up and benefit. Through the increase of GSP, there was a hope that the programme would tangibly improve the health of the individuals and communities within the T&L pilot localities. Some T&L sites aimed for a secondary impact of supporting communities to be healthy through increased accessibility of greenspaces and increased connection to nature. Through these activities there was an ambition to reduce the burden on the health system.

These activities were intended to build towards the ambitions to better understand what was needed for, and then to undertake the scaling up and out of GSP. This ambition related to both the scale of provision (geographically) and in regard to the types of health conditions it was being used for. Local Theories of Change were developed for each of the seven Test and Learn sites and are provided in the appendices.

Table 14: T&L pilot sites ambitions (taken from site summaries)

T&L site	Ambitions
T&L1	To embed green providers and activities in social prescribing systems (and wider systems of health and care) across [locality]. Currently, different areas within [locality] are at different stages of development with social prescribing (and therefore 'green' social prescribing) so there is an emphasis on using the programme to share learning between areas. There is hope that by the end of the programme they have been able to 'level-up' the provision of and access to green social prescribing so that there is a 'minimum' acceptable level across the [locality's] footprint. There is good evidence from the engagement undertaken so far that green providers want to be part of the system, but that referrals and funding need to flow more effectively through to providers to make green social prescribing and green activities sustainable.
T&L2	• To affect System change: aim to join-up existing green activities, assets, and providers with the [locality] social prescribing 'system(s)' and wider systems of health and social care within the Integrated Care System (ICS). • Improve (equity of) access to green space through green social prescribing, particularly for the target communities. • Better recognition of the impact and benefits of green social prescribing (and SP more generally) within health professions. • To improve the capacity of green providers.
T&L3	To improve the mental health and wellbeing of communities hardest hit by the COVID-19 pandemic, by connecting local people with nature-based activities and green community projects and initiatives. The programme aims to develop a 'green ecosystem' of social prescribing, building on existing activity, developing new pathways, and sustaining activity after the project finishes. Key outcomes are: • People in the health system value and understand green social prescribing. • Increasing nature connectedness and social interaction among participants. • Enhanced capability and capacity within the community and voluntary sector in relation to green social prescribing (investing in VCS providers as infrastructure for referrals).
T&L4	To create a joined-up approach across the [locality] using green social prescribing to better support and improve the mental health and wellbeing of local communities. [The locality] will know if they have achieved this when a) green social prescribing is a valued and sustainable option as part of a menu for supporting mental health and wellbeing, when b) every person, in every community in [locality] is aware of the benefits of spending time in nature and can access green space wherever they live and whatever their circumstances. Enabling the vision will require changes at several 'layers' of the system which may not all happen within the scope of the T&L, but which will be worked toward. This summary outlines current ambitions.
T&L5	To bring together [the locality's] complex and varied green sector with the extensive social prescribing infrastructure to create a collaborative approach to green social prescribing that is easily communicated, adopted, and scaled. In doing so, this will embed green social prescribing across [the localities] as a valued and genuine offer for personal health and mental health, with GPs making green social prescribing referrals as much a part of their routine practice as prescribing medicines. To have green social prescribing widely commissioned with the necessary capacity of quality destinations that provide communities with the interventions they need. This would ensure the target groups are engaging, and that the right people are being reached. Work with sites will combine four key elements: Addressing inequalities,

	improving access, protecting, and enhancing the environment, and promoting volunteering. Ensuring sustainability of green social prescribing beyond the life of the programme is also an aim.
T&L6	To address the system wide barriers to the systematic use of greenspace for health and wellbeing, and to inform local and national learning by focusing on: • Connectivity: Developing a Green Health and Wellbeing Network. To connect over 100 partners in a cohesive system-wide approach. It aims to ensure residents at increased risk are connected to green and blue opportunities (including waterways and reservoirs), matching supply and demand. • Access: The Network plans to co-design and co-produce approaches to overcome barriers and increase access to green opportunities, including for those in urban and residential settings. It will build community capacity to lead culturally relevant green opportunities and help the green sector become a more accessible place for the diverse population. [The locality] aim to deliver their proportion of the £2bn NHS saving per year which Natural England identified could be achieved if everyone had access to good quality green space. • Quality: The Network aims to develop a quality standard for green social prescribing, so that the approach can be rolled out at scale. It will establish a baseline and work with an academic partner to capture and build an evidence base for the impact of nature on health and wellbeing, especially for disadvantaged groups who may have poorer health and wellbeing. [The locality] aim to maximise their natural capital and help deliver objectives of the 25-year Environment Plan. • The model of green social prescribing developed will aim to be sustainable after March 2023.
T&L7	To improve the lives of people across [locality] through green social prescribing, with a focus on developing healthy, inclusive, and sustainable communities.

3.4.2. Priorities

The priorities of the sites differed somewhat (see Table 15) and responded to the local context, specific challenges and the ambitions of the stakeholders involved in each locality.

All sites explicitly recognised the value of existing activities and intelligence within localities, and aimed to both recognise and build on established systems at the various local, community, locality, and regional levels.

T&L1 was qualitatively distinct in aiming to evaluate both the recruitment and the journey of a designated cohort of people on existing mental health waiting lists, alongside investment to provide a platform to VCSE providers of Green and Blue Social Prescribing to reach a wider community-based need.

T&L2, T&L5 & T&L6 included mapping, scoping and co-design in the development of their GSP offer, focussing specifically on strengthening existing SP pathways and connecting with their priority cohorts. Likewise, T&L4's stated ambition was to create a joined-up approach across the locality using GSP to better support and improve the mental health and wellbeing of local communities through the use and development of green space, by supporting people to feel confident and encouraging them to become active participants in the natural world. Learning and feedback was a key part of this ambition.

Learning and education clearly underpinned ambitions across all T&L sites. Sites aimed to realise these ambitions through designing and delivering training programmes for health care professionals, Link Workers, and provider organisations alongside building green networks, investing in GSP activities through targeted project funding, communicating the benefits of GSP to the public and working collaboratively with the national programme to support learning and embeddedness for the whole programme.

Making GSP 'the norm', or 'business as usual' and embedding green social prescribing into policies, working practice and delivery through whole scale system change was an explicit ambition for T&L3, T&L5, T&L6 and T&L7. T&L3's vision was to weave a web connecting people, places, and projects into a green eco-system with a city-wide, hyper-local and individual approach. At the city level, this would be via a range of accessible gateways into experiences with nature with health, care and community professionals gaining knowledge and skills to offer a well-designed green prescription building nature connections. At the hyper-local level, T&L3 planned to harness community assets and neighbourhood partners to connect and empower people to get involved and their local part of the green eco-system. On an individual level, T&L3 planned to support access both physically and digitally.

For T&L6, this embeddedness meant establishing an at-scale system-wide collaboration, modelling wide stakeholder engagement from multiple sectors, and embedding the green sector within T&L6's health and care system. Alongside this system change, T&L6 had priorities to focus on geographic and thematic communities who experience inequality, including those in rural and urban areas and people from ethnic minority backgrounds, to understand barriers in accessing green spaces for residents at risk through engagement and co-design, to create a database of existing green opportunities that can be accessed by the public and professionals to aide referral to green opportunities. In addition, T&L6 aimed to increase the take up of nature referrals by building on existing social prescribing models through a robust green social prescribing pathway, model green opportunities at a range of spatial and scales, from hyper-local community projects based in streets and neighbourhoods, to regional initiatives at landscape scale, co-design green opportunities and embed users

within the governance, rapidly capture and learn from existing green social prescribing initiatives available within the locality including forest bathing, dementia walks, therapeutic youth interventions, test new innovative approaches informed by co-design with users and evaluate impact using qualitative and quantitative techniques supported by an academic partnership, use learning to develop and roll out evidence-based at scale models across the population and inform shared policy and delivery, and develop an evidence base that demonstrates social prescribing as one of the high impact actions and irrefutably secures the future of green social prescribing in the locality, especially in relation to mental health.

The ambitions of T&L7 centred on building on existing social prescribing networks and green health networks, so that - rather than reinventing the wheel – they were developing on skills, knowledge, and enthusiasm within the locality to fully embed green social prescribing across the system. T&L7 aimed to firmly establish health and nature as a golden thread across their health and care offer. As well as forming part of the system response to addressing health inequalities. Maximising on collaborations across the NHS, wider health and social care, and a diverse range of environment and nature organisations, T&L7 specifically focused on whole population support to develop infrastructure to embed green support within health and care (including ensuring that social prescribers, as well as the public, are aware of and linked into initiatives using local green spaces), targeted, location-specific support based on four locations and harnessing coproduction and community assets, embedding green health within their wider referral pathways via the new Community Mental Health Framework and within their sites of health and social care.

Table 15: Population and geographical priorities

T&L pilot site	Population priorities	Geographical priorities
T&L1	Clinical cohort: • Funding was open to organisations/groups for projects under the broad remit of 'improving people's mental and physical wellbeing through activities that occur outdoors and in nature'. • The cohort was aimed at individuals with identified low to moderate health issues accessing social prescribing and mental health services (although approximately one third self-referred). • The clinical cohort initially had an age limit of 65 for participation but this limit was removed following recruitment challenges in particular parts of the region. NHS Charities Together (NHS CT) funding: • Funding to work with ethnic minority groups across health care partnership to co-design GSP activities and evaluation with their communities (this work is currently underway following delays in the funding being released from NHS CT).	• All six geographical areas across [the locality]. • Project aimed to embed GSP across the whole region. • Clinical cohort: – Projects funded across each of the six areas within [the region]. – Project engaged with social prescribing services (NHS and VCSE) and all four mental health service deliverers across the region.
T&L2	Focus on people with mental ill health and those living in areas of high deprivation, ethnic minority communities, young people, and those who are clinically extremely vulnerable.	Five key target urban areas across [locality].
T&L3	A mix of specialist, targeted and universal coverage: • A universal offer delivered through Link Workers and greenspace organisations and integrated into the healthcare system via PCNs and GPs. This will be supported by the Canal & Rivers Trust, working with local organisations, and building on existing activity. • A targeted hyperlocal offer in the three targeted neighbourhoods to develop 'mini green ecosystems'. The approach is to engage existing organisations, explore opportunities, and then create new services or referral pathways. • A specialist offer for individuals with complex needs, working via [locality] Housing Association's Nature in Mind programme.	Three targeted, disadvantaged neighbourhoods across [locality]. [Locality] city; and [locality] county.
T&L4	Population focus: Four broad (and interacting) cohorts: • People in areas adversely impacted by wider determinants of health and wellbeing (6 x wards identified).	No specific geographical focus. To work across [locality] in the footprint of the Integrated Care System.

	• COVID-19 negative impact on jobs, opportunities, and mental health. • People claiming employment and Support Allowance. • Children, young people, and families across locality (5 x wards identified). The initial target was where these overlap.	
T&L5	The approach will be to position [the locality's] activities on the spectrum of mental health needs and not overreach to begin with. Initially, the service is likely to target the mild and preventative mental health issues so that systems can be developed and tested. In the longer run, destinations will have the skills and capacity to provide specialised interventions at all levels of need.	Main localities will be those where the four sub-Test and Learn sites. However, there is intention to grow the programme and reach other areas throughout the two years. The [locality] initiative will also bring in the wider sector across all localities, building capacity and sharing resources and the learning from programme delivery.
T&L6	Specifically targeted ethnic minority groups, people with learning disabilities, people living with dementia and their carers, people with mental health diagnoses, and mental health and wellbeing. Green social prescribing initially focused on the most deprived communities, those at increased risk of poor health and wellbeing, and those most disadvantaged due to COVID-19 in [locality], with a view to replicating and scaling up across the county.	Initial focus on the four most deprived communities in [locality].
T&L7	Whole population support: Develop infrastructure to embed green support within health and care (including ensuring that social prescribers and the public are aware of, and linked into, initiatives around local green spaces). Specific communities of need: • Health inequalities - ethnic minority groups, Disability, Excluded CYP, isolated older people, people being supported by social care. • Strategic Partnerships – IAPT, main Mental Health Trust, MHSTs, SEND Clusters.	Four location-specific projects across locality which offered the activities, support and resource required to scale up green social prescribing.

3.4.3. Theories of change

Theory of Change (ToC) models were co-produced for each Test and Learn site (see appendices) and for the national partners. They describe the vision, current status and needed changes, resources, activities, and aims regarding medium- and longer-term changes. The site based ToCs were synthesised to create a generic ToC model that describes the shared vision, current status and required changes, resources, activities, and aims regarding medium- and longer-term changes Figure 2.

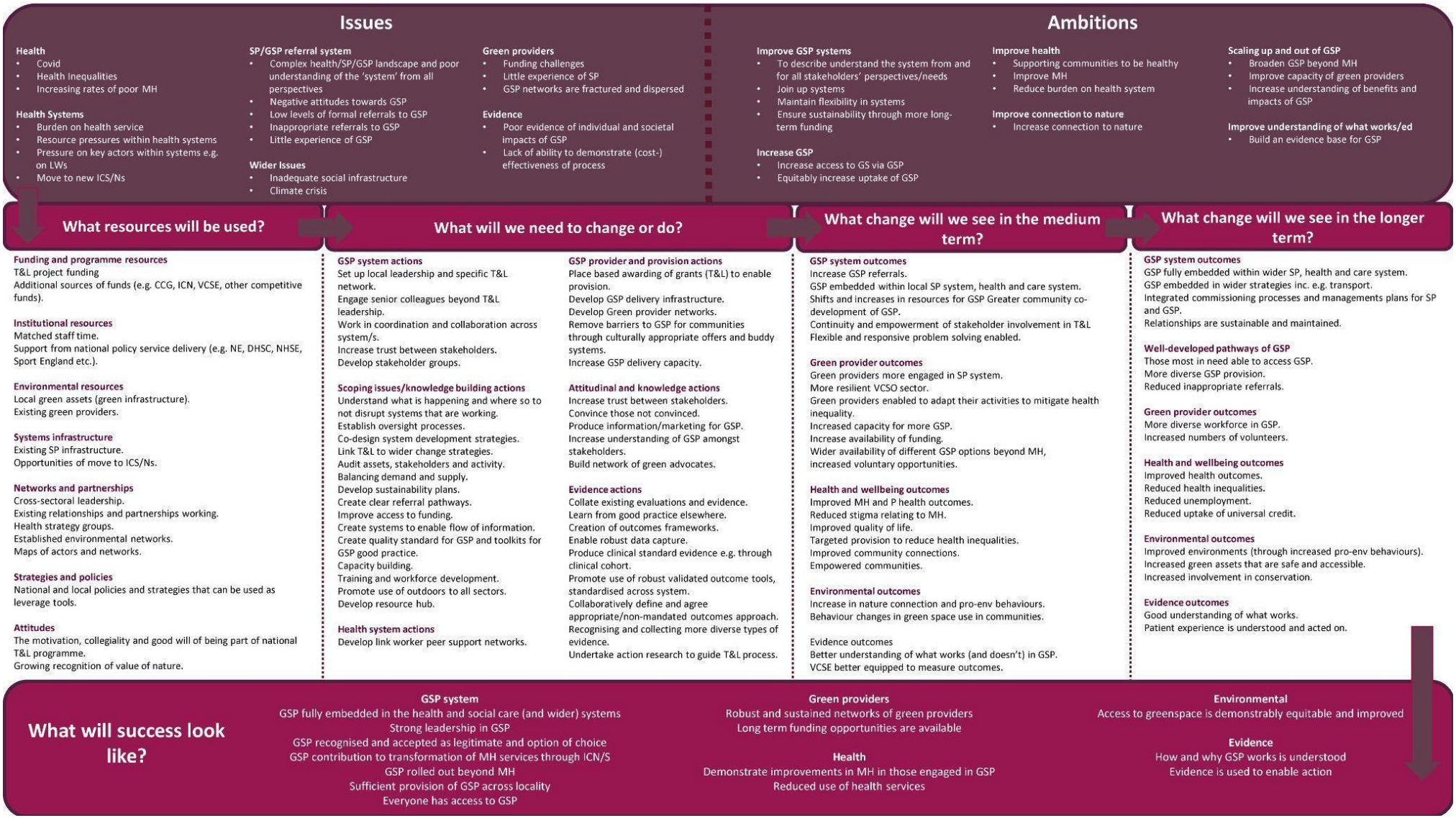
Changes needed to meet the ambitions of the GSP project and achieve successful GSP systems identified by the Test and Learn sites included: generating better evidence as a mechanism to influence more clinician buy in; building links (within the health system and beyond it), and aligning with broader organisational structures and cultures, strategies and programmes (within the health system and beyond it), in order for GSP to be embedded; clarification of referral pathways and more effective connection between Link Workers and providers; increased capacity in nature-based activity provision; raising awareness among communities about nature-based activities and ensuring equitable access through addressing barriers such as childcare and transport.

Sites identified a range of medium and long-term outcomes for the system, the community and the individual including:

- Establishing trusting relationships and partnerships within the system and enabling ongoing collaboration around GSP.
- GSP becoming better understood, accepted, and valued as a viable option (particularly for prevention) by health care professionals and the healthcare system leading to greater likelihood of it being embedded in health systems.
- Sustainable funding (including direct commissioning) contributing to improving capacity; improving service user pathways.
- Increasing awareness and understanding leading to equitable uptake of GSP offers by the community; and GSP practices becoming environmentally sensitive.

Several sites aimed to increase understanding, awareness of, equitable use of, and connectedness with, local green and blue space, with the aim of improving mental health outcomes. Focusing on the upstream determinants of mental ill-health – particularly in terms of inequalities in access and in health – is seen as a key mechanism through which GSP can impact mental health outcomes, in that this will lead to empowered and resilient communities.

Figure 2: Synthesised Theory of Change for the Test and Learn pilots



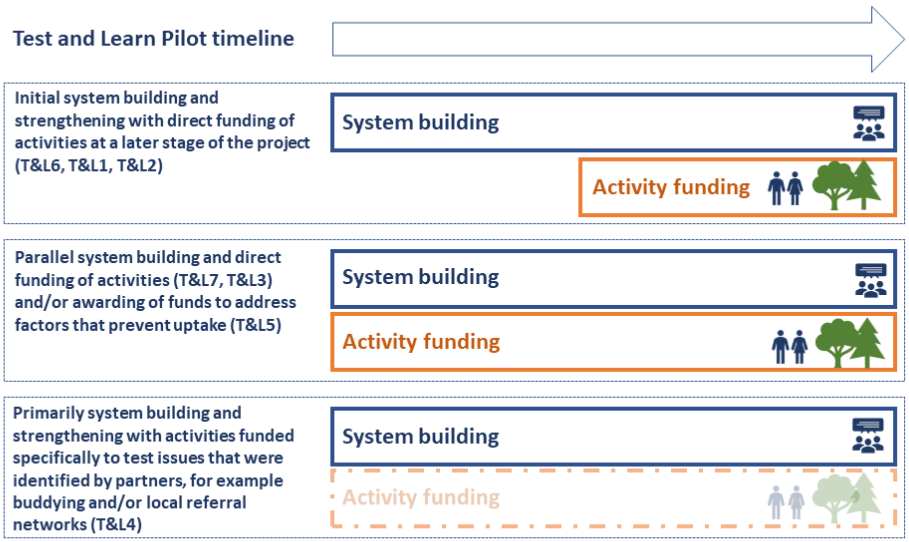
3.5. Strategies for delivery of the pilot programme

3.5.1. Strategic approach taken by the Pilot sites

There were three key approaches taken by the T&L pilot sites (illustrated in Figure 3):

- Initial system building and strengthening with direct funding of activities at a later stage of the project (T&L6, T&L1, T&L2).
- Parallel system building and direct funding of activities (T&L7, T&L3) and/or awarding of funds to address factors that prevent uptake (T&L5).
- Primarily system building and strengthening with relatively little to no direct funding of activities or other factors (T&L4).

Figure 3: The three key strategic approaches to delivery



3.5.2. Leadership and partnerships

As can be seen in Table 16, leadership came from a plurality of sectors. All sites took an inherently collaborative approach to delivery and as such a wide variety of stakeholders were involved. While this differed between areas, depending on the specific context and ambitions of each site, typically the following groups were involved:

- **Environment**: local authority environment departments (e.g., parks); AONB and National Park authorities etc.); environmental charities and NGOs.
- **Health**: public health (local authority) and ICBs; NHSE; GPs and other primary health care; Link Workers; mental health trust/services; social care and related; private healthcare (e.g., therapists); and health and/or social care charities and NGOs.
- **Communities**: representative charities and NGOs; community groups.

Table 16: Key T&L stakeholders by sector in T&L programme leadership roles for each site

	Local authority					NHS and health system						Others				
Key: *0 (no - v little involvement)* *1 (some involvement but not core leadership)* *2 (significant involvement inc. leadership)*	Environment department (parks, AONB etc.)	Health department	Social care, older people etc.	Communities	Active Partnership	Mental health trust/services	GPs and other primary health care	Secondary health care	Link Workers	Private health care (e.g., therapists)	Commissioners	National parks authority or similar	Environmental charities and NGOs	Health and/or social care	Community groups	People with lived experience
T&L Site 1	0	1	0	0	0	1	0	1	1	0	0	1 NE	2	3	2	0
T&L Site 2	0	1	0	0	0	1	1	-	1	0	0	1 NE	-	-	-	0
T&L Site 3	0	1	0	1	0	2	1	0	2	0	2	1 NE	2	1	2	2
T&L Site 4	0	2	1	0	1	1	1	1	1-0 *	0	0	1 NE	1	0	1	0
T&L Site 5	1	1	0	0	0	0	0	0	0	0	0	1 NE	-	-	-	0
T&L Site 6	2	1	2	2	0	1	1	0	2	1	0	1 NE	1	1	1	0
T&L Site 7	2	2	2	2	0	2	2	2	2	2	0	2 NE	1	1	1	0

*left leadership group

3.5.3. Resources

Beyond the direct T&L pilot programme funds the sites have drawn on a variety of resources. As is detailed in a later chapter, many of the T&L sites were successful in achieving additional funding from a variety of sources. In some cases, this was competitive funding schemes, for others additional funds came from the Integrated Care Board (ICB) or Clinical Commissioning Group (CCG). System infrastructure, including that of the social prescribing system, was drawn upon to support delivery.

Project resource also came in the form of matched staff time, secondments, and support from national policy service delivery (e.g., NE - see previous section on National Partner activity). The motivation of being part of the national T&L programme and goodwill of the stakeholders involved was also framed as a resource. Networks and partnerships, existing relationships across systems, and cross-sectoral leadership was also seen as a resource to deliver the project. Several sites drew upon the opportunities offered by health and/or environmental strategy groups. These were understood through mapping exercises, the results of which were then used as a resource to help define priorities and ways of working.

The cross sectoral and departmental policies and strategies of the stakeholders were used as a tool to enable and leverage activity related to the T&L pilots.

Through the development of the Theories of Change the T&L sites also expressed the environmental assets – including general categories of resource such as greenspace and green infrastructure, through to specific sites ranging from national parks to allotments - as project resources that were used to deliver the aims of the project.

Finally, the growing evidence base and societal recognition of the health values of nature were used instrumentally as resources to support T&L strategy and activities.

3.5.4. Activities

The funds allocated to the project, in addition to the wider resources (as detailed above), were used to support a wide variety of activities. Table 17 provides a high-level breakdown of how the T&L programme funds were used for different activities. Table 18 describes how comprehensive activities were for each T&L site.

Table 17: Uses of funds

Activity	Approximate % allocation of total funds across T&L pilot sites
Infrastructure	3%
Project Management	39%
Co-production*	7%
Nature-based providers**	42%
Developing Green Network	2%
Local Evaluation	3%
Training and development	2%
Admin and Coms	<1%
Integrated Care Team (ICT)	<1%

Source: Management information collated by NHS England Social Prescribing Team.
*In some sites, investment in nature-based providers included resource to undertake co-production, so these costs are not included in this row.
**Some sites made additional investments in nature-based providers under other cost categories, for example as part of co-production and delivery of training.

Sites undertook specific activities aimed at developing, expanding, and embedding the GSP system in their locality. This included: setting up local leadership and networks specific to GSP within the T&L site; engaging with senior colleagues beyond the explicit T&L leadership team; working to coordinate activity and work collaboration across system/s; working to increase trust between stakeholders; and developing stakeholder groups.

As was detailed in the interim report there was a plurality of different approaches taken to build or strengthen GSP related systems. In most cases funds have been used for costs for project management and a range of support posts. Other activities include funding:

- Leadership positions including T&L pilot project managers.
- Funding for staff for project coordination.
- Governance mechanisms.
- Participation of community members, people with lived experience, or priority group representation in delivery.
- Evaluation, evidence, and best practice reviews.
- System mapping and strengthening including building referral pathways.
- Key priority group mapping needs assessments.
- Set up or strengthen practitioner (Link Worker or nature-based provider) networks.
- Data systems.
- Trusted provider schemes.
- Communications and marketing.
- Training.
- Future planning and proofing activities, succession plans.

Sites aimed to scope issues and build knowledge about GSP in their locality. They wanted to improve their knowledge about what was already happening, and where it was happening so as not to disrupt systems that were already working. This included auditing local assets, stakeholders, and activity, using co-design strategies to develop GSP, creating systems to enable the flow of information between stakeholders, developing resource hubs and supporting workforce development, capacity building, and training. Link Worker peer support networks were developed. Quality standards and toolkits for GSP good practice were created. Sites sought opportunities to link GSP to wider change strategies and to promote the use of the outdoors to all sectors. Oversight processes were established. They aimed to create clear referral pathways and ensure that supply and demand for GSP was balanced. Methods of improving access to funding were explored and sustainability plans developed.

To support local nature-based provider organisations to provide activities to support mental health as part of GSP, sites awarded grants using GSP project funds to local organisations and developed GSP delivery infrastructure. Sites which directly funded nature-based activities have taken different approaches. Two sites have focused on a small number of key providers with whom they are working closely to develop the activities. Others have taken an open funding approach, where priorities have been shared and local delivery organisations have bid for funding to deliver activities or support access. These different approaches can help explain why there is such a difference in the number of nature-based projects funded between sites (from two to 52) and should be noted when interpreting the outcomes data (See Chapters 4, 5 and 6).

In a small number of sites, funds have been used on GSP infrastructure such as allotments. Where funds have been used to try and address barriers to uptake a range of activities have been reported - this includes three sites where activity has been reported but is not consistent. These include buddy systems, (for both supports to join activities, as well as between referrers and activities providers), funding resources such as coats and wellies, and transportation. In addition, funding has gone to organisations that support training for nature-based providers, or to support a trusted provider programme. Table 18 provides an informal assessment of the extent of different activities by T&L site.

Table 18: Tangible activities by providers, Link Workers and system actors (ER assessment)

	GSP Providers					Link Workers						GSP system				
Key: *0 (no* activity) *1* (activity reported but not extensive) *2* (extensive activity)	Compilation of offers (green book, list, database)	Assessment of need differentiation ('levels')	Network of provision / community of practice	Funding reached providers through grant programme	Training offered to providers	Training offered to Link Workers	Targeting' for inequalities	Taster sessions offered	Tech solution engaged (Elemental/Joy)	Triage element included	Support mechanisms (transport/buddying)	Co-production activities	Evidence generation activities	Agreed or future external funding	Training offered to system stakeholders	Inclusion of GSP in key strategies (ICB/Other)
T&L Site 1	0	1	1	2	1	2	1	1	0	1	1	0	2	1	2	1
T&L Site 2	1	1	2	2	2	2	2	1	1	1	1	2	2	2	2	2
T&L Site 3	2	2	1	1	1	1	2	1	1	1	1	1	1	1	1	2
T&L Site 4	2	2	2	1	1	1	1	1	1	1	1	0	1	1	0	0
T&L Site 5	1	1	2	1	2	2	1	2	1	1	2	1	1	1	2	2
T&L Site 6	2	2	2	2	2	2	2	2	2	1	2	2	2	2	2	2
T&L Site 7	2	2	2	2	2	2	2	2	2	1	2	2	2	2	2	2

3.6. What was happening in other areas?

During the evaluation, we engaged with key stakeholders from the public and VCSE sectors in 13 areas of the country who had not received GSP project funding but where we understood there to be interest in growing green social prescribing in similar ways to the Test and Learn sites. Four areas were interviewed twice (in early 2022 and early 2023), a further three areas were interviewed in 2022 and six areas were interviewed in 2023. The evidence from these areas highlighted how they identified many similar challenges to the Test and Learn sites but found it harder to overcome these without significant investment. None of these areas had received equivalent investment in GSP to the Test and Learn sites to develop GSP systems and processes.

Key challenges identified by these areas included: fragmentation across the GSP and wider social prescribing system; funding and capacity for nature-based providers, many of whom were reliant on short-term and piecemeal income streams, which led to a high turnover of staff and made relationship building, awareness raising, and training very difficult; duplication and competition between nature-based providers, which created uncertainty about how and to where referrals could be made; safeguarding, in particular ensuring that staff were sufficiently skilled and experienced in dealing with complex mental health needs; and evaluation and data collection, to demonstrate the reach and outcomes of GSP to senior decision makers.

To try and overcome these challenges these areas were enacting strategies to enhance collaboration between the NHS, local authorities and VCSE sector and exploring where funding could be attracted from other sources. There were also prioritising neighbourhood-level working through devolved local authority structures and developing community assets through approaches such as Asset Based Community Development. However, progress was much slower than in the Test and Learn sites, mainly due to a lack of strategic investment and prioritisation from within the Integrated Care System or wider partners.

In the four areas we revisited in 2023 some progress had been made, particularly in terms of getting GSP recognised and referenced in key strategies including those associated with prevention, mental health transformation, parks and physical activity. Participants also reported that they have made some progress developing networks and relationships associated with GSP and had begun developing strategies for future development. In one area a number of ‘green Link Workers’ had been appointed to focus on increasing referrals and making links to nature-based activities, but there were very few concrete examples of major investment in GSP systems or delivery.

Overall, in the areas that hadn’t received GSP project funding, progress to scale, spread and embed GSP was much slower than in the Test and Learn site areas. This highlights the catalytic role that GSP project funding has played in supporting the pilots to develop and grow GSP, and the importance of further strategic investment in other areas if the ambition to scale, spread and sustain GSP across the country is to be realised.

3.7. Understanding who is accessing GSP

For the National Evaluation, we can only analyse the monitoring data provided by sites which is a proportion of people who are accessing GSP. The data enables us to explore patterns of who is accessing GSP, the support they receive and impact. However, the data does not capture everyone who is accessing GSP, nor do we know how representative the data is. NHS England through their programme monitoring did collect some aggregate data on who accessed GSP. NHS England reported that 8,339 people received support from GSP during the lifetime of the programme. This figure

highlights the scale of GSP. The numbers supported by individual T&L sites varied considerably from 119 (T&L4) and 2,240 (T&L2).

For the remainder of the analysis, we will focus on reporting the monitoring data provided by T&L sites to the National Evaluation team. Whilst this is a smaller sample than reported by NHS England, it provides detailed information on who is accessing GSP, their GSP journey and impact on mental health outcomes.

3.7.1. The role of Link Workers

Link Workers, whether they are based in primary care or voluntary sector organisations, are a key part of the GSP referral process because of their potential role in supporting people to access nature-based activities. Given this, the national evaluation sought to understand who was accessing Link Workers, the referral routes to Link Workers and onward referrals to nature-based activities.

However, as explained in the appendices, it is challenging to collect Link Worker data because (1) Link Worker data systems are still being established (2) there are multiple Link Worker service providers in each T&L site which no consistently of monitoring data systems (3) The GSP programme has no contractual 'right' to access Link Worker data and it relies on relationships between PMs and local providers. (4) PMs prioritised collecting data from nature-based providers that they commissioned. Furthermore, two sites that provided data for the interim report did not provide an updated Link Worker dataset for the final report. This was because they either had not found the data useful to inform their delivery of GSP or because the data they were provided from Link Workers was difficult to process and utilise once numbers increased. Whilst there is limited data provided to the national evaluation, the PMs in all the sites have used their experiences of trying to access Link Worker data as a springboard to have both local and national conversations to improve the quality of Link Worker monitoring data.

The Link Worker data provided by T&L sites differed considerably in the period it covered and who it included. Consequently, it was not appropriate to combine it to provide a cumulative Link Worker dataset. In terms of the Link Worker data received it included:

- T&L2 provided data up to June 2022 for one social prescribing service and it only included people who had received a nature-based referral.
- T&L5 provided data up to June 2022 for their nature-based triage link workers. They specifically supported people to access nature-based activities rather than being generic link workers.
- T&L1 provided data throughout the evaluation period but only included people who had been referred to a nature-based activity and consented to participate in the cohort study.
- T&L4 provided some Link Worker data from the Joy dashboard for a small number of Link Workers. The latter included monitoring data collected by the Link Workers as part of their own service processes so did not include the national evaluation variables.
- The T&L2&5 data was presented in detail within the interim report. T&L4 data provides limited information. Consequently, in this section we focus on a narrative discussion of the data, comparing and contrasting sites where appropriate.

3.7.2. Demographics of people receiving Link Worker support

Gender: Amongst all four sites, more females than males were supported. For example, in T&L4, 63% were female (n=1871/ 2971) and in T&L1, 58.7% (n131/223)

were female. This gender imbalance is common within social prescribing services and there is a need for a wider system approach to develop methods for engaging men in GSP and social prescribing generally.

Age: Link Workers were generally supporting adults of diverse ages. The Link Workers which provided data were generally not supporting people under 18 years. This is partly because there are usually specialist Children and Young People Link Workers and because in T&L1, they were only consenting people aged 18 or older to be in the cohort study. In T&L1 adults were recruited from across the age spectrum including people of working age (Table 19). In contrast, in T&L4, who provided Link Worker data for all clients, the mean age was 58 years old. This could be an indication that whilst Link Workers will often support people across the age range, they tend to support older people. In contrast, GSP may be supporting a younger population, partly because of the focus on mental health and potentially because of the potentially more active aspect of nature-based activities.

Table 19: Age profile of people accessing Link Workers in T&L1

Age Category	N= 221 (%)
<18	0 (0.0)
18 – 24	24 (10.8)
25 – 34	36 (16.1)
35 – 44	39 (17.5)
45 – 54	52 (23.3)
55 – 64	43 (19.3)
65 – 74	21 (9.4)
75 – 84	3 (1.3)
85+	3 (1.3)

Ethnicity: The ethnic profile of people being supported by Link Workers varied between the sites, reflecting local geographical profile. For example, in T&L 1, 96.8%, (n=213/ 220) of participants were White British. In contrast, in T&L5, 79.1% of people were White British (n=231/393) and 11.7% people identified as being Asian/Asian British- Pakistani (37/393). The GSP programme has sought to engage people from ethnic minorities through funding targeted nature-based activities and there could be scope to consider this approach in respect of Link Workers.

Socio-economic deprivation: Link Workers were supporting people living in the most socio-economically deprived neighbourhoods. For example, in T&L1, 56.6% (n=114/201) lived in the third most socio-economic deprived neighbourhoods. This is positive as indicates that through GSP, Link Workers may be reaching people living in more socio-economic deprived areas. This is important because typically Link Workers have supported people living in more affluent neighbourhoods (Social Prescribing Observatory).

Employment and Education status: T&L1 collected data on employment and education, (Table 20), There was a considerably greater proportion of people unable to work because of disability/ill health than the UK average. Amongst participants, 28.4% (n-63/222) were not working due to disability/ill-health compared to the national average of 17.7%. Education status was comparable to national averages.

Table 20: T&L1 Education and employment

Characteristic	N=222 (%)
Education	
None	25 (11.3)
GCSE/O-Level or Equivalent	62 (27.9)
A/AS Level or Equivalent	27 (12.2)
Diploma / Foundation Degree or Other Level 5 Qualification	50 (22.5)
Undergraduate Degree with Honours	24 (10.8)
A Higher Degree (e.g., master's or PhD)	8 (3.6)
Other	9 (4.1)
Prefer Not to Say	17 (7.7)
Employment	
Full-time-paid work (30 hours or more each week)	32 (14.4)
Part-time paid work (under 30 hours each week)	31 (14.0)
In education or training	2 (0.9)
Unemployed	36 (16.2)
Voluntary Work	13 (5.9)
Unable to work because of long-term disability or ill health	63 (28.4)
Retired from paid work	33 (14.9)
Looking after the family or home	7 (3.2)
Other	5 (2.3)

Health conditions: Over three quarters of people being supported in T&L1 had a physical and/or mental health condition that was detrimental to their daily lives (79.9%, n=179/224). This is important because it highlights that the service is reaching people with specific health needs who may benefit from GSP. It also has implications for people accessing nature-based activities, because within the questionnaires, stakeholders raised concerns about the challenges people with physical and/or mental health issues may face when accessing nature-based activities. These included accessibility and whether providers had the sufficient skills/resources to meet people's specific needs.

Mental health of people being supported by Link Workers: Almost three quarters of people being supported in T&L1 had mental health issues (73.1%, n=165/224). This indicates that GSP is engaging people with mental health needs, which was a key objective of the programme.

Table 21: T&L1 Health status of people accessing GSP - Health conditions

Health Condition	N=224 (%)
Any Health condition (one or more of the below)	179 (79.9)
A mental health condition such as depression or anxiety	165 (73.7)
Any other long-term illness or health condition that has lasted, or is expected to last, at least 12 months	46 (20.5)
Dyslexia or an autistic spectrum disorder	38 (17.0)
A physical impairment such as difficulty using your arms or mobility difficulties which require you to use a wheelchair or other mobility aid	21 (9.4)
A long-term health conditions such as HIV, cancer, heart/respiratory condition	19 (8.5)
A learning difficulty/disability or cognitive impairment such as Down's syndrome	17 (7.6)
A sensory impairment such as blindness or deafness	8 (3.6)

3.8. Referral routes and rates

People were referred to Link Workers through many services and there were differences between sites, reflecting local service configurations. In T&L1, self-referral was the main route (30.6%, n=67/219). Furthermore, a relatively high proportion of referrals were from mental health services (22.8%, n=50/219). However, this may be due to the specific context of the cohort study because this was not seen in other sites. Around 10% of referrals were from primary care staff e.g., GPs (10.5%, n=23/219) which is relatively low given that Link Workers are often based in GP practices and receive referrals from that specific GP practice. In contrast, in T&L2, 55.2% (n=48/87) of people supported by Link Workers were referred by their GP and 16.1% (n=14/87) were referred by other primary care professionals. It was not possible to analyse T&L4 referral data because it was not coded into categories and in T&L5, Link Workers were a specific triage service so not reflective of Link Workers generally. There are other studies that have reported on referral routes to Link Workers, and it is somewhat dependent on local commissioning patterns (Kilgarriff-Foster & O'Cathain, 2015). For example, a GP surgery funded Link Worker service may only be able to accept referrals from staff within that specific surgery whereas a voluntary sector employed Link Worker may accept self-referrals and referrals from local community groups.

Table 22: Referral pathways to link workers in T&L1

Referral Route	N- 219(%)
Self-Referral	67 (30.6)
Mental Health Service	50 (22.8)
Mental Health Charity	36 (16.4)
Voluntary or Community Group	30 (13.7)
GP	18 (8.2)
Other	9 (4.1)
Other Primary Care Service	5 (2.3)
Local Authority Services	3 (1.4)
Secondary Care Services	1 (0.5)

3.9. Onwards referrals to nature-based providers

It was hoped that, through the data, it would be possible to estimate the proportion of people who received a green related referral as both a proportion of all Link Worker service users but also how the proportions of green related referrals as a proportion of other types of onward referrals. However, it was challenging to establish this information largely because systems do not currently have automated systems to identify what has been a nature-based referral. For example, in T&L4, information was provided on which organisations people were referred onto, but it would have been challenging to identify which of these were nature-based referrals. In other sites data was only provided on Link Workers' service users who received a nature-based referral (e.g., T&L2 and T&L1) so a percentage could not be calculated.

From the small amount of data received in July 2022, it appeared approximately 5-10% of Link Worker onward referrals were to nature-based activities. For example, in T&L4, Link Worker data was provided from one of the nine localities involved in the T&L site. Of the 686 onward referrals, 8.2% were to nature-based providers (n=56/683). These proportions reflect the findings of the questionnaire. It was not possible to explore whether people being referred to nature-based activities are representative of the general Link Worker population.

In T&L2, Link Workers referred service users (total n=91) to a range of nature-based activities including community allotments and gardening projects (25%, n=22/91), conservation projects and nature-based physical activities (25%, n=22/91). The most common onward referral route was to nature-based organisations who would then determine what specific activities the person would access (28.4%, n=25/91). This reflects an approach taken in T&L5 where people were referred to Link Workers embedded within nature-based providers to support them to identify an appropriate nature-based activity.

In T&L1, where people were recruited to a cohort study, there were onward referrals to a range of nature-based activities (Table 23), indicating that when Link Workers make onward nature-based referrals, they are aware of, and refer people to different types of nature-based activities. The main activities people were referred to included gardening (30.8%, n=69/224) and green exercise (17.9%, n=40/224).

Table 23: Onwards referrals to nature-based activities in T&L1

Nature-based referral	N=224 (%)
Gardening	69 (30.8)
Green Exercise	40 (17.9)
Other	34 (15.2)
Bushcraft (e.g., forage, tool making, firecraft)	17 (7.6)
Crafting	7 (3.1)
Yoga or Other Mind-Body Activity	5 (2.2)
Conservation	4 (1.8)
Food Growing	1 (0.4)

Whilst we have limited data, it appears that a small proportion of Link Worker onwards referrals are to nature-based activities. As explained elsewhere this is partly because Link Workers are increasingly supporting people with other priority needs such as financial advice as a result of the cost of living crisis. This data is also reflected in the nature-based referral routes, where there are multiple referral routes alongside Link Workers. Ultimately at this stage, it is difficult to explore onward referral rates from Link

Workers to nature-based providers because there are no systems in place to identify nature-based referrals other than manually. To address this, it is recommended that Link Worker monitoring systems are developed to include a dichotomous variable (e.g., a tick box) to identify whether a person received an onwards nature-based referral.

3.9.1. Who is accessing nature-based activities and what support do they receive?

Sites provided a range of data on service users accessing funded nature-based activities through GSP. As discussed previously, data was only provided on a proportion of people that accessed GSP and it is unknown how representative the data is of people that accessed GSP generally. However, the data is useful in terms of understanding potential patterns in who is accessing GSP, their GSP journey and the impact of GSP on people's mental wellbeing.

3.9.2. Who accesses nature-based providers

In this section we provide a cumulative reflection across sites about who is accessing nature-based activities. Within the appendices, we provide individual site summaries.

A diverse range of people are being supported by nature-based providers, many of whom are experiencing mental health issues. Furthermore, nature-based providers are supporting service users including people living in socioeconomically deprived areas and people from ethnic minority backgrounds who may be experiencing health inequalities. There are some differences between sites, partly due to local population profiles (e.g., deprivation levels) but also in respect to differences in sites about whether they supported people who were under 18 years old.

Gender: Across the sites, more females were supported than males (Table 24). 57.4% of people supported were females (n=1,826/3181) compared to 41.4% males (n=1,317/3181). This gender imbalance reflects other social prescribing services (Foster et al., 2020). It highlights the need for services to do more to support males to access nature-based activities. For example, there could be learning from the Men's Shed movement (https://menssheds.org.uk/). As Link Workers are also supporting more females than males, it indicates the importance of other referral routes to help males to engage in nature-based activities. There were less than ten people within the GSP programme that considered themselves non-binary. This indicates that in the future, GSP programmes may want to explore further whether the programme is accessible to people who are gender fluid or identify as a different gender to what they were assigned at birth.

Table 24: Gender of people accessing nature-based activities

Gender	N=3181 (%)
Female	1,826 (57.4)
Male	1,317 (41.4)
Non-Binary	8 (0.3)
Other	26 (0.8)
Prefer Not to Say	4 (0.1)

Included: T&L sites 2,3,4,5,6 & 7

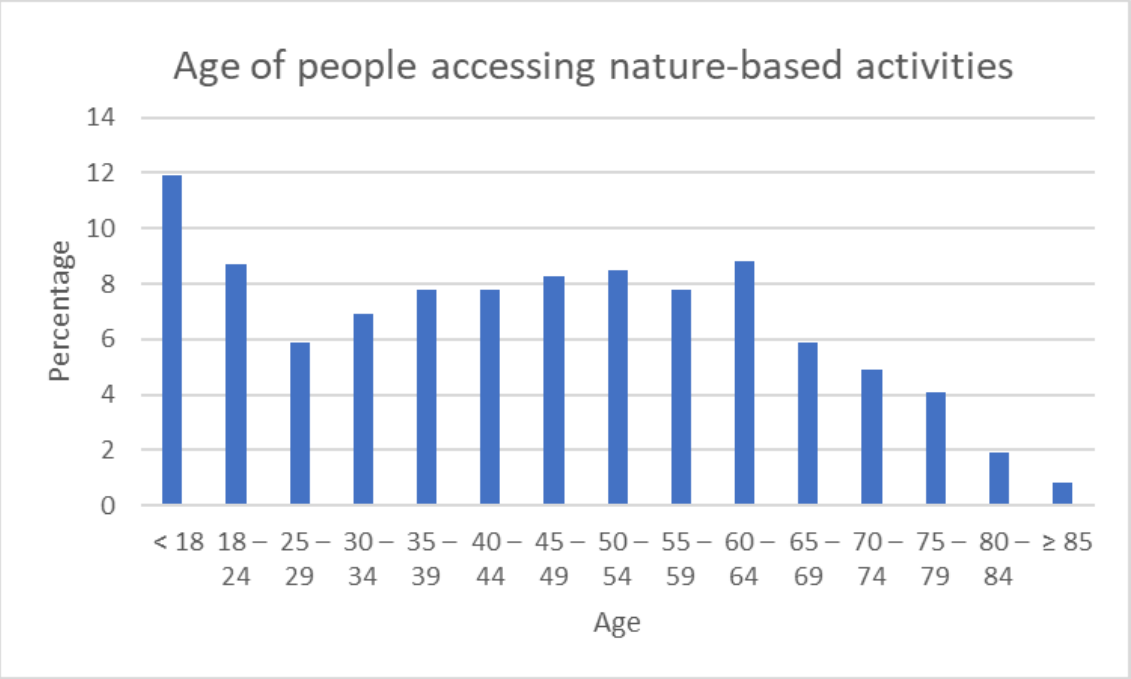
Age: Across all T&L sites, nature-based providers were supporting people across the age spectrum including under 18s, people of working age and older people (Table 25, Figure 4). As can be seen in Figure 4, there is a fairly even proportion of people being supported across the different age ranges. This is positive because historically, social prescribing has tended to support a higher proportion of older people whereas GSP is also reaching people in the 20 to 50s age categories as well as older people. The main difference between sites was the proportion of under 18s being supported. In some sites such as T&L5, only a small proportion of the overall participants were under 18 (1.1%, n=6/824). In contrast, around a quarter of people were under 18 years in other sites. For example, in T&L7, 28% (n=307/1097) and T&L6, 26.7% (n=92/344) were under 18. Further reflection is needed on the types of activities involving children and young people that are run as some were exclusively for children and young people whereas others were 'family events', where households including parents and their children attended nature-based activities together. These are different entities and there needs to be greater consideration of the function these activities have within GSP. Given the different approaches taken by the Test and Learn sites on supporting children and young people, there needs to be reflection at a national level about GSP and children and young people especially within the context of commissioning, referral pathways and the wider work being undertaken on social prescribing for children and young people (Hayes et al., 2023). For example, exploring how GSP develops referral routes with children and young peoples' Link Workers and mental health services along with funding opportunities.

Table 25: Age of people attending nature-based activities

Age categories	N=2102 (%)
< 18	225 (11.9)
18 – 24	163 (8.7)
25 – 29	112 (5.9)
30 – 34	129 (6.9)
35 – 39	146 (7.8)
40 – 44	146 (7.8)
45 – 49	157 (8.3)
50 – 54	160 (8.5)
55 – 59	146 (7.8)
60 – 64	165 (8.8)
65 – 69	111 (5.9)
70 – 74	93 (4.9)
75 – 79	78 (4.1)
80 – 84	36 (1.9)
≥ 85	16 (0.8)

Included: T&L sites 2,3,4,5 & 6

Figure 4: Age of people accessing nature-based activities



Ethnicity: Nature-based providers are supporting people from a range of ethnicities including people from ethnic minority groups. The ethnic profile varied considerably between sites, reflecting local demographics. For example, in T&L2, 10.8% of people were Asian/Asian British but this was much lower in T&L4 (3.8%). This reflects ethnic diversity in the different T&L sites. Some sites funded activities to specifically support people from ethnic minority groups to engage in nature-based activities which appears to have translated into GSP supporting people from different ethnic groups.

Table 26: Ethnicity of people accessing nature-based activities

Ethnicity	N=1805 (%)
White British	1,425 (78.9)
Asian or Asian British	190 (10.5)
Black, Black British, Caribbean or African	88 (4.9)
Mixed or Multiple Ethnic Groups	59 (3.3)
Other Ethnic Group	38 (2.1)
Refused	5 (0.3)

Included: T&L sites 2,3,4,5 & 6

Socioeconomic deprivation: There was heterogeneity in the proportion of service users from neighbourhoods classed as socioeconomically deprived between sites (measured by the IMD as described in Chapter 2). This is reflective of the different localities of the T&L sites but also reflects that within each site, there will be areas of higher and lower levels of socioeconomic deprivation. Over half of service-users lived in the most socioeconomically deprived neighbourhoods (Deciles 1-3) (56.5%, n=841/1489). This is important given concerns raised within the baseline questionnaire about the challenges of supporting people from socioeconomically deprived areas accessing nature-based activities. GSP also supported people living in less socioeconomic deprived neighbourhoods, which is relevant given that GSP was aimed at improving mental health and issues such as loneliness are relevant irrespective of the socioeconomic status of an area. For example, people may be living in an affluent

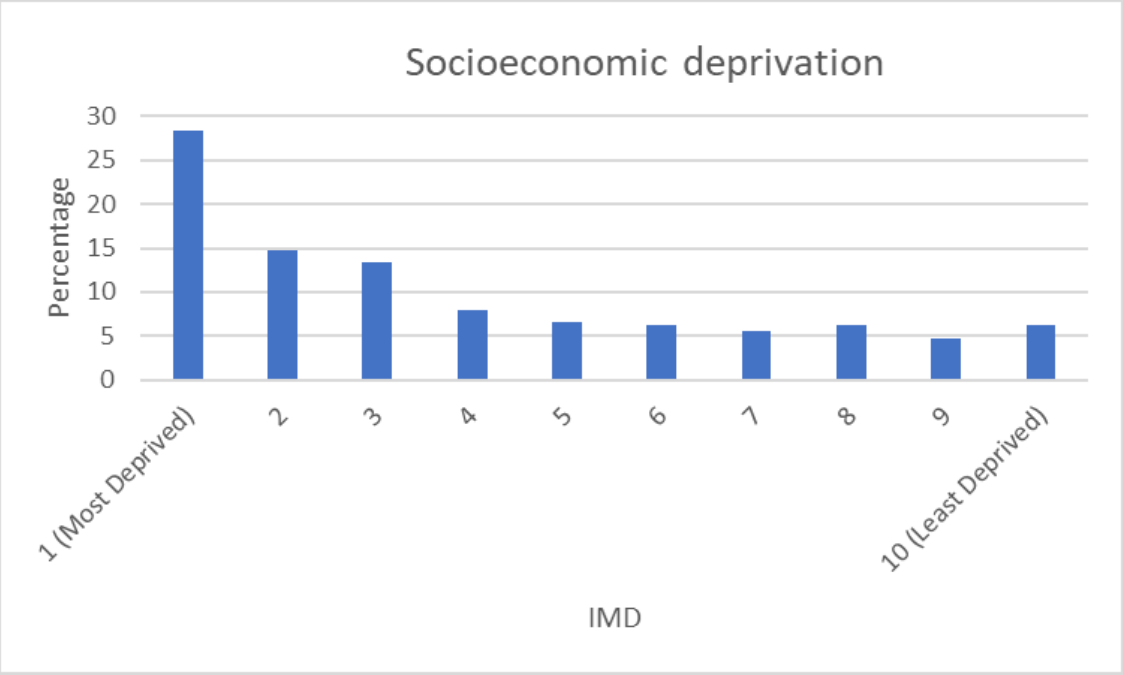
rural area but struggle with loneliness due to a lack of transport opportunities to access activities.

Table 27: Socioeconomic deprivation

IMD Decile	N=1489 (%)
1 (Most Deprived)	421 (28.3)
2	221 (14.8)
3	199 (13.4)
4	119 (8.0)
5	98 (6.6)
6	92 (6.2)
7	84 (5.6)
8	93 (6.2)
9	70 (4.7)
10 (Least Deprived)	92 (6.2)

Included: T&L sites 2,3,4,5,6 & 7

Figure 5: Socioeconomic deprivation of people accessing nature-based activities



Sexuality: Emerging data indicates that GSP is engaging people who identify as LGBTQ+. Site 7 collected monitoring data on sexuality. Within the site, 3.5% of service users identified as LGBTQ+ (n=32/915). This is comparative with national averages (van Kampen et al., 2017; Office for National Statistics, 2021). Whilst this is only one site, it is an important issue for GSP projects to consider whether they are supporting people who identify as LGBTQ+, especially given the higher rates of mental health issues within the community.

Health status: Emerging data indicates that GSP is supporting people who consider themselves as disabled or as having a long-term health condition. In T&L7 (the only site collecting this information), over a third of service users self-

identified as having a disability or long-term health condition (34.3%, n=329/915). In T&L1, they asked how impacted people were by their health condition, with over three quarters feeling their lives were limited substantially or to some extent by their health conditions (80.3%, n=179/223). This is a significant proportion, some of these people will be affected by mental health conditions and some by physical health issues, the latter which can often be detrimental to people's mental health. These findings also have implications for nature-based providers who will need to meet people's different needs. The questionnaire findings indicate that providers and Link Workers are concerned about whether nature-based providers may be able to meet people's health related needs. For example, there may be accessibility issues, or someone's condition may fluctuate, meaning that they are only able to engage in nature-based activities some of the time.

Clinically vulnerable to COVID-19: T&L2 wanted to ensure that people who were clinically vulnerable to COVID-19 were supported through GSP because of the impact of the pandemic on this population such as having to shield. **Just over a third of people supported within this site were classed as clinically vulnerable, indicating that GSP is reaching this population (37.8%, n=166/439).**

Caring status: The GSP project appeared to be supporting people who either had carers or were informal carers. T&L2 collected information on caring status and identified that almost a quarter of service users considered themselves as having a carer (23.6%. n=134/569). The GSP project was also engaging people who considered themselves to be informal carers (6.7%, n=38/569). This is comparable to the national average of 6% of the population being informal carers (Foley et al., 2022). This indicates that within the specific site, the GSP project is reaching people who are impacted by caring.

Additional demographics: In T&L1, information was collected at the Link Worker stage for people that accessed nature-based activities. These demographics are reported in the Link Worker section but may also be relevant to who is accessing nature-based providers, such as there being a higher than the national average proportion of people who cannot work due to health issues. Please see the Link Worker section for this information.

Mental health needs: The majority of people accessing nature-based activities reported mental health issues and T&L sites were reaching people with different levels of need ranging from pre-determinants[5] to people living with serious mental illness. Across the sites, 80.8% of people accessing nature-based providers had mental health needs that were having a detrimental impact on their daily lives (n=1187/1469). There was consistency between sites in that the majority of people they were supporting had mental health issues - the range across sites was 72.6%-85.3%. This indicates that the GSP is successful in supporting people with mental health issues or at risk of developing mental health issues.

GSP was supporting people with differing levels of mental health needs ranging from having pre-determinants to more severe mental health issues (Table 28, Figure 6). Almost a quarter of people were categorised as having pre-determinant mental health issues including experiencing loneliness (32%, n=470/1468). The most common category was moderate mental health issues including service users experiencing depression (37.8%, n=555/1469). A small proportion of service users were categorised

[5] Throughout we use the term pre-determinants for people who may be experiencing issues that could be impacting on their mental health including people experiencing loneliness or debt that may be having a detrimental impact on mental wellbeing. However, these people would not be necessarily categorised as someone meeting a clinical diagnosis of a mental illness such as depression. This term alongside the classifications of mental health needs used within the National Evaluation was developed with the national partners.

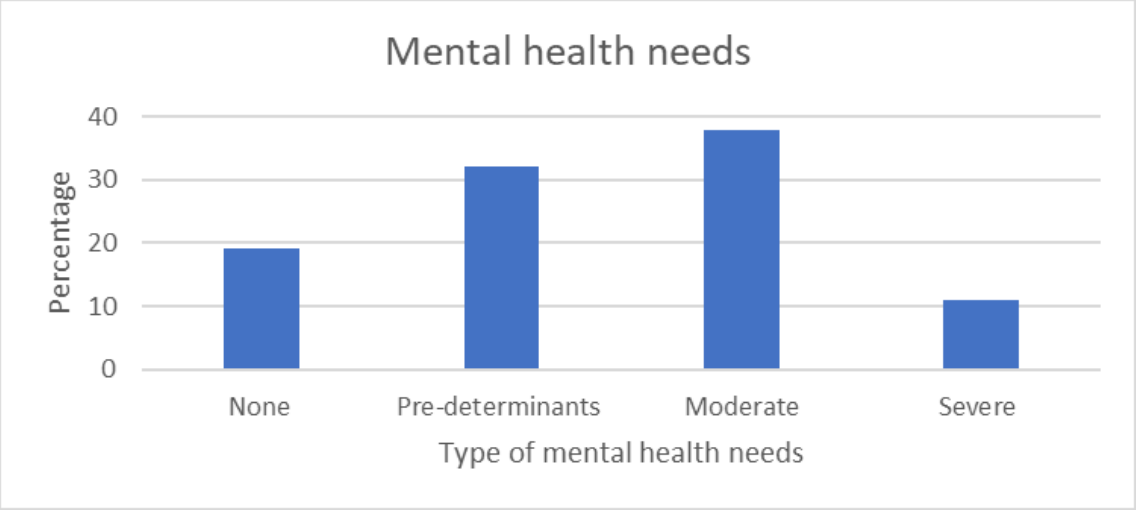
as living with serious mental illness e.g., psychosis (11%, n=162/1469). It is positive that nature-based providers are supporting people with a range of mental health needs especially as within the questionnaire, concerns were raised about the resource required to support some people accessing activities. Provision has been a mixture of universal activities and more targeted activities specifically for people with more severe mental health needs such as a gardening project in T&L2 for people with more severe and enduring mental health needs.

Table 28: Mental health needs of people accessing nature-based providers

Mental health needs of people accessing nature-based activities	N=1469 (%)
No mental health needs	282 (19.2)
Early/pre-determinants of mental health needs	470 (32.0)
Moderate mental health needs	555 (37.8)
Severe mental health needs	162 (11.0)

Included: T&L sites 2,4,5 & 6

Figure 6: Type of mental health needs



Source of referral to nature-based activities

There was considerable heterogeneity in referral routes between the T&L sites (Table 29). Referrals were from a wide range of sources including Link Workers, self-referrals, and referrals from VCSE organisations. This demonstrates the importance of having multiple access routes to nature-based providers to provide the greatest opportunity to engage people in nature-based activities. Self-referral was the most common referral route within GSP, with almost a third of people accessing nature-based activities this way (31.5%, n=916/2909). Link Workers were also a common referral route, with a quarter of people being referred by Link Workers (25.8%, n=752/2909). This was a mixture of voluntary sector and General Practice based Link Workers, reflecting local commissioning practices. Other referral routes included from VCSE organisations or family/friends. Mental health services were not a prominent referral route, for example less than 2% of people were referred by Community Mental Health Teams (1.9%, n=54/2909). This indicates that there could be further opportunities for GSP to develop referral routes with mental health services.

There were some differences between referral routes reported by T&L sites (Figure 7) especially in relation to the proportion of self-referrals and referrals by Link Workers. For example, in T&L7, almost half of referrals were self-referrals (48.6%, n=467/960)

compared to less than 10% in T&L6 (9.3%, n=21/257). Whereas in T&L7 less than 10% referrals were from Link Workers (6.5%, n=62/960) compared to 61.1% in T&L6 (n=257/609). This variation will reflect local systems. However, the differences indicate that there could be scope to increase nature-based referrals in T&L sites where currently there is a lower proportion of Link Worker referrals (Figure 8).

Table 29: Referral to nature-based activity providers

Source of Referral	N=2909 (%)
Self-Referral	916 (31.5)
Voluntary/Community/Social Enterprise Based Link Worker/Social Prescriber	442 (15.2)
Primary Care based Link Worker/Social Prescriber	309 (10.6)
Voluntary, Community or Social Enterprise Organisation	241 (8.3)
Friends or Family	197 (6.8)
Referral from another part of the organisation	159 (5.5)
Other	121 (4.2)
Other Professional	119 (4.1)
Other NHS Service	89 (3.1)
Private Sector Referral	77 (2.6)
Local Authority	70 (2.4)
GP	69 (2.4)
Community Mental Health Team	54 (1.9)
Other Primary Care Professional	30 (1.0)
College	16 (0.6)

Included: T&L2, T&L3, T&L4, T&L5, T&L6, and T&L7

Figure 7: Referral routes to nature- based providers

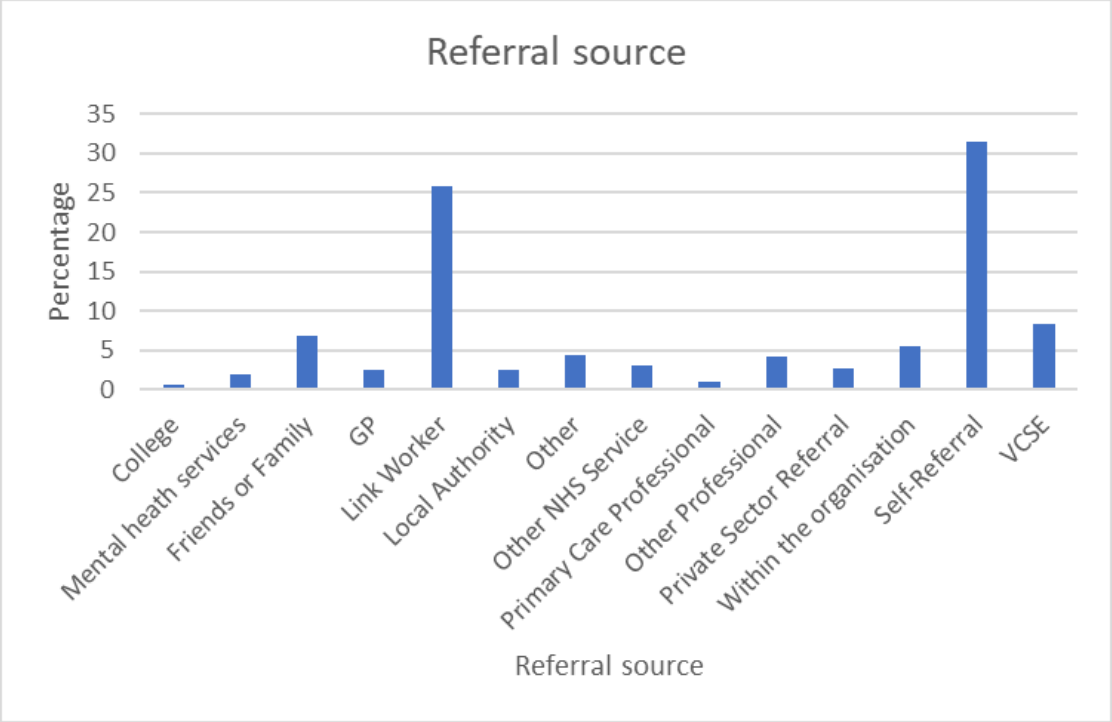
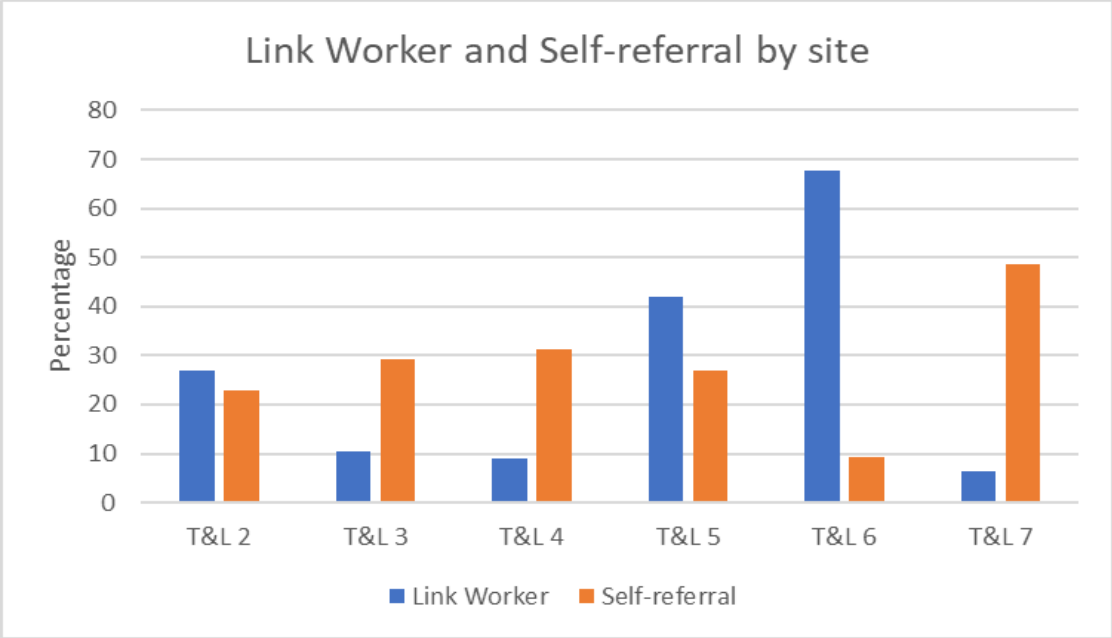


Figure 8: Link Worker and self-referral rates by T&L site



T&L1 not included as it only provided data for people referred by Link Workers participating in the cohort study rather than providing monitoring data from routine practice.

Accessing support: The majority of people referred to nature-based activities appeared to receive support (Table 30). Across the sites, (78.7%, n=1308/1167) received support. There was a small proportion of people awaiting support such as waiting for a course to start (7.1%, n=118/1167). Less than 15% of people did not receive support following a referral to nature-based providers for example they declined to attend, or life stresses made it difficult for them to access the support (14.3%, n=237/1167). This is a relatively low number, indicating that nature-based providers are managing to support people to engage. Whilst there will always be people who will not access support, further exploration may be useful to investigate what helps people to engage from the initial referral and what more could be done to encourage as many people as possible to receive support from a nature-based provider following a referral.

Table 30: Proportion of people receiving support

Received Support	N= 1663 (%)
Yes	1,308 (78.7)
Awaiting Support	118 (7.1)
No	237 (14.3)

Included: T&L2, T&L4, T&L5, T&L6

Types of nature-based activities delivered: There was a wide variety of nature-based activities delivered ranging from horticulture, those with a craft focus and nature connection activity (Table 31, Figure 9). Of the data received, nature connection activities such as bushcraft (29.1%, n=557/1985), horticultural (30.5%, n=608/1985) and exercise based (22%, n=431/1985) activities were the most common. Less common were activities such as care farming, conservation based, and talking therapies.

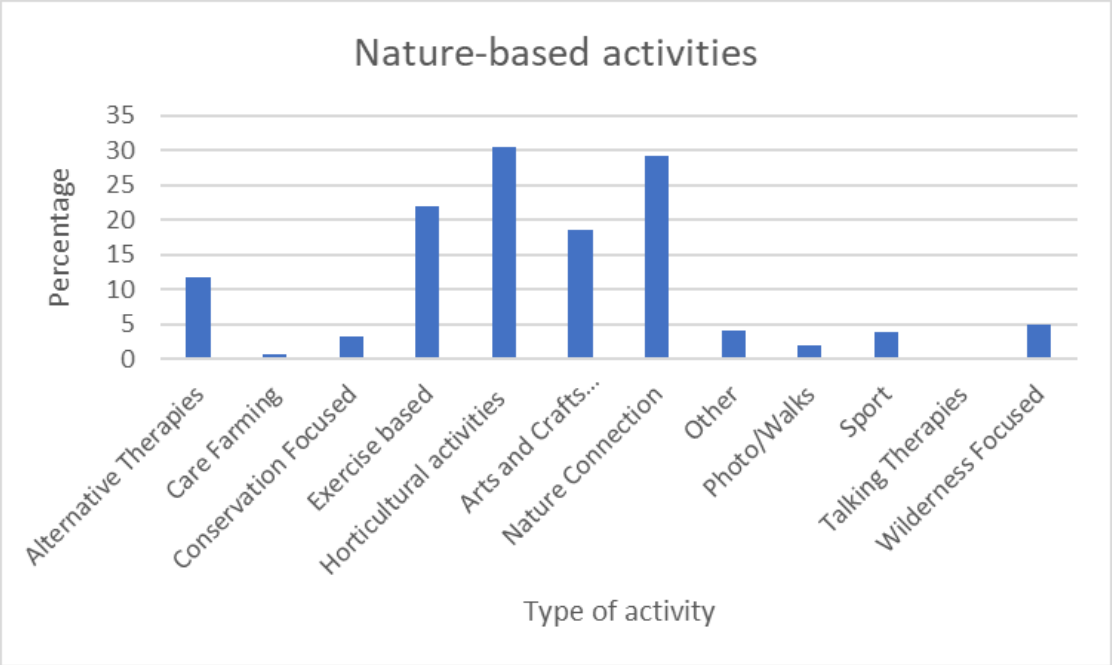
The types of activity varied between sites reflecting local commissioning preferences (although it may also be the product of who returned monitoring data). The wide range of activities highlights the importance of having different types of nature-based activity on offer to appeal to as many people as possible. From the reported data, we cannot assess the optimum nature-based activity mix that T&L sites may want to fund and whether some types of activity may be more effective than others in terms of supporting mental wellbeing. There is also the issue of how the specific type of activity influences commissioning decisions. For example, is the specific activity less important than ensuring having activities targeting specific demographics? Cost and resources may also be relevant, for example it may be cheaper to offer health walks than sustain a community allotment. There was considerable variation in the number of people supported by each project, which is reflective of both the scale of the activity, the allocation of funding but also the needs of people being supported. For example, one organisation in T&L2 provided intensive support to a small number of people with complex needs whereas other organisations ran open days on community allotments.

Table 31: Types of nature-based activity being delivered

Type of nature-based activity	N=1985 (%)
Horticultural activities	606 (30.5)
Nature Connection	557 (29.1)
Exercise based	437 (22.0)
Nature Based Arts and Crafts Programmes	370 (18.6)
Alternative Therapies	233 (11.7)
Wilderness Focused	99 (5.0)
Other	79 (4.0)
Sport	78 (3.9)
Conservation Focused	63 (3.2)
Photo/Walks	39 (2.0)
Care Farming	15 (0.8)
Talking Therapies	4 (0.2)

Included: T&L2, T&L4, T&L5, T&L6. Note that the participants may be doing more than one activity.

Figure 9: Types of nature-based activities delivered



Date of referrals and support: There was variation in the number of service users accessing nature-based activities each month. Sites provided information on the date of referral and the dates that service users received support. However, the high number of errors within the data meant we were unable to utilise it meaningfully. For example, the date of referral was often the same as the date recorded for when support began, or dates were in the future. However, despite this, it was evident that the number of service users both referred and supported appeared to vary each month. This indicates no consistent pattern of referrals, which can make planning capacity and estimating appropriate caseloads challenging. For example, nature-based providers report more people accessing activities in the Spring/Summer months than in the winter. In addition, referrals may follow a networking event or when running specific activities. This variation has implications for resourcing. GSP may be more subject to seasonal challenges than other types of social prescribing referral activity. From the questionnaire, it was apparent that the length of time to receive support was dependent on capacity within the organisation, such as if they were operating waiting lists and whether it was an ongoing activity or people were waiting for the activity to start. For example, someone may be able to join a health walk straight away but have to wait a few weeks for a horticultural course to start. It would be useful for providers to consider whether having a delay can be detrimental for people engaging if they lose the momentum and whether there are ways that organisations employ to facilitate people to remain engaged such as being given updates on how long the wait may be.

Amount of support received: Generally, people appeared to access the nature-based activity for a relatively short period of time (less than ten sessions). However, exact numbers of interactions received from providers were not fixed and difficult to assess, given a lack of consensus on 'completion' and the fact that about half of people continued to attend the nature-based activity when their data was reported. Some activities being delivered were one-off events, some were a fixed length course of activity and others were ongoing. A third of people were recorded as accessing one session (35%, n=708/2020). This will be a mixture of people attending one off events such as park open days but also may be people who did not feel the activity was suitable for them. A third of people attended 2-5 sessions (34.2%, n=691/2020). Less than 10% of people attended more than ten sessions (9.7%, n=197/2020). However, about half of people were continuing to attend the nature-based activity indicating that the session numbers may increase. The implications of this are that whilst nature-

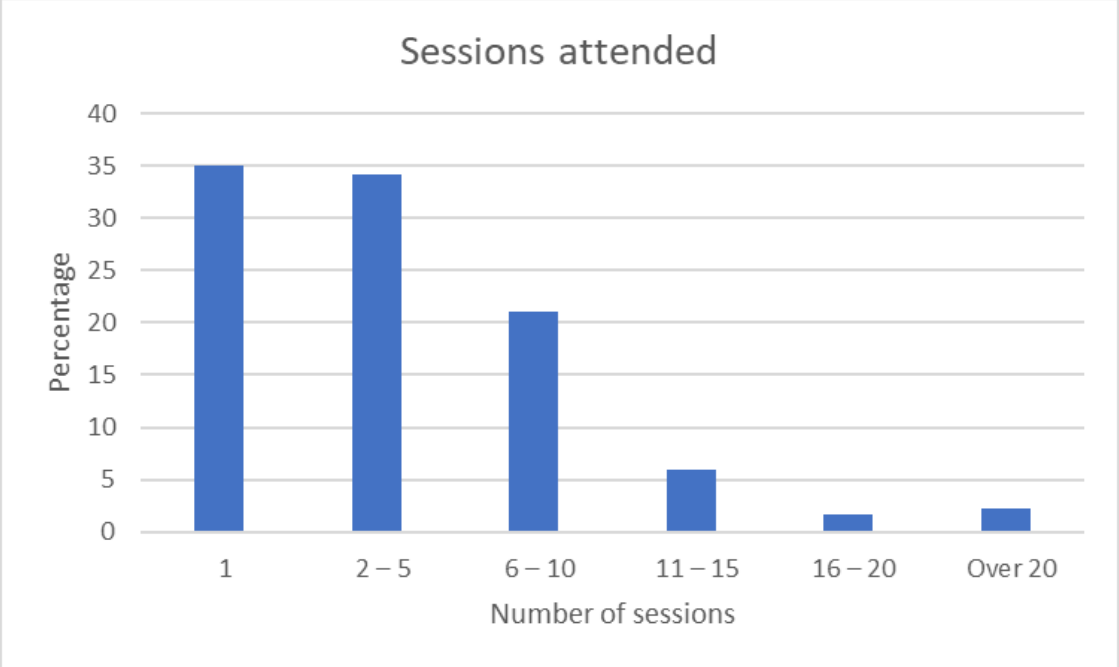
based activities may be a relatively short intervention for some people, the activities are also potentially an ongoing intervention for others.

Table 32: Number of sessions attended

Number of Sessions Attended	n=2020 (%)
1	708 (35.0)
2 – 5	691 (34.2)
6 – 10	424 (21.0)
11 – 15	119 (5.9)
16 – 20	33 (1.6)
Over 20	45 (2.2)

Included: T&L2, T&L4, T&L5, T&L6, T&L7

Figure 10: Number of sessions attended



T&L1 recorded the frequency of sessions and the majority of people attended the nature-based activity weekly (78%, n=135/173). A small number of people attended more than once a week and a smaller number attended monthly/fortnightly. Whilst this was only one site, it indicates that generally people attend nature-based activities weekly.

Destination following nature-based support: Almost half of people were continuing to attend the nature-based activity (48.1%, n=500/1039). This is interesting as it indicates that many of the nature-based activities are ongoing activities albeit this could create capacity issues longer-term. The proportion of people having an unplanned ending was relatively small (5.1%, n=53/1039). However, there may be data quality issues with this statistic because within the questionnaire, respondents raised concerns about supporting people to continue attending. The attendance rate may also be a result of the approaches nature-based providers put in place to support people to engage such as buddying systems and transport.

A fifth of people were supported to attend other activities with the organisation indicating that GSP may act as a 'launching pad' to support people to access other

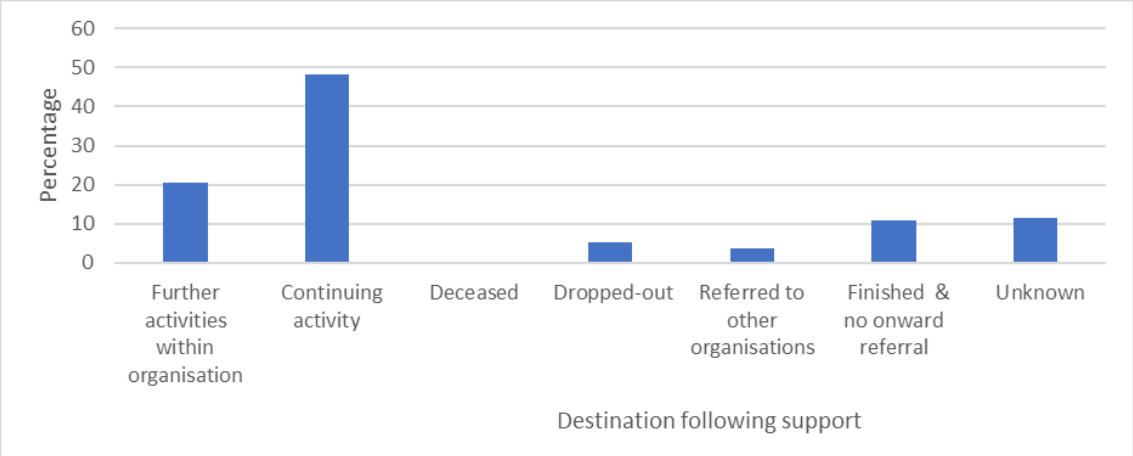
nature-based activities (20.5%, n=213/1039). To summarise, the majority of people were continuing to attend a nature-based activity be it the same activity or they had been supported to access other activities. There was less than a fifth of people that appeared to stop attending a nature-based activity indicating that GSP is supporting people to engage in activities longer-term and certainly longer than the sessional data indicates. However, further consideration is needed about people's pathways through nature-based activities especially considering sustainability and capacity issues. One person did die during the period that they were attending a nature-based activity and unfortunately, this will occasionally be an outcome. It may be beneficial for providers and Link Workers to ensure they have adequate systems in place to manage this, for example, removing people from databases etc.

Table 33: Destination following support

Destination Following Support	N=1039 (%)
Continuing to attend the activity	500 (48.1)
Accessed further activities within organisation	213 (20.5)
Unknown	121 (11.6)
Finished in the organisation with no onward referral	111 (10.7)
Dropped-out of the activity before completing planned support	53 (5.1)
Finished in the organisation and referred to other organisations	40 (3.8)
Deceased	1 (0.1)

Included: T&L2, T&L4, T&L5, T&L6.

Figure 11: Destination following support



Footnote: Please note, decreased does not have an obvious bar because it was one person and the proportionality of the bars are not that sensitive.

Key learning about how to scale up and embed GSP

4

In this Chapter, we provide the synthesised account of our learning about what is needed to scale up and embed Green Social Prescribing in a locality. As described in the Methods section, this is based on programme theories (describing how something is thought to work) developed through WP3b and articulated through a series of if-then statements which are described below. For each statement, we describe what the situation was at the beginning of the project, significant changes, factors that supported or inhibited change, and evidence of change across the sites. This is supplemented by insights from the other work packages, particularly survey data from WP3a, insights from non-Test and Learn sites gathered in WP4, the national partnership work undertaken through WP5, and written accounts provided by T&L sites in the form of their reports the GSP delivery team, as well as to the wider research literature. Inevitably, given the complexity of the processes involved and the interconnections between different parts of the system, processes, activities and outcomes, there is some overlap between the programme theories and their findings, and some repetition, where similar experiences and activities are relevant to different parts of the programme theory. Where it gives additional context, we also reproduce the summary findings from the descriptive themes reported in the Interim Report (Haywood et al., 2023).

Programme theory is expressed as if-then statements and ours are summarised in the table below and explored in detail through this chapter.

Table 34: Programme theory

Name	If….	Then…
1. New commissioning arrangements.	If we have new commissioning and procurement arrangements and agreements.	Then we will ensure that nature-based providers are embedded within the delivery and wider social prescribing landscape.
2. Political and strategic power and influence to support GSP.	If political and strategic power and influence is directed to support GSP.	Then there will be shifts in policy and budgeting.
3. Harnessing nature-based assets.	If we grow or harness nature-based assets.	Then there will be a range of appropriate, diverse, geographically spread opportunities for service users.
4. Alignment of organisations.	If efforts were made to remove perceptual and structural barriers and create aligned structures.	Then there would be coherence and clarity of roles and responsibilities across the system.
5. Creating compelling evidence.	If we gather and share routine data in the GSP system.	Then this will build confidence in the efficacy of GSP to support people with mental ill health.
6. Improving networks to support connectivity.	If we enhance processes to support information flow and feedback loops within the system between the network of providers, Link Workers, referrers, and funders.	Then we'll have better connected, efficient and effective pathways.
7. Mutual understanding and awareness of different parts of the system and how they operate.	If we want mutual accountability and shared problem-solving to enhance service users' experiences.	Then we need to build trust and respect so that people understand and are aware of how different actors in the system may operate.
8. Referrals to GSP (extent and appropriateness).	If we build referrers' capability, opportunity, and motivation to refer to GSP.	Then we have improved access to appropriate green opportunities.
9. Inequalities in access to nature.	If we want equitable access to appropriate green opportunities.	Then decision making must be made through an inequalities and instructional lens.
10. Engagement of users in GSP processes.	If there was a desire for the green social prescribing system to be person-centred.	Then the user voice was important to illuminate the changes across the pathway.
11. level of retention/drop-out of users in the GSP system at different points in the pathway.	If we want referrals to be fulfilled.	Then service users must have a positive experience across the GSP pathway.

4.1. New commissioning arrangements (including commissioning, procurement and new financial models)

This section relates to the ways in which nature-based providers are funded and how this impacts on their ability to deliver support through GSP. We theorised that if we have new commissioning and procurement arrangements and agreements, then we will ensure that nature-based providers are embedded within the delivery and wider social prescribing landscape.

Box 1: Summary findings Section 4.1

Context

- Strategic level: nature-based providers were funded in a fragmented way and unsustainably resulting in sector fragility and competition.
- Operational level: precarious, short-term funding cycles barrier to GSP engagement and sustainability.
- Operational level: sustained collaboration resulting in shared values and vision hard to achieve given turnover of staff owing to funding cycles.
- Smaller or micro-providers are often unheard and facing greatest challenges.

Activities

- Regionally: representatives from T&L sites placed on regional boards to communicate challenges.
- Regionally: creation of co-design forums around commissioning issues to develop strategies.
- T&L sites: refine existing spend through better understanding of appropriateness of referrals – matching need with provision through trusted providers/databases.
- T&L sites: strategies to redistribute existing funding structures – green health budgets, personal health budgets linked to nature-based providers.
- T&L sites: seeking external funding leveraged on the success of the GSP programme.

Challenges

- Cyclical challenge of less investment meaning less time and resource to seek further funding.
- Challenges associated with increasing complexity of need amongst those referred; different funding streams or descriptions of activities to existing funders.
- Success is often measured in outcomes, yet processes required to get to the point of delivery often took significant time commitment and resource.
- Inter-organisational differences in structure, working and timeframes can be challenging.
- Concurrent wider challenges of COVID-19 and ICS/ICB restructuring impacted on commissioning activity.

Implications for GSP test and learn project

- To communicate the difficulties and impacts of short-term funding cycles, it is important to embed those active in GSP across system-wide networks.
- There are specific challenges faced by smaller organisations compared to larger ones, so providing additional support to allow those to engage is important.
- Recommendations for spread and scale of GSP.
- Support should be provided for new collaboratives to develop funding bids particularly those that include dedicated co-design work amongst partners and participants.
- As self-referrals are important for green providers, more awareness raising of the benefits of GSP to the public and community groups would be useful.

4.1.1. Context

At the beginning of the GSP project, nature-based providers' funding was fragmented and unsustainable, resulting in sector fragility and competition. Key themes identified in the interim report related to nature-based providers are shown in Box 2.

Box 2: Key Findings from Theme 6 of the Interim Report: Nature-based system and providers

- Preventing poor mental health, and maintaining good mental health, were commonly seen as important outcomes by nature-based providers. However, most providers also recognised clear benefits of nature-based activities for everyone regardless of condition, rather than being limited to specific health conditions or needs.
- It is currently unclear whether the myriad challenges faced by providers and Link Workers across the nature-based system are due to lack of availability, capacity or connectivity. It is currently unclear if this is an issue of lack of availability or capacity, or a lack of connectivity, and what factors contribute to this variation across the system.
- The scale and spread of organisations providing or able to provide nature-based activities is not necessarily known by those who may be able to make referrals, such as NHS social prescribing teams.
- Relationships between Link Workers and provider organisations are often the method by which referrals are made, but individual connections are fragile, and risk being lost when people move on, change roles or external pressures change priorities within the system.

The availability, ability to access and distribution of funds and investment to sustain GSP were of critical importance to all T&L sites. The interim report noted that that precarious, short-term funding cycles and lack of system level support for the VCSE sector was a barrier to sustainability and embedding GSP within statutory systems (see also (Dayson et al., 2019)). Multiple T&L sites (T&L5 and T&L1 for example) as well as our non T&L sites in WP4, reported a lack of partnership, coordination and connection around commissioning, procurement, and funding arrangements. Whilst there are often shared values and approaches across nature-based providers (T&L3), as reported in the wider literature this has not always translated across to health systems (Nguyen et al., 2022).

Additionally, where there are degrees of link-up it is often project-specific and therefore of a limited duration and sporadic (T&L7). The nature of the funding available for activities delivered in all pillars of social prescribing (including GSP), which is *ad hoc* and limited in scale, prevents any longer duration collaboration developing and increases precarity (all sites and also the non T&L sites in WP4).

> *I also think that's a challenge for the green sector and any voluntary sector [organisation] because they're set up to be competitive to each other because they're reliant on funding, so getting them to work differently is also a challenge. I think we've made some steps forward on that but probably not as far as I would like us to have got to be honest. (T&L3, project manager)*

Most importantly, it is often the smaller and micro-provider voices that are unheard and who experience the greatest challenge (T&L4), with these organisations often not able to meet specific criteria for procurement processes resulting in an inequitable distribution of what funding is available. This repeats concerns that were highlighted both from our non T&L sites in WP4 (Interviewee F) and also in our interim report where power imbalances between the VCSE and statutory sectors, and between larger and smaller VCSE organisations, was raised in relation to delivery. It was noted that GSP commissioning and procurement poses multiple challenges, from who qualifies for each stream, and how committed that stream is to existing organisations, to the bias towards larger organisations in funding applications (Haywood et al., 2023).

> *So I kind of ended up getting involved by talking to…from [locality]CHS who let me know that there was gonna be this green prescribing opportunity for tender coming out. We've also got coz [locality] Wildlife Trust, one of 46 Wildlife Trusts across the country. So we've got a health and wellbeing manager who sits at the sort of national level and they were letting us know that there were quite a few opportunities for wildlife trusts to get involved as well. (T&L4, VCSE organisation)*

4.1.2. Activities

There were a range of activities that sites undertook to mitigate the existing limitations on accessing funding and investment. Firstly, at least two sites (T&L1, T&L6) sought to have representation from their sites on several related programme boards in the local region, to communicate and mitigate challenges. In this way, the GSP programme more widely was seen as a good vehicle for highlighting existing issues, and in contributing to sustainability planning.

> *The whole point about green social prescribing, all social prescribing is it should be outside of the clinical environment. If the whole point is that the clinical contracts that we've delivered are failing to deliver a change in health, we need to look outside of that structure, okay, if you're dependant on that structure guess what, you're going to be falling into the same traps as the structure itself, and I feel that that wasn't really clear at the very beginning. So, what happens is if you look at the different organisations where they gave money to, there was two or three [NHS/statutory services] there and you're thinking why are you paying them instead of the voluntary community sector? (T&L1, steering group member).*

Secondly, the creation of other, linked, forums for discussion and reporting of commissioning, procurement, and funding issues (T&L5) enabled meaningful co-design and engagement (T&L2, T&L7, T&4) which was eventually formalised into collaboratives or alliances that then sought external investment. This co-design was also extended to those in local organisations involved in delivery (T&L2) and strategies developed to assist in fund allocation through grant panels or similar mechanisms. This is echoed in the wider literature (Baxter et al., 2018), where co-design is posed as one way to better develop a new model of integrated care at a system level. In addition, some sites invested heavily in capacity building to support and upskill green providers to apply for their own funding. For example, in T&L5 larger scale providers shared information about potential funding streams to smaller organisations and supported them to develop bids.

Thirdly, activities were developed that sought to refine the existing spend or allocate money with more nuance. Sites worked on communication strategies that would refine the appropriateness and sustainability of referrals, through approaches that sought to match provision to the level of need in the population such as directories of offers and trusted provider schemes (e.g., T&L3). These schemes sought to collate providers that had previously been part of schemes and successfully delivered activities into one place, conceptually if not practically 'accrediting' them as trusted.

> *For many, many years we've talked about having accredited provision in the voluntary sector, whether that's around children and young people, around green space, around employment support, and it's the first time I've known it actually succeed, somebody really grasping that mantle and really implementing it. So I think it really is important and in terms of those organisations to be able to use that for future funding opportunities as well is really valuable. [...] It's an external quality assurance mark ... the voluntary sector don't have a whole lot of those open to them so the fact that this is externally verified makes a big difference to funders' reassurance and confidence. (T&L3, greenspace provider)*

Lastly, sites reported very practical or pragmatic strategies to improve connectivity around finance/investment, for example the development of green health budgets (T&L6) which aimed to reduce barriers faced by participants and increase the choices available. This was echoed in T&L4 where the programme piloted matching personal health budgets to nature-based providers. There were also some key exemplars reported by sites (including T&L1, T&L6, T&L7) where seed funding allowed growth and then attracted further external investment (see exemplar in Box 3, below).

Sites were consistent in what they considered to be factors which supported or inhibited the success of the activities detailed above. Gaining funds from outside the programme (as well as the programme itself, of course) validated people's time and allowed them to then seek further funding (T&L1, T&L5). There are studies in the wider literature that have also noted the nuances involved in how funding mechanisms impact those in the VCSE (Kavanagh et al., 2022), and the use of internal GSP programme funds to develop this work was also considered supportive (T&L2, T&L4). Our non T&L sites highlighted that there are other routes to GSP funding emerging (e.g., Integrated Care Boards, local authorities), which is positive, but often on a smaller scale (WP4, Interviewee C).

It was noted that commitment (and importantly a set of shared values), that was both ongoing and broad, from all included partners was beneficial (T&L5, T&L2), but (as has been noted in the literature) it was important for each actor in the system to be clear what their sphere and level of influence was (Bagnall et al., 2019). This coherence was reinforced by others who felt that the GSP programme was a solid platform from which to amplify provider voices in myriad forums and could also be a central point of contact as well as a catalyst for change (T&L1, T&L7).

Conversely, sites reported a cyclical effect where limited investment means less capacity (resources, time) for all organisations to undertake the activities detailed above and successfully attract more funds (T&L5, T&L2, T&L1). The pressure from national partners to engage participants with increasing complexity further exacerbated this feedback loop (T&L7), as did the fact that funds were often non-recurrent, and time-intensive to locate and apply for (T&L7). The shifting of priorities, from system wide embedding and towards mental health, meant that the orientation of the described activities often had to be modified and therefore took even more time to resource (T&L2). Our interim report (Haywood et al., 2023) noted that a *"...lack of clarity and shifting priorities from the national partnership were found to be unhelpful and, in some cases, thought to negatively impact the potential of the sites' success (for example, through focusing on generating evidence of mental health impact rather than on embedding GSP in local systems)".*

Relatedly, what looked like success to some in the system did not reflect the huge undertaking involved in simply getting to the point of delivery (i.e., funds being released to support nature-based activities being delivered, and people recruited to participate). Lastly, sites highlighted the importance of inter-organisational differences (such as level of administrative support, flexibility of roles to attend meetings, staffing levels and understanding of timeframes) and their impact on trust, collective vision, and therefore ability to attract investments (T&L4).

4.1.3. Outcomes

Sites were clear on what components would indicate a better landscape from which to seek commissioning, investment, and funding. The ability for organisations to work together in partnership through coordinated bids, which represented a shared understanding, and which were developed with significant co-design, was core (T&L5, T&L2, T&L1). It was also important that new networks were developed (T&L5) that included both internal GSP programme members and external organisations including the local ICB (T&L1). This would result in more joined up commissioning and procurement processes (T&L 6) and better integration with the existing social prescribing landscape (T&L4). This was certainly echoed in WP5 where national partners highlighted the work around shared investment funds being explored in coming reviews.

> *I think it [uncertainty around whether funding is available to continue a programme] does cause a lot of anxiety in people, and if there were more longer term…*

because it's not just the organisations that get anxious about funding running out, it's the people that attend because I would be really disappointed if it finished. I do intend to carry on for as long as I'm able to do that and I really enjoy it. (T&L7, stakeholder interview)

Practically, this joined up vision would produce outputs such as green book directories of activities that were agreed and shared amongst internal and external partners (T&L3, T&L4) and which have plans and structures for ongoing support and updating. Less tangible, the presence of clear shared buy-in amongst included partners (T&L2) was argued to enable more equitable access to commissioning and investment (T&L6 and T&L7), as well as increasing the autonomy for GSP as an approach to allocate and manage its own funds (T&L4).

In terms of evidence that would suggest progress on these outcomes, sites reported wanting to see (or having already seen) successful funding bids from new collaboratives (T&L5, T&L1); dedicated co-design work amongst partners to develop future bids (T&L2); an increase in self-referrals which would indicate a population more aware of offers (T&L3); and an increase in funding/commissioning events being held (T&L5). National partners (WP5) were optimistic about the evidence in pipeline studies (those research studies funded as part of the wider GSP programme, including feasibility trials), but these would still potentially not completely resolve the issue for some policy makers.

Looking to the longer-term, post-GSP programme, sites all reported the ongoing existence and growth of networks interested in pursuing funds as important, particularly if these continued in the absence of project-specific funding to support them and would further enable, broaden, and deepen the influence that the GSP system could have on health. This reflects findings highlighted in our interim report around using the GSP programme funds to leverage and develop capacity through external funds (Haywood et al., 2023). Lastly, all sites wanted to ensure that any outputs generated were broadly used and continued to be used into the longer term.

These things do take time but I think it's shifting and it's helping the wider personalised care agenda to get people to realise that yes, the medical model works to a point for some people but for others they need different solutions and we need to be able to offer them. Also it's such good value for money and that's always the challenge, trying to get people to fund. That's where I think it's very telling in personalised care and a lot of the work that I do, everyone's very in favour and that's a very good idea and it's having an amazing impact and...[we can] share the stories of look at this great work, but when it comes to funding it, maybe different, and that's what we need to shift into we want to work differently and have more creative solutions, different solutions outside of the one size fits all, we also do have to fund them. (T&L3, policy representative)

Box 3: Exemplar: Tackling system barriers to sustainability by funding organisations to build capacity

The current funding system is fragmented, with small pots of single, non-recurrent or unclear funding available from different sources without cross-reference or coordination. Funding is mainly focussed on delivery activity, meaning providers (and particularly smaller providers and one-person operations) have to scrabble around for support to run their organisation – e.g., paying for their Microsoft licence, training, professional development – and growth activities are often overlooked, as focus needs to be on directly-funded delivery activities.

The idea: Leveraging GSP money with additional money from the ICS, the PM worked with the Local Active Partnership to approach Sport England for support through the Together Fund to pay for capacity building in a small number of GSP projects, acknowledging that it's almost match funded by GSP delivery funding. And this was accepted *"which was amazing, because normally, you know, that wasn't the model. The Together Fund money is about delivery. However, we have had this support and resilience package around, so they saw it almost as an extension of that, but very focussed. And because this is the last phase, I think they [Sport England] liked the idea that we were really, really trying to think about what happens when this money stops"* (T&L7 stakeholder 04).

The GSP project is working with five GSP partners who span nature and physical activity. They have secured delivery funding from T&L7, and they have capacity funding from the local active partnership.

> *And we had our first meeting last week to talk with them, as a group of five, to look at, "Okay. What can you do in these next six months? We've given you some money to pay for your time, which you never get. That means you have now got time to develop your [monitoring & evaluation] processes. To look at a volunteering strategy. To look at diversifying your income. To improve your policies and procedures. All that stuff that, when you're trying to run a small business, and also, out there delivering, and doing everything in your own personal time, and... I mean, the stories that we hear of people not paying themselves. Because they're just like, "Well, the money needs to go to the delivery out there. Well, I'll just not take any money myself." People personally paying for the access to Microsoft Office, because they're like, "Well, I haven't got any funding stream that will pay for that. So, I've just got to pay that out of my own account because I need it. I can't not have email." And just all those things that small businesses really struggle with, and are being unfairly treated really, because the system only pays them to do delivery. (T&L7 stakeholder 04)*

The funding is for six months but is intended to demonstrate proof of need and concept – that this sort of small, inward investment can make a real difference.

Where next: The aim is to demonstrate to the sub-regional locality, the local authorities, and the locality partners, that these five organisations are supporting the most vulnerable e.g. 250/300 people in the community in this locality, and improved participant outcomes are clear, alongside savings to the local health system – with the hope that this will encourage further funding from those organisations because the small outlay is more than paid for by the cost savings to the system.

4.2. Political and strategic power and influence to support GSP

This section relates to the need for GSP to be supported at a strategic level in order to be successful. We theorised that if political and strategic power and influence is directed to support GSP, then there will be shifts in policy and budgeting.

Political will and leadership around GSP was seen at both the national and the local/regional level. In complex systems, leadership needs to be facilitative, enabling actors in the system to respond creatively to need in response to local context. Within the Test and Learn sites, the role of the Project Manager(s) – made possible by the funding from the GSP project – has been critical in providing leadership, direction and influencing the culture of GSP within localities (see interim report, Haywood et al., 2023). There are examples of sites successfully aligning GSP with key strategy and

policy documents, and with wider related funding bids, in order to embed GSP activity within the wider system.

These shifts in policy and budgeting have occurred where there has been appropriate networking and relationship building at all levels – strategic decision makers, those who need to operationalise change, and the VCSE sector. Summary findings from this section are shown in Box 4.

Box 4: Summary findings Section 4.2

Context

- Strategic level: Lack of awareness and recognition of GSP resulting in lack of leadership and investment.
- Operational level: lack of link up between parts of the GSP system – particularly between (small) VCSE organisations and statutory sector.
- Other contemporaneous large-scale systems change (such as the establishment of ICS/ICB).
- Cost of living crisis, NHS pressures.

Activities

Nationally

- GSP project with cross departmental support provided critical leadership, support and funding which provided legitimacy and helped localities gain buy-in for GSP.
- Importance and commitment to scaling up visible through GSP presence in strategy and policy documents (e.g., Environment Improvement Plan).

Test and Learn sites

- Role of the project manager(s) was pivotal providing leadership, direction and influencing the culture locally.
- GSP steering/ management groups involved a wide range of strategic partners.
- Networking, relationship building, partnership work and advocacy was key - some sites funded posts for this role.
- VCSE partners embedded in strategic decision-making structures.
- Ensuring GSP and learning from the T&L pilot is embedded in key strategy documents locally (e.g., ICS Green Plans, Public Health strategies).
- Leveraging other funding, for example with aligned projects, to support GSP.

Challenges

- A two-year project is short to achieve systems change to embed GSP.
- Other pressures reduced the capacity of some stakeholders to engage with the GSP project.
- Translating enthusiasm into resource commitment.
- Balancing activities to support relationship building, coproduction, and systems change with the need to provide data about MH impact on those who participate in nature-based activities.

Outcomes

- Positive change towards greater connection and understanding between different parts of the GSP system.
- Some differences, and power imbalances, remain between VCSE and the statutory sector – including different cultures, languages and priorities, as well as resources to fully participate in decision-making fora.
- Mixed results in terms of change in strategic leadership beyond the T&L site GSP team.
- GSP recognised in relevant local strategy documents, although shifts from policy to practice and resourcing may take longer to enshrine.

- Success in obtaining additional funding for the pilot, and/or further work in GSP. Issues about sustainability and longevity remain.

Implications for GSP test and learn project

- To get strategic, political buy-in requires motivation, and people driving the agenda, as well as evidence for the value of GSP.
- Leadership with explicit accountability and investment is required.
- Influencing systems change, networking and relationship-building and strategic thinking takes time, and sites need to be given time to build and embed what has been achieved.
- Getting GSP embedded in policy is necessary but not sufficient – requires commitment about how to support and fund it.
- VCSE partners, including smaller organisations, need to be part of strategic decision making.

Recommendations for spread and scale of GSP

- On going, cross-government support and promotion for GSP is required, recognising that systems change takes time.
- Ensuring that GSP is recognised in key strategies and policies.
- Resourced staff are required with responsibility to drive the programme of work in localities, and for specific key roles developing the system and building relationships.

4.2.1. Context

At the start of the GSP programme, all sites noted a lack of awareness or formal recognition of the value of GSP at a strategic level, leading to a lack of strategic leadership and targeted investment for GSP. At the operational level, this meant that link up between the various parts of the GSP system was lacking.

Several sites explicitly wanted to develop GSP in the context of the wider SP landscape and considered that it needed to be fully integrated into SP, as one of its four pillars (the others being advice and information, physical activity, and arts and heritage.) (T&L1). For others, GSP was seen as part of broader work around developing the role of the VCSE sector (T&L 2 and 3). A key focus of the GSP programme was the need for sites to develop appropriate referral pathways into nature-based activities. (T&L5).

4.2.2. Activities

The national Tackling and Preventing Mental Ill Health through Green Social Prescribing project itself represented a critical moment in leadership and strategic funding at the national level through the shared outcomes fund. A steering group and board drawing from cross-departmental members illustrated the breadth of interest and relevance for GSP as well as providing the opportunity to feed GSP information from and to diverse governmental departments. The GSP project linked partners including the Department of Health and Social Care, Department for Environment, Food and Rural Affairs, Natural England, NHS England, Office for Health Improvement and Disparities (formerly Public Health England), Department for Levelling Up, Housing and Communities, National Academy for Social Prescribing and Sport England. This helped Test and Learn site leaders to legitimise GSP activity and focus, and was considered to have been an important component of getting wider buy in:

> *I think policy decisions and commitments from NHS England nationally is so important and so meaningful. Because when you've got that written in policy in a mandate from the government or NHS England nationally you can then start having those conversations and making those decisions much more easily because you know that's the future direction of travel. (Project management team, T&L5)*

I know locally, when I'm talking to kind of providers and services with the, you know, the individual NHS trusts. As soon as I say NHS England, you know, little ears go up! And they're listening. So, I think, but whether that's not them providing any action, that's just kinda got the interest in the first place. (Nature-based provider, T&L5)

At a national level, GSP is now seen in a range of strategy and policy documents, for example, there is a commitment to scaling up GSP across health in the cross-governmental Environment Improvement plan, and it is likely to be included in the forthcoming Major Conditions Strategy. This suggests a shift in the political will, and a recognition of its importance (WP5).

Within the T&L sites, steering/management groups including a range of strategic partners were established by all sites with the aim of bringing together a range of key stakeholders and partners. However, as noted in the interim report, despite efforts to include a broad range of stakeholders, some were not represented at all these fora, such as service user members/ people with lived experience of mental ill health, Link Workers, mental health services, primary care/GPs and nature-based providers – particularly those representing smaller or local organisations rather than network or national green organisations (Haywood et al., 2023). Nature-based, and other social prescribing providers were sometimes seen as having a limited place in strategic decision making during this process. In cases where advocacy for VCSE organisations was led by individuals, some of the GSP management team felt they were unable to advocate on behalf of the whole sector, or for all communities (T&L4). Some participants, such as Link Workers, faced challenges around time and capacity to attend such meetings, so even where they were initially included, attendance dropped off (Haywood et al., 2023).

While some sites funded posts with a specific remit to make connections and build relationships across the system, elsewhere, such networking and advocacy was driven by project managers, who saw the value in identifying allies, but also recognised that sometimes serendipity, and individuals' attitudes was instrumental in securing the recognition and buy in which allowed GSP to be linked to other key priorities in the locality:

It's been a process of building that advocacy with key people, obviously the chair, building a relationship with [them] ... convince [them] and then the ICB as well, it was great because the new CEO of the mental health care trust was there and [they are] an ex-mental health nurse and [they] immediately, after I stopped speaking, said 'this is absolutely what we should be doing, we should be investing in this, we should be taking risk around prevention, can we look at this', it was great because they could see the value of the work. The other thing they were really interested in was the self-referral, it was about people taking responsibility themselves. So I think you've got the chair of the ICB driving it, you've got the head of the personalised care team who's chief nurse driving it, you've got chief executive of the mental health trust, so they're key people on that board that are getting it. (T&L3)

Increasing political awareness and influence, and harnessing strategic leadership, has been a clear aim for some sites (e.g., T&L7) from the start of the pilot. Other sites, such as T&L3, also noted that consistency of leadership within the VCSE sector had been key, deepening existing relationships between it and primary care. This ensured that health sector leaders received consistent messages about the value of GSP and the importance of VCSE sector provision and activities – particularly where these were based in the communities that health professionals wanted to reach in order to tackle health inequalities.

A number of factors inhibited change, or greater change, within the sites. A two-year timescale for a project seeking to affect systems change was seen as very tight, both locally and by national partners (T&L1, 2, 4, 5).

> *This is a change management programme in the context of enormous system change in a global pandemic. I don't think partners know and understand that…Two years is quite a short time to demonstrate 'system change' – if you think about a systems approach, something that requires a cross sector transformation, you're talking at least 3-5 years strategy. (WP5)*

GSP programme activities were hampered in some cases given the context of shifting NHS structural organisation – particularly in relation to establishing ICS, but also, in some cases, other critical restructuring activities, such as in local council commissioning and social care reforms, financial challenges in local authorities, community transformation, and changes to local IAPT systems. (T&L1,2,3,4,6). This could result in an inability to make strategic decisions, especially among commissioners, in the "chaos" of establishing the ICB, with key decision-makers wanting to wait until the new ICS strategy had been established (T&L 2, 4), or feeling unable to pursue innovations because they had to refocus efforts on their core tasks and reinforce boundaries (T&L6). Because ICSs potentially emphasise the need for greater collaboration between VCSE and health-services, these are regarded as a positive by the wider social prescribing system, however the timing may have been such that the GSP project was less able to take advantage of this potential. Responses to the pandemic and ongoing pressures on the NHS meant that other services were prioritised, and commissioners were in fire-fighting mode (T&L6, 7, 3, 5).

> *[Mental health services] haven't got the headspace to think about new models of care because it is so busy trying to get the existing models of care to work at the present moment. The system is broke. So the integrated care system is basically a hundred million of overspends. So any time you come in, with any conversations that I need new funding, the answer will be no because there is no money in the system. And we are, I would say we are probably not in an innovation place at the present moment. Now you could argue that this could be the best time for innovation but actually we are not in an innovation place. We are still, we stand to recover from COVID. We are desperately trying to get from the deep scars that COVID has put into the system, both in terms of waiting lists but also from a mental health specific. And we are too busy firefighting to think about new ways of firefighting. So, the best example I could do at the present moment we are the fire brigade with the hoses desperately trying to keep those fires down. Do you know what, that hose is great, but I've got a far better way of doing the fire. I have got a far better way of doing it here. I've got foam. Foam works far better than water. (Mental health system leader, TL5)*

Other system priorities could mean that GSP remained being seen as a minor service compared to huge changes taking place across NHS, so was considered "nice to have" but not core (T&L1).

> *So yes, I think it's all the sort of functional bits that make green social prescribing work, so the Link Workers and the providers, a lot of our effort has gone there. And there's still work to be done with the more strategic elements. I think the evidence is going to help, or hopefully will help. I think we've got an understanding, I don't know if we've got complete buy-in, but purely due to other system priorities. And the sort of challenges that the system as a whole, has at the moment. But the green social prescribing is still something that you know, may not stand above other things, where priorities are being made. (T&L1)*

Within the NHS, it remains challenging to advocate for strategic initiatives during a period of crisis:

> *The winter pressures, anything that we're working on can get changed at any one time, so it means sometimes things don't, it doesn't mean it's not a priority but it's something that they just have to wait while we address reaction rather than proactively working towards something. (T&L3)*

This might also mean that there was a lack of time and capacity to engage with GSP programme, and 'meeting fatigue' for online meetings, both of which meant attendance at key meetings began to drop off in later stages of project (T&L2).

Some projects felt that the focus of the GSP project had been too much on delivery, rather than strategic working: getting nature-based providers delivering through social prescribing pathways and measuring mental health impact; and there was a need to return to operating at the strategic level to ensure that GSP was actually embedded, rather than leading to short term projects (which the VCSE sector have always struggled within) (e.g. T&L1). Similarly, one area focused on developing a cohort study with the aim of measuring outcomes (T&L1). It has been noted elsewhere in the literature about whole systems working, that a focus on outcomes, particularly where this is a top-down edict, can hamper progress:

> *… the promise of a simple way to control delivery outcomes from the centre …. Its ability to worm its way into the operating system damages the genuine efforts of organisations, communities, and individuals to improve the way services work on the ground. (Attwood et al., 2003)*

4.2.3. Outcomes

Through the GSP programmes locally, sites reported positive change towards greater connection and understanding developed between different parts of the GSP system - including VCSE organisations, local authority colleagues and other strategic partners such as the NHS (T&L2 and 4). For those involved with GSP in the pilot localities, there was greater understanding about the nature and diversity of the VCSE sector and the paucity of participation afforded to the sector in senior decision making, and the programme of GSP work could be regarded as a case study that illuminated a more widespread issue with social prescribing and other related activities. VCSE partners felt more understood and valued as a result of the T&L pilot (T&L2).

Yet the will and commitment to effect change at a strategic level in the sites was less apparent (T&L4). The role of the Project Manager(s) at all sites was pivotal in providing leadership, direction and influencing the culture of GSP within localities. The absence of resources for similar leadership roles was noted as a key limitation in developing and expanding GSP work in non-T&L sites (WP4).

> *The whole project has got really great awareness across the system, both within the health system in the NHS, but also, ... more broadly across lots of partners... And I think that's credit to [the project manager], and the way that [they've] promoted the work, and got out there, and engaged with as many partners as possible. And also, I think, it's also partly due to the fact that the project came from the health system...So, … it feels to me like people see it slightly more elevated already, because it's come from within the system. I think it's really good awareness, and all I ever hear is people just saying how amazing it is, and how great it is, and how we just want it to continue, and hope that there's sustained funding. (T&L7, project board member)*

However, change in strategic leadership beyond the local GSP team itself has, in some cases, been small, and change has been incremental or piecemeal, which could be frustrating (T&L1,2,4,7).

> *We've got good pockets [of GSP practice] but we're a long way off that being something that is considered business as usual and something they would proactively invest their money in. (T&L6, project board member)*

Although connections between VCSE organisations and strategic partners had increased since the start of the project, some issues remain such as a lack of understanding and appreciation of data collection issues, creating mismatch between the data valued by the funder/commissioner and what VCSE organisations were able to provide. It was felt that change was starting to happen, but that "*there is still some way to go"* to align agendas. (T&L2).

T&L1 suggested that there had not been enough engagement and communication with strategic leaders who may not, therefore, have GSP on their radar.

> *I'm not sure that it's been communicated as well as we think and you know how many times in those [steering group] meetings have we said we need to be talking to … the chief exec at the ICB, we need to make sure they're all aware of it, but I don't think those conversations have happened in depth enough, for there to be that wider understanding at that level.' (T&L1, VCSE MH stakeholder)*

Despite, in some cases, multiple lines of enquiry by the locality GSP team, it was felt that little substantive and sustainable change happened to reassure them that there was political and or strategic leadership for the GSP agenda (T&L4, 6 and 7). Lack of strategic leadership could lead to stagnation, and form a barrier to systems change:

> *I was at a recent event in [T&L site] where they were talking about [our strategic] priorities. You could have rewinded five years and the same strategic priorities would have been on the screen. (T&L6, project board member)*

Elsewhere, despite strong buy-in from strategic health staff who are enthused about the concept of GSP and how to take it forward, financial resources in many cases have yet to be committed (e.g., T&L3 and 5).

> *I think [there is buy in] for sure. It hasn't come with wads of cash immediately, but I think the green social prescribing and nature-based interventions for health is written into the green plan and it's also in the population health strategy as well. I don't think it would have been without this programme, I'm almost certain of that. So those are two big policy levers now that we've got to pull on and we've actually got to commit to say that we're achieving these things now. (T&L5, Project Management team)*

The numbers of referrals to GSP by the end of the project were lower than expected by T&L5, however the fact that organisations *are* now receiving GSP referrals (in some areas from there being none at the start of the project) is considered a significant change. Challenges for Link Workers in terms of the volume of referrals and severity of need was thought to have some impact on this, however it was also suggested that some models may have benefited from further resource into developing strategic links with organisations and "*developing a longer-term vision of where the money is in the future*". T&L5 saw the progress made within the mental health pathways as "*very significant*". This was the result of a strategic decision to undertake specific work with this focus. After providing taster sessions to mental health staff, one area has now been commissioned by a community mental health NHS trust to provide GSP activities on a rolling contract which represents an important shift away from short term and

uncertain funding models, and towards sustainability. It is possible that shifts in pathways within the Test and Learn time period will translate to increasing numbers beyond it. Given the time constraints for affecting systems change, it was felt that a reasonable amount of shift had occurred in prioritising GSP (T&L7). However, VCSE sector fragility and composition had not substantially changed at the end of the two years.

A perceived change in emphasis from the national partnership to focus on tackling mental ill-health, rather than supporting mental health and well-being, part way through programme was considered a challenge, and elsewhere central requirements for data collection on individuals was felt to be at odds to local priorities, and potentially diluting strategic direction:

> *We are also experiencing a dichotomy between having projects running to supply the data required for the national programme versus trying new and innovative approaches that may take longer to establish and not provide the required data set within the funded period. This is creating a pressure to choose between what may be a more effective model and what is easily deliverable. (T&L6, quarterly reports)*

In addition, some felt that there was not enough support at a national level to ensure longevity for GSP, with localities being left to persuade people to action in the absence of a central mandate:

> *I feel quite let down to be honest by central government, because if you're not going to fund it, the least you could do is write a policy about it...embed it somehow so it's actually got some legs. Because they've just left us now to have to persuade people that it's worth doing. Which is a bit of a naff position to be in. (Project board member)*

These quotes highlight the need for ongoing dialogue between partners locally, and locally and nationally, to ensure mutual understanding and alignment of project goals and processes.

Nonetheless, many sites have been successful in ensuring that GSP, and the learning from the Test and Learn project, has been embedded into key strategy documents. This contrasts with non-Test and Learn sites (WP4) where key informants found that even where social prescribing might be seen within some local strategy documents (for example ICS strategies) specific plans around GSP were lacking so, for example, it was not considered within Green Plans, and participants felt that the nature of GSP was not well understood locally. National partners interviewed as part of WP5 felt that GSP was now embedded in a range of policy statements as outlined in 7.2 however, they also acknowledged that due to the short timeframes for the project, they had not been able to 'codify' GSP or develop mandates for it that localities could draw on in future (see 7.5).

GSP is starting to be seen as a key part of primary care (T&L3), has been included within ICS strategies to improve population health (T&L 2, 3, 5, 6) and ICS Green Plans in all sites – ensuring that nature and health priorities are embedded in the system and that GSP is part of ambitions related to medicines, NHS estates, workforce development biodiversity ambitions (T&L7). The T&L3 ICS strategy has recognised some key features of GSP T&L learning, such as recognising the VCSE sector as a key partner for future working, the centrality of personalised care approaches and the need to move away from a reactive, medicalised model to more "proactive, strength-based, partnership and holistic" approaches which are also recognised in recent social prescribing plans (T&L3). This echoes movement within social prescribing more broadly, with recent NHSE personalised care plans also highlighting the need for more

targeted, proactive approaches. Through aligning GSP with these mental health and personalised care agendas locally, this has allowed GSP to gain some traction. New roles have been created within the ICB to embed the learning from the pilot phase (T&L3). In T&L3 the value of green activities is being supported through the embedding of social prescribing and personalised care in key strategic documents, and the integration of these into contract renewal processes. T&L6 reported (in a Quarterly report, Q4 2023) that GSP has been or is in the process of alignment with other key policies and strategies including those in relation to:

- Biodiversity net gain.
- Net zero.
- [Local strategy] response to the climate emergency.
- The Levelling Up agenda.
- Better care funds.
- Place based planning.
- Local community networks for place-based leadership.
- Care pathways [local Mental Health Trust transformation, innovation, and development group] and Personalised care budgets and direct payments strategies.

Other sites have also seen the collaborative and innovative approaches of GSP being adopted as an example of good practice for addressing “wicked issues” (T&L7). Crucially, the VCSE sector is seen as a key partner, and is now embedded in governance and strategic decision-making structures (T&L3). As part of this focus on personalised care, GSP development in the future is likely to be extended beyond mental health and be considered as a wider public health intervention within the care system (T&L3). However, shifting from strategy to practice takes time, and change may not be visible within the relatively short Test and Learn period – it was suggested that middle management and some operational staff can be slow to translate new strategies into changed practices (T&L3).

Strategically, T&L5 undertook a lot of work aimed at increasing referrals from mental health services (including attending meetings with system leaders, providing taster sessions to mental health trusts) which specific engagement work and continued *"collective effort"* from individuals. Providing taster sessions of good quality small scale services to demonstrate proof of concept and promote buy-in before scaling up, whilst being "*honest and upfront*" about budget constraints and potential risks to onward funding, was perceived as key for engagement. Funding from the T&L site has allowed for more time and resource to be allocated to providing patient centred care - including having more detailed conversations and developing care plans with service users to understand their needs and any barriers to engagement. In the example of the commissioned mental health service, having staff time to deliver the sessions and develop the connections, as well as receiving a financial contribution towards taxis to remove potential barriers, was instrumental. These mental health referral routes were a direct result of the GSP programme.

There was debate in some areas about the extent to which GSP should be fully integrated into wider social prescribing activity or whether it should be distinct (T&L1) although the steer from NHSE centrally was that it should be integrated. Similar discussions have taken place elsewhere - for example in relation to young people and children’s social prescribing offers - but no consensus has been reached (Hayes et al., 2023). Those believing that GSP should be distinct from SP generally felt that GSP social prescribers had a specific interest and knowledge of that area and that it may

become lost or diluted if subsumed by SP generally. The way the GSP project was set up fed into this, but may have worked against it becoming fully embedded, with green social prescribers working separately on this project (T&L1). Interviewees in T&L 5 suggested that the PCN model does not allow for flexibility in its approach such as developing new referral pathways which suggests there are difficulties of integrating GSP for mental health into standard SP model.

Differences between the statutory and VCSE sectors remain. These range from using different languages (T&L2), to entrenched power imbalances which impact on decision making at strategic levels (T&L4), the latter leaving one site led from the VCSE sector feeling powerless to affect change, particularly in the NHS. However, some sites were positive that this was starting to change:

> *In the voluntary sector there's always been a willingness for them to work with the health system but that hasn't been reciprocated, but I think now there is definitely... what the programme has done is it's brought a lot of organisations together from across the system in a number of different spaces, which I have liked. (Nature based provider, T&L2)*

Sustainability is an issue for all sites. Some key activities developed through the GSP project, such as networks of nature-based providers (T&L2), were organised and led by staff funded through the pilot which creates issues for their continuation, despite a desire for this to happen.

Other ways of aligning GSP with other local initiatives have also been successfully pursued. One site was awarded over £1.5m from the Active Travel Social Prescribing feasibility fund (see exemplar case study), and this work will be overseen by GSP strategic steering group with project staff hosted within the local VCSE coordinating organisation.

Sites have been successful in obtaining funding to further GSP work in their area, through a range of charitable or statutory sources and through the pilot project. In some cases this is substantial (e.g., T&L7 has secured £775K matched funding) (see Box 5). Further detail about funding obtained by the sites is detailed in Chapter 6. This has included input from commissioners in health and social care.

Box 5: Exemplar: Aligning active travel and green social prescribing

One site has been selected as one of 11 active travel social prescribing areas, funded by the Department of Transport with £1.58m of revenue grant funding until 2025. The aim of the project is to explore how personalised care plans can be combined with investment in improved walking and cycling facilities to improve physical and mental health. The project aims to remove barriers to participation, making walking and cycling a realistic prospect for people who currently don't benefit from active travel. There will be particular emphasis on walking as this is the easiest activity for people on low incomes.

From the outset, project leaders have recognised the alignment with the current green social prescribing Test and Learn pilot and the two projects are being integrated as closely as possible. Leadership of the project sits within the current green social prescribing team within [locality] VCSE and will build on the networks created through the GSP Test and Learn pilot. The principal transport officer in [locality] Council who is responsible for the project will join the GSP strategic board and there will be shared quarterly meetings of the two projects, with shared reporting to the Integrated Care Board, [locality] Place Based Partnership and the local Joint Health and Wellbeing Board.

The coordinating team within VCSE will be able to draw on the learning from the GSP pilot to inform planning and delivery of the new project while using the opportunity to further deepen the networks of health and greenspace providers developed through the Test and Learn pilot. Projects will include an online information hub (building on work done through the GSP pilot to create a directory of providers and a map of accessible green spaces), as well as a bike library

service and grants to help community groups provide peer-led walks and cycle rides. Three areas in the north, west and east of the city will be targeted based on local health needs, overlapping with the targeting of green social prescribing investment. The project was due to begin in April 2023.

The networks established through the Test and Learn pilot have been significant in developing the new programme. In addition to the central role of the VCSE, others involved in the GSP pilot will also be part of the new project, including the head of social prescribing; [locality] GP Alliance, the city council's public health team; the organisation responsible for the largest allotment site in the city, a local Blue VCSE provider; and a group representing service users and people with lived experience of mental health issues. The project will also bring new organisations and individuals on board, including charities such as Sustrans and Age UK and a new post working with Muslim women and girls, creating the potential to extend learning from the green social prescribing pilot into new networks. The active travel project will also take on the development of the GoJauntly walking and wellbeing app initiated within the GSP pilot.

Building on learning from the GSP pilot, three referral routes will be offered relating to different levels of need. Community-based promotion will encourage self-referral for those who wish to support and improve their own wellbeing without going through the NHS; referral within primary healthcare will be via social prescribing Link Workers and newly appointed health and wellbeing coaches; and within secondary care, there will be bespoke referral routes for people with liver disease or diabetes via the [locality] Active Hospitals Programme.

While it is possible that the active travel project could have been funded and delivered independently of the GSP pilot, the close integration of the two has created opportunities to build the networks that have been initiated through GSP project work and embed the learning from the pilot. It complements the ICB's focus on preventative interventions and personalised care and begins to integrate the city council more closely into social prescribing.

4.3. Harnessing nature-based assets

This relates to the availability, funding, organisation, and connectivity of nature-based assets for GSP needs. We theorised that if we grow or harness nature-based assets, there will be a range of appropriate, diverse, geographically spread opportunities for service users.

Box 6: Summary findings Section 4.3

Context

- Sites overall reported that there was good coverage of nature-based providers and delivery capacity is often high.
- Connectivity, link up and the ability of nature-based providers to receive social prescribing referrals is sometimes insufficient.
- Fragmentation and variability across the system is compounded by a lack of communication between elements of the system around capacity, availability, and appropriateness of referrals.
- Site reports varied in their experience; one site found issues of inequity, with small providers unable to engage in the same way or to the same extent as larger groups, and so impacted more than others. Another site reported a broad, linked, and sufficient provision of NBPs within the system.

Activities

- Nationally: if programmes are to be delivered and increase or retain capacity there needs to be dedicated and accessible funding and investment in the organisations that provide them.
- Locally: increasing capacity must be accompanied by accompanying training resources for those involved, and any increase should be matched to an assessment of need in local areas.
- Locally: if provision is to be sufficient then funds are needed to provide basic practical elements for organisations and participants; transport, equipment and similar.

- T&L sites: referral pathway refinements through co-design work and awareness raising activities allow for existing provision to be more appropriately used and for increases in capacity to be best allocated.
- T&L sites: successful efforts matched need and availability, via a trusted provider list and directory of activities, to increase awareness of support available and to allocate resources.
- T&L sites: funds, even nominal amounts, validate involvement in activities and other input often undertaken for free, and legitimise existing activities.
- T&L sites: sites reported the importance of a collective vision (and collective action) for provider availability and deployment, and for that vision to be clearly articulated across all elements of the system.
- T&L sites: some sites presented referral pathways as 'additional' to existing routes through services and maintained the nuance in presenting these offers to various health organisations.

Challenges

- Time was the most important resource. The time individuals put into developing and refining pathways and seeking funding validates these activities to other elements of the system, but often more time was required than had been expected.
- Time from those in the VCSE sector to develop funding proposals was critical to ensuring sufficient provision. Some senior strategic partners lacked time, which was problematic.
- The number and type of referrals impacted on sites' ability to harness nature-based assets in the system.
- The shift in focus towards mental health referrals throughout the GSP programme had an impact on the shared vision amongst partners and therefore on provision link up and sufficiency.

Outcomes

- Sites were consistent in what they would consider as progress for being able to harness sufficient provider availability.
- Building trust across systems was critical to progress.
- New VCSE organisations delivering GSP activities that had not previously done so was a core indicator.
- Developing collaborative funding bids to extend the programme, with larger organisations supporting smaller ones, would be a clear indication of progress.
- Referral data would indicate where progress has been made, and clarification and communication of safeguarding criteria to prevent inappropriate referrals would indicate that assets were being harnessed appropriately.

Implications for GSP test and learn project

- Greater join up of the system, and audit of provision, is needed to ensure that provision matches population need, and that providers can support participants referred to them.
- Supporting the VCSE sector by finding time and resource to develop funding proposals is important.
- Senior strategic partners must ensure they invest sufficient time in supporting activities to develop and refine pathways.

Recommendations for spread and scale of GSP

- Sufficient funds should be invested in order to provide basic practical elements for organisations and participants such as equipment, transport and personal support.
- Funding for NBAs validates involvement in nature-based activities and legitimises existing activities.
- It is important to develop a collective vision and action for provider availability and deployment, and for that vision to be clearly articulated across all elements of the system.

4.3.1. Context

The interim report suggested that it was unclear whether the myriad challenges faced by providers and Link Workers across the nature-based system were due to lack of availability or capacity, or a lack of connectivity, and what factors contribute to this variation across the system. There was a high degree of variation across T&L sites in terms of both availability and accessibility of delivery settings. Some sites report sufficient nature-based activities, while some report not enough specialist providers for issues such as higher mental health needs or requiring more expert support (Haywood et al., 2023).

For this report, sites overall reported that there was good coverage of nature-based providers (T&L5, T&L1, T&L2) and so delivery capacity is often high; however, it is the connectivity, link up and their ability to receive social prescribing referrals that is sometimes not sufficient. This is reinforced in the wider literature, where studies have shown there is often poor interagency communication around cohorts with complex needs (Wood et al., 2021). There is fragmentation and variability, which is compounded by a lack of communication between elements of the system around capacity, availability and appropriateness of referrals (T&L3, T&L4). This links directly to findings in our interim report, which highlighted the importance of pre-existing networks and the difficulty in linking these disparate groups together (Haywood et al., 2023).

Nationally (WP5), this topic has been approached through the recent 'National green social prescribing delivery capacity assessment', [6] which sought to "improve our understanding of the existing provision of green and nature-based activities across the country and help determine whether the current level of provision is sufficient to support social prescribing referrals equitably to these activities if rolled out nationally." This was conducted in non T&L site areas, as was the acceptability and perceptions research outlined later in this report). The results from this study largely support those reported from sites and we detail these below where appropriate.

One site (T&L4) went further and reported that there were issues of inequity, with small providers unable to engage in the same way or to the same extent as larger groups, and therefore the fragmentation described impacts some more than others. This is echoed in the broader literature, with studies arguing that commissioners need to consider equitable funding mechanisms which enable smaller organisations to access funds if social prescribing is to be sustainable (Holding et al., 2020). Conversely, another site (T&L7) reported that there was an adequate amount of provision in the system and that it was broad, linked, and sufficient.

4.3.2. Activities

The activities described by sites aimed at addressing provision or provider coverage across various elements of the system fell largely into two categories. Firstly, and linked directly to programme theory 1 described in more detail previously, funding mechanisms are central. If programmes are to be delivered and increase or retain capacity, there needs to be dedicated and accessible funding and investment in the organisations that provide them (this is also a central finding of the national capacity assessment (WP5).

T&L5 highlighted the important nuance that increasing capacity has to be accompanied by concomitant training resources for those involved, and that any increase should be matched to an assessment of need in local areas. Additionally, if

[6] https://www.gov.uk/government/publications/national-green-social-prescribing-delivery-capacity-assessment/national-green-social-prescribing-delivery-capacity-assessment-final-report

provision is to be sufficient then funds are needed to provide basic practical elements for organisations and participants; transport, equipment and similar (as was also highlighted in a review of the social prescribing pathway by Husk et al., 2020).

The second category of activity related to referral pathway refinements which would allow for existing provision to be more appropriately utilised and for increases in capacity to be best allocated (T&L1). T&L2 undertook significant activities to understand the barriers to engagement that providers experienced and to create mitigation strategies. They did this through comprehensive co-design work with the organisations, and subsequent awareness raising activities. The integration of a broad range of voices with experience in decision making was a key recommendation from our interim report (Haywood et al., 2023). This co-design work was echoed in T&L4, where significant work was done around developing nuanced approaches to matching support and levels of need, to better allocate service users in the system.

T&L3 also sought to match need and availability, through developing a trusted provider list and directory of activities, to both increase awareness of appropriate support available and to better deploy the resources that were available. Such approaches to asset matching and listing are also present in the broader social prescribing literature (Tierney et al., 2020).

The need for this was echoed in our work with non T&L sites, who reported a lack of low-level, low cost interventions aimed at those experiencing mild or very mild symptoms but who may not be currently active (WP4, Interviewee 3).

Three factors supported the delivery of these core activities to better harness nature-based assets in the GSP system and increase appropriate capacity. Funding was the most reported factor and the one given most importance by sites. Funds, even nominal amounts, validate involvement in activities and other input often undertaken for free (T&L5, T&L2). Funds allocated in this way can also legitimise existing activity, for example the trusted partner developments in T&L3.

> *That hasn't been done through direct funding to those groups, it's all kind of help and support on upskilling them with delivery resources and just kind of helping support their programmes generally which then enables them to go out and develop their own pathways because they can evidence that they've already done this and they've got skills… they've gotten training for different delivery perspectives, from safeguarding, from risk assessments, applying for funding, that sort of thing, they've kind of given them some funding if they need some resources to prepare their site or to kind of improve their facilities…equipment. (T&L5, project stakeholder)*

To this end, the GSP programme provided a counterpoint to the issues raised in our non T&L sites (WP4, Interviewee D) around resourcing time to attend meetings and training, and that (again) it was smaller organisations who were likely to be excluded where this GSP resourcing was not present:

> *But they don't have anyone who can do the volunteer administration and find out about things like volunteer policies or safeguarding… the larger organisations… might have somebody paid who can do this. (WP4, Interviewee 3)*

Secondly, sites reported the importance of a collective vision (and collective action) for provider availability and deployment, and for that vision to be clearly articulated across all elements of the system (T&L5). This agreed collective vision has been argued to be important across all levels of community-centred approaches to public health (Stansfield et al., 2020). This collective vision should also be developed through appropriate co-design work (T&L2) and recognise that there is useful and important

local variation (T&L1). These ideas are explored in more detail in the exemplar given in Box 7 below.

Lastly, T&L2 and T&L3 raised the importance of presenting referral pathways as 'additional' to existing routes through services, and to maintain the nuance in presenting these offers to various health organisations.

Three factors were reported as inhibiting activities. As described in multiple other programme theories, time was probably the most important resource. The time individuals put into developing and refining pathways and seeking funding validates these activities to other elements of the system, but T&L5 and T&L6 in particular noted that more was required than had been expected. T&L3 agreed that time from those in the VCSE sector to develop funding proposals was critical to ensuring sufficient provision, but T&L4 noted that senior strategic partners lacked time, which was problematic.

> *…that's his sole role to go out and talk to those groups and provide that level of support [around funding proposals, and developing internal processes and infrastructure] and I think that's been, whilst it's not always material things that come from that, I think the support that's provided and the opportunities that are created through that as a result of that are really significant and quite important. (T&L5, Project Management group)*

Secondly, the number and type of referrals impacted on sites' ability to harness nature-based assets in the system. T&L2 reported that Link Workers were seeing a cohort of people whose support needs were more acute, and so were not immediately appropriate for GSP referral, as well as those who chose not to engage in GSP through personal preference or for practical reasons (again these two components are supported by the findings of the national capacity assessment). This builds on our findings reported in the interim report, which highlighted that GSP was only one of myriad routes for Link Workers and other social prescribers to explore and is supported in the wider literature (Hazeldine et al., 2021; Tierney et al., 2020).

> *The referral process is working but that is an area as well that hasn't worked so well. I think we thought that more referrals would be coming through from Link Workers to […] and it hasn't been the case, you know, people have been more self-referred. And I guess when you hear about the experience of Link Workers and their caseloads and the sort of, you know, issues that their patients are experiencing they're like at crisis point sometimes and therefore green prescribing isn't the most, they need to sort out housing and these sort of basic needs before they'd be ready really for that green prescribing offer. I guess it's partly symptomatic of the wider system and wider sort of health crisis, I guess. But yeah, it's a little bit disappointing that that hasn't flowed. Especially considering the Link Worker training and how well received that was from the feedback we got and that you know the other health professionals. (Nature based provider, T&L2)*

T&L2 also noted that the shift in focus much more towards mental health referrals throughout the GSP programme meant a shift in approach for some providers where other referral routes had been more common, and this represented a change in cohort - which in turn had an impact on the shared vision amongst partners and therefore on provision link up and sufficiency. T&L1 highlighted that not all areas have adequate green options available which again impacts on referral and in turn on perceived sufficiency of provider coverage. These points were echoed in non-T&L sites, who highlighted organisations' difficulty in taking on referrals of cohorts who may be more challenging to manage, and that they lacked the knowledge or expertise to engage with such a group (WP4, Interviewee 5).

Lastly, T&L3 reported that whilst engaging in innovative funding approaches such as linking personal health budgets to green provision was positive, the ability of some organisations in the VCSE to manage such funding routes was often limited and therefore a bottleneck in broadening appropriate provision (Dayson et al., 2019).

4.3.3. Outcomes

Sites were consistent in what they would consider as progress for being able to harness sufficient provider availability. T&L5 and T&L3 described new modes of delivery as an improvement; the model adopted by T&L5 meant that funding decisions were devolved, and autonomy given to more of the system which enabled greater flexibility and therefore perceived sufficiency of provision. An indicator valued by T&L2 was an increase in referrals, which they argued demonstrated that GSP provision was seen as sufficient by those in the system. In particular, an increase in self-referrals was viewed as positive in this respect. This builds on our observation in our interim report, which highlighted the need for multiple points of entry to the GSP system.

Four sites (T&L3, T&L2, T&L4, T&L7) all indicated that building trust across systems was critical to progress, something demonstrated by the trusted provider programme in T&L3 and through the work to describe the breadth and appropriateness for mental health support of nature-based activities available in T&L4.

In terms of observable differences which would provide evidence of change against these outcomes, sites indicated that new VCSE organisations delivering GSP activities that had not previously done so was a core indicator (T&L5).

> *[Organisation name] are a really good example, I think they've really cleverly used this work they've been doing to make changes in their organisation culturally to think about how they open up their assets [e.g., places, spaces, groups or clubs] for health and for people and not just protect and maintain them. We've got a really good example of that with [locality] which they went through a whole load of internal wrangling to get that opened up for the public to be able to access it so they could run their men's mental health programme and they've taken that learning now and said what other assets have we got that we can open up and make available. (T&L3, project manager)*

Relatedly, T&L5 also noted that developing collaborative funding bids to extend the programme, with larger organisations supporting smaller ones, would be a clear indication of progress. T&L2 and T&L3 stated that referral data would give an indication of where progress had been made, and that the clarification and communication of safeguarding criteria to prevent inappropriate referrals would be an indicator that assets were being harnessed appropriately.

Looking to the future, sites felt that broadening and deepening the use of matching levels of need to existing provision (T&L3) and describing the breadth and appropriateness for mental health support of nature-based activities available (T&L4) would be important to address sufficiency. This could be tied to providers starting to work together as consortia (T&L3) and to think clearly about how health inequalities across multiple domains might be addressed, as well as mental health, through such provision (T&L2), a granularity of approach that is echoed in the broader literature on community assets and health (de Andrade and Angelova, 2020).

Box 7: Exemplar: Increasing connections across the system through a co-design approach

In this T&L site there is a complex infrastructure for social prescribing in place with different funders, referrers, data systems and models which do not always fit neatly into the standard model of SP. There is considerable variation in the SP model and level/type of investment by place, influenced by a range of contextual factors. This requires increased understanding across the system, alongside co-design of activities so that delivery reflects differences in context/place and the needs of local communities/stakeholders.

In response to this, this T&L site has invested lots of time and resources into developing a partnership/co-design approach which has underpinned all activities throughout delivery. Co-design workshops were undertaken at the start of the project with people with lived experience alongside place partners, e.g., CCGs, local authorities, social prescribing teams and programme partners, to map the GSP infrastructure, coproduce programme objectives and develop target cohorts for each place (e.g., one area targeted those living in high deprivation whilst another focused on ethnic minority communities).

These insights were used to develop criteria for a grants panel for green providers. Green providers across the region were invited to bid for small/medium/large scale grants which targeted specific population groups. Panel members were brought together to discuss each application, and decisions were made on the basis of coverage, scale, potential impact and target population. Applications for funding scored more highly if they focused on any of the target groups and even higher if they targeted communities on their placed based priority. Offering different sizes of grants allowed engagement from a range of green providers with different levels of capacity.

In some areas not all the funding was allocated, so further work was undertaken by place partners alongside providers to coproduce new applications that met the programme objectives and plugged gaps in provision. For example, further work has been undertaken in one area to target those experiencing severe mental health needs as well as blue activities due to a gap in provision. The social prescribing lead in the area contacted groups to encourage participation and through this work the panel received two more applications focused on the target cohorts. In one area – whose original focus was the clinically vulnerable and those who are shielding, findings from workshops with stakeholders revealed the need to focus on ethnic minority communities.

This is a particular challenge in this area due to a lack of available groups. Further work was undertaken to target these groups, such as contacting the local ethnic minority network and delivering workshops. This resulted in another application from an organisation with a track record in engaging with ethnic minority communities but who had not previously delivered green activities. Although taking this codesign approach meant that formal delivery of projects started later in this T&L site than in some areas, stakeholders felt this approach was instrumental in creating buy in for the programme and developing connections across the system:

> *I think what has worked really well is the approach that the [name of area] have taken in terms of there's been a quite measured approach and a genuinely co-designed thing but with providers and with the wider voluntary sector. And I think as a result of that it's probably been perhaps a little slower than some other areas in those test sites and maybe even than colleagues at a national level might have wished but I think it's brought people along. Not least our staff who are quite excited about the new projects that they get to refer into. There's a sense of ownership I think at a local level in place, that I don't think would have happened the ICS hadn't taken that more measured co-design approach. So, I think that would definitely be something I'd highlight as something I think had worked well, co-designed at a local level and taken the time to get the grant funding out in a way that it got a lot of interest from voluntary sector organisations and gave a lot of networking events that led up to that.*

There have been several other examples of co-production activities within this T&L site. For example, a network of green providers and health sector partners with an interest in GSP was developed in response to the codesign workshops at the start of the project. This is a voluntary run space with content that is co-produced and led by the needs of VCSE organisations with a focus on sharing best practice and upskilling green providers.

> *Feedback that we've had has been about how valuable the peer support has been and how providers have learned from each other. So I think I shared that example at the task group*

where[...] one provider was wanting to make their stuff more physically accessible, another provider had previous experience of doing that and could tell them oh you need to do this this and this you know we've done, we've been through it and you know shortcutted that process for them…I think there's certainly been the feedback that we've had that that's been a really valuable thing.

In addition, several placed based workshops with representatives from social prescribing teams (including Link Workers), VCSE organisations, a large nature-based infrastructure organisation and the ICB were undertaken to review the progress of the grant panels, understand the collective learning and coproduce area and place level priorities for the next stage of delivery which will be funded by the ICB. For example, some areas will continue to focus on areas of high deprivation and are exploring how to further reach underserved communities.

Further grant panels brought together the ICB, local authority practitioners, social prescribing teams and others to decide which green providers would receive extension funding from the ICB and applications were scored according to how well they had developed referral pathways and reached underserved communities in the first round, as well as how well they fit within the agreed priorities for onward delivery. Both sets of grant panels are a good example of co-production and using engagement work to ensure that services are accessible and delivered in a way that makes sense to local people and partners.

We had the place workshops recently to look at the sort of reviewing the grants process really and seeing you know what have we achieved through the grants and what are the areas that we still need to address and I haven't directly been involved, but my colleagues have and the feedback from them is that they've been really useful and there's been some really good conversations and you know that collaboration between you know providers and the kind of lead for the social prescribing Link Workers as well and they've been kind of working out you know what potential solutions there are and you know it's been good you know the development that's been done there.

Taking this co-design approach was valued by many stakeholders. As a result, stakeholders felt that there is greater connection and understanding between different parts of the system - including VCSE organisations, local authority colleagues and strategic partners such as the NHS. Organisations such as small VCSE providers are now having more system level conversations and are engaging in collective problem solving with health system partners. VCS organisations in both the local and national evaluation described feeling much more valued due to this approach, resulting in more collaboration:

I think one of them is my own experience, so a big part of my job is having those conversations about voluntary sector relationships and I think for the longest time system partners have not been open to those conversations or, if they have, it's very much been just the voluntary sector has a delivery on – you can't see me doing this – but there's really far over there and there's a lot of disconnect between them. But now I think off the back of this programme and other programmes like it, there's more openness from people because they've seen that voluntary sector organisations are legitimate and they can deliver things and there is that trust, that reciprocal trust anyway...I think it's enabled those organisations who perhaps were the not usual suspects, if you like, to foray into a world that they've not been able to understand or get into before, because what the green social prescribing has done is funded activities that kind of hit some co-produced outcomes rather than an external body kind of delivering on some outcomes that weren't co-produced for or by people. So, yeah, I think it's really just been conversations, but I've seen some of that attitude shift towards being more open to the voluntary sector being legitimate partners in this work now.

…You know the green prescribing was brought together by partnerships. We didn't have the relationship that we have with the [name of strategic organisation] before it you know; it's been a real step change. So, you know I think it's been fairly instrumental in you know the potential for that being much more impactful and people actually being bought into that...I'm having more conversations and my colleagues are having more conversations with people in the NHS and maybe they were quietly bought into it but it does feel like it's changed.

Although the co-design approach has been very successful, there were several key inhibitors to change. For example, although the mapping and insight work at the start of the project was very helpful in coproducing shared priorities for the programme there was time pressure due to the wider timescales of the national programme. This meant there was very little time to develop a high-quality proposal, which may have skewed engagement towards already existing providers

and precluded the development of new more innovative ideas. In addition, service user involvement throughout the programme could have been improved.

Although service users with lived experience contributed to some of the later grant panels, they were not involved in panels at the start of the project. In turn, the size of the region's footprint presented challenges for effective communication and the project relied upon contacts and networks of local social prescribing led organisations to share information with the wider VCSE. However, this information didn't always reach the right places, or wasn't timely enough, which created gaps in understanding about the project. In turn, although co-design underpinned all activities within the project, the shifting priorities of the national partnership created challenges to this and meant that some parts of delivery were much more 'top down' then initially intended, particularly as the overall programme management was delivered centrally.

When VCSE organisations were not as involved at the start of the programme or had less connection with the SP system, understanding of programme delivery was also weaker. However, stakeholders are keen to build on partnerships built up in the project through the next stage of delivery funded through ICB. In turn, stakeholders are committed to continue the co-design / place level approach which has been adopted throughout the programme. Engaging place leaders to take more of a central role in the coordination of the project to ensure projects are better tailored to local needs is being explored for future delivery.

4.4. Alignment of organisations

This section focuses on the alignment of organisational structures linked to or supporting GSP. It was theorised that if efforts were made to remove perceptual and structural barriers and create aligned structures, then there would be coherence and clarity of roles and responsibilities across the system.

Box 8: Summary findings for Section 4.4

Context

- GSP is a complex intervention operating in a complex system, this relates to the interdependencies between the actors involved, the variation in practice within and between areas, and the dynamism of the system.
- Strategic, systemic, and procedural alignment can be important when working towards a common goal.
- There is evidence of a lack of strategic, systematic, and procedural alignment in relation to GSP.

Activities

- Nationally: A key element of the cross-departmental T&L programme call was to address misalignment at a local level.
- Locally: All sites recognised the need for alignment and integrated relevant activities into their plans for the T&L programme.
- T&L sites: Building awareness and understanding of GSP and systemic and procedural issues was a key component of all pilots.
- T&L sites: Efforts were made to co-develop and establish shared ambitions between actors in each pilot site.
- T&L sites: Some aspects of mis-aligned systems and tools, such as funding and data capture and transfer, were addressed by some pilots.
- T&L sites: All T&L sites sought to clarify and develop responsibilities and accountabilities to achieve strategic alignment of GSP.

Challenges

- The time frame of the T&L programme was insufficient to create and embed greater alignment.
- Perverse incentives, such as rapid ongoing cycles of change, that prevent alignment were not addressed.

- There was not the power to address some of the most important systemic mis-alignments (such as funding) amongst the GSP stakeholders.

Outcomes

- There was mixed evidence of achievement of greater alignment of strategic, or procedural elements of GSP.
- Overall, there was considered to be greater alignment in terms of understanding of GSP, of different stakeholders' ways of working and needs, and ways forwards, achieved through networking, dialogue and information sharing.
- There was some evidence of alignment strategically through reference to GSP in a variety of policies and strategy documents.
- Misalignment of funding systems remains though efforts were made to understand the implications of related challenges and to trial alternative options. Similarly, the misalignment of data systems was addressed but not solved.

Implications for GSP test and learn project

- Resources are needed to ensure that the progress made in alignment through the T&L programme is not lost and is instead capitalised on.
- Sufficient time to build alignment is needed if a second stage is funded.
- Those with power to change some of the underlying factors preventing GSP alignment need to be more involved.

Recommendations for spread and scale of GSP

- Alignment is a fundamentally important factor and should be considered in the scale up and out of GSP.
- A plural systems level approach needs to be used, backed up with sufficient time and resources, and those with the power to address key factors (such as funding/commissioning) must be involved.
- Perverse incentives that make working towards alignment an irrational option should be addressed.

4.4.1. Context

GSP is an inherently complex system. The complexity partly relates to the number of actors (and their respective ways of working, systems etc.) involved, the variation in practice within and between areas, and the dynamism of the system. However, a crucial component of the complexity is the interdependency within (and beyond) the GSP system. Those interdependencies determine whether or not the system 'works'. In the interim report, (Haywood et al., 2023) we illustrated some of the different factors in the GSP system. In brief, those interdependencies relate to understandings and awareness; ambitions; priorities; systems and tools; processes and ways of working; and responsibilities and accountabilities. For the system to 'work', and particularly for it to be efficient, there needs to be sufficient alignment within or across the factors listed above (Nurjono et al., 2018; Middleton et al., 2019). In our previous work it was noted that a lack of alignment of these factors could, arguably, contribute to GSP not achieving its potential.

Strategic alignment within a system is where there is coordination of the ambitions and activities of the different interdependent stakeholders with the aim of achieving a commonly understood goal. Procedural alignment relates to the sufficient correspondence of the capacities of, and the tools and processes used by the different stakeholders to achieve those common aims. There can be different depths of alignment, from coordinated systems and processes that work in parallel, through to more comprehensive integration of stakeholders and their ambitions and strategies, or tools and processes.

The types of factors which influence strategic or procedural alignment include (Nurjono et al., 2018; Goderis et al., 2020):

- Mutual understanding of what is to be achieved and how.
- Consensus about how to achieve it.
- Mutual expectations (including of each other).
- Mutual buy in.
- Coordination and collaboration.
- Clarity of responsibility.
- Empowered actors.
- Power dynamics and disparities are acknowledged and addressed.
- Administrative systems that, if not interoperable, can operate in parallel or in correspondence.
- Sufficient resources (including dedicated time for change and adaptation activities) and capacities available.
- Sufficient flexibility that is recognised, acknowledged, valued and mutual. Fairness is also crucial; it should not be expected of some partners and not others.
- Compatible cultures and ways of working.
- Management of conflicting drivers etc.
- Communication mechanisms.
- Transition management.
- Performance review and aligned performance indicators.

These factors map to understandings of the features that affect how well or not whole systems approaches work (Garside et al., 2010).

A lack of alignment, or even misalignment in the GSP system is expressed, or manifest in a number of ways. In some cases, the misalignment can be very basic. For example, many of the geographies of the GSP system (e.g., local government, health, and neighbourhood-based organisations) do not align. Misalignment can be perceptual. For example, it has been noted that there has been a lack of alignment in institutional stakeholders' understanding of what GSP is and is not (an example of this can be seen in the differences of opinion in the early stages of the project, on whether or not community referrals should be included in 'GSP' between different partners within the T&L programme itself - see Chapter 2). In other cases, the misalignment is in terms of basic resources for GSP. For instance, there is little alignment or coordination of the funding of GSP. Third party funders are relied upon to fund the delivery of services needed for the social prescribing system, which is primarily centrally organised.

Often the lack of, or misalignments in the GSP system is multi-dimensional and interconnected. A good example is in relation to demonstration of outcomes of GSP. In this case, the misalignment is related to:

- Differences in ambitions for GSP, leading to prioritisation of different outcomes and confusion over what data needed to be collected by whom and in relation to what.
- Differing understandings of if/or why outcomes are necessary to collect; and

- Considerable variation in the tools and processes for data collection, storage and use which, where there is need for transfer of data, do not necessarily correspond across the system.

In response to a recognition of these challenges, one of the key elements of the T&L programme was to focus on alignment of ambitions, processes, and structures. This, it was hoped, would help address some of the macro and micro challenges of sufficient coordination of different elements of the GSP system and process. The T&L project aimed to give the pilot sites time and space to review and adapt systems to facilitate and enable GSP and therefore, hopefully, result in participant benefit. Many of the sites highlighted the lack of alignment in their initial bids: *'We have … lacked a systematic approach for our community and environmental partners to provide support at scale'.* (Application documents). Another site noted that '*Systemic connection: between the green and health sectors – this includes a lack of awareness, engagement, communication'* (Application documents) was a key barrier to GSP, and that the: '*[county] has large areas of publicly accessible land…, however, the systematic use of greenspace for health in [county] is underutilised and there are system-wide barriers that our partnership has identified…'* (Application documents). In T&L5, a co-production process with over 40 local stakeholder organisations, which sought an agreed ambition for their pilot, resulted in the identification of 'integration' as the key aim.

Addressing the strategic and procedural alignment was a key aim of all the T&L sites. In T&L6, for example, the project sought to work differently from the traditional siloed model of local authority working and instead to cut across and integrate more effectively the different work areas. They aimed to: '*Establish an at-scale system-wide collaboration, modelling wide stakeholder engagement from multiple sectors, and embedding the green sector within [county's] health and care system.'* (Application documents). This was intended to have a number of outcomes including: '*Embedding green sector partners within the [locality] health and wellbeing system to facilitate on-going collaborative partnership and secure economic and resource benefits*' (Application documents).

One site recognised a local '*disconnect between the sectors referring to and providing those interventions'* and '*a significant disconnect between the realities of the existing funding and prescribing landscape, and the pressure placed on the community-based groups, businesses, and projects that provide the activities as a result of social prescribing.'* (Application documents). As a result, this site aimed to '*invest time and resources in continuing to build effective, mutually beneficial long-term partnerships with the VCFSE sector'* which would: *'create system collaboration and connectivity through a vibrant network of health and environment stakeholders with community representation sharing expertise and scaling activity'* (Application documents).

Beyond the T&L programme, as noted in previous sections (for example see 4.2), the GSP pilots were happening against a background of wider systemic change. For some areas this related to a move to, or consolidation of the local ICSs, in others this also related to wider inter-institutional reorganisation (T&L7).

4.4.2. Activities

Sites used a variety of strategies and activities address the factors listed above which influence strategic or procedural alignment relating to alignment. Many of these strategies overlap with elements of the T&L programme discussed in other sections of this report. Those links are highlighted in each subsection below.

Building understanding and awareness

Previous research on integration and alignment of health systems has highlighted the importance of the *'softer issues of relationship building in order to create trust between professionals who may otherwise operate with different understandings of what is involved when integrating care'* (Goodwin, 2016).

This has been recognised by all sites. In T&L3 awareness raising at all levels has been key. Particular efforts were made to enhance recognition that all parts of the system are important. One site aimed to build a mutual understanding of how the different contributory organisations and systems worked: '*…we are building in approaches, such as reflective learning and communities of practice, to support the creation of open, collaborative ways of working. This attention to culture and shared ways of working will be essential if we are to successfully integrate our health and environment sectors.'* (Application documents)

A range of approaches were used to build understanding and awareness of GSP across the local systems. T&L5 developed and implemented a communications strategy and website with central resources and ran engagement events to share information on the pilot. Several sites (e.g., T&L7 and T&L5) worked with or developed formal and informal networks of stakeholders to help build awareness and understanding around GSP. All T&L sites used events, workshops, town halls, and meetings to address shared understandings of GSP and what was to be achieved through the T&L programme.

Co-developing and establishing shared ambitions and priorities

Co-production processes, particularly in the bid development stage, but also after funds were awarded helped clarify and align ambitions for the T&L project but also for the GSP system beyond the project. Indeed, the methods used in the evaluation itself, and in particular the formal development, between the researchers and the T&L site leadership groups, of the initial Theories of Change (detailed in the interim report), were considered to have been helpful in articulating and clarifying ambitions and priorities.

Beyond the evaluation, co-design approaches allowed for increased understanding of the specific issues of individual pilots in each geographical area and helped establish shared ambitions and priorities. In T&L4 a provider collaborative model co-produced new governance, guidelines for data quality, safeguarding, and agreed minimum standard rates. This helped establish transparency between partners. Across the T&L pilots, Memorandums of Understanding (MoUs) and related tools were used to bring some alignment in terms of the pilots' ambitions (T&L4). All partners within T&L4 had core funding to contribute towards the development of the model. Further, a provider collaborative model co-produced new governance, guidelines for data quality, safeguarding, and agreed minimum standard rates. This helped establish transparency between partners.

Addressing systems, tools and resources

Funding was a crucial component of addressing alignment. The funding associated with the national T&L programme itself helped facilitate buy-in, enhancing the potential of system wide alignment. In T&L5 funding was considered to have been critical: the development of a successful network "*would not have happened"* without the support from the T&L programme. It also provided resources to enable participation of different stakeholders, and to commission new tools or services (see below).

More broadly the strategic and aligned funding of GSP is a specific issue that was, to some degree, addressed by the T&L sites. More can be read on this in Section 1 on new commissioning arrangements. As noted above, and in more detail in the Interim report, the reliance on third party funders for the vast majority of GSP is a significant challenge to achieving alignment.

All T&L sites made efforts to address the challenges of misaligned data systems. T&L2 undertook a programme of activities to address these challenges (Box 9 gives an exemplar from one site in relation to their data management alignment activities.)

Box 9: T&L2 data management alignment activities

Nature-based providers

- The team worked with national evaluation colleagues to share the spreadsheet, guidance, and a data list with providers to understand what groups felt able to share. This later resulted in the production of an FAQ help sheet.
- Ran three workshops – slides included a basic template for case studies. Offer a quarterly voluntary Community of Practice meeting hosted by [local] Wildlife Trust.
- One to one support offered by [local] Wildlife Trust, particularly on adopting an outcomes framework and items such as ONS4.
- The grant management organisation contacted providers a number of times each quarter to remind groups to submit the data, and recently targeted the groups that had not submitted anything – this prompted most to get in touch to discuss.

SP Teams

- Continually discussed approach through the Programme Management Group.
- Met individual teams to discuss the data ask.
- Attended specific meetings and conducted focus groups in one area to discuss the data ask and explore options and understand the challenges.
- Offered backfill for the time needed to understand how to meet the data ask.
- Engaged a contact at NHSE to run a regional support offer (a workshop) on 'storytelling and case studies'.
- In addition, a T&L2 data group has been set up with representatives from each area to understand and mitigate the issues. Through involvement in the GSP project the project manager now sits on the national SP data working group. Several activities have been undertaken as part of this group e.g., one area [in T&L site] is now signed up to trial a data system to test whether a consistent system can be implemented across the region.

Developing responsibilities and accountabilities

As discussed in detail in Section 4.2 developing strong and robust leadership was a key strategy to achieve strategic and procedural alignment of all T&L sites. Previous work on the development of effective integrated care systems has highlighted the value of the involvement of key strategic actors in decision making. Middleton et al (2019). theorised that '*When health providers are included in local decision-making networks…, their knowledge about local issues enables them to improve the design and integration of local services…, which in turn leads to a reduction in demand for secondary services'.*

All T&L sites had leadership teams with representation from across the GSP system. The project team of T&L1 included VCSE and clinical partners enabling connections and working across systems. The individuals and organisations they represented had interlinkages with wider systems, adding to the potential for a secondary alignment. Steering groups - which were deliberately recruited from across different sectors including environment, social care, mental health, third sector - not only provided oversight and governance, but also acted as a tool to create alignment across the involved organisations.

4.4.3. Outcomes

Understanding and awareness

Across most T&L sites it was reported that there was greater awareness and understanding of GSP and, if maintained, that this is likely to contribute towards some form of alignment. In some cases, this was considered to be one of the primary achievements of the T&L programme (see also Section 4.7, which considers understanding and awareness in the GSP system in the context of building trust and respect and shared problem-solving).

In T&L5, a GSP focused network has been developed with over 500 stakeholders - demonstrating continued significant interest and a "*movement*" towards GSP. Elsewhere, T&L3 for example, worked towards strategic alignment through an interconnected process of advocacy with networking (see Box 10).

Box 10: Exemplar: Strategic leadership through advocacy and networking

Throughout the T&L3 pilot there has been a concerted drive to win over key decision-makers through a combination of evidence and argument. Central to this advocacy has been an approach of 'showing not telling' – evidencing the benefits of green social prescribing by letting decision-makers see local green projects and speak to those involved. [Named site] Allotments, the largest allotment site in [T&L locality] and one of the biggest in Europe, has provided a compelling backdrop as visitors have been able to see the many projects and activities hosted under the overall management of a local charity.

Three examples show how advocacy, networking and sharing learning have led to strategic advances for green social prescribing at different levels. In autumn 2022 the chair of the new Integrated Care Board was invited to visit the Allotments and meet participants in green activities. As a result, the T&L site project manager was invited to give a presentation in February 2023 at the inaugural meeting of the board, which provided an opportunity to make the case to other board members. The board subsequently approved a draft strategy in which green social prescribing is viewed as a key element of personalised care, and case studies from the Test and Learn pilot are being used in ICB communications.

That strategic shift is being complemented by moves to embed green social prescribing at different levels in the healthcare system. The local mental health trust recently held an event to bring together health professionals and green organisations at the Allotments, showing potential referrers the range of activities on offer to give them a better understanding of what they could offer their clients. One commissioner commented:

> *It was an idea that we discussed a while ago about how do we build the relationships between those two so they get to know each other and they've kind of just got on and done it. What they're going to create is a web … so they know each other, so they've got Link Workers going, they've got mental health teams going, they've got all the providers on site there meeting each other, connecting, putting faces to names.*

A third example of this strategic integration is in the borough of [area] to the south of the county. [The area] was a leader in the development of social prescribing, and that work has now drawn on the experience of the [locality] pilot to provide a model for embedding green social prescribing into local health priorities, including becoming 'dementia friendly' and promoting active travel. A health development worker has been jointly funded by the local Borough Council and the local primary care network. A local authority manager explained:

> *We're uniquely positioned in [area] that our health development officer is a shared post with our PCN, primary care network, so we jointly fund it so whilst it's a health development officer role that is focusing on the wider determinants of health, she also liaises quite heavily with our social prescribers and the purpose of my involvement in this group is to try and ensure that we've better coordination between the social prescribers and the activities and the groups that they are referring to, to make sure that they are appropriate, that we're helping the groups establish and making the best of our green and blue infrastructure across the borough…*

While the [area] work was not funded by the Test and Learn pilot, it was supported because learning from the pilot was being shared widely as it expanded from the [locality] into the county. [Area] Council therefore had the confidence to use its own resources to extend and adapt the work of the T&L site to its own local priorities.

In T&L1, small scale changes were considered to have happened, in terms of the development of relationships and connections, e.g., between VCSE and NHS/statutory partners through the steering group. However, the scale of this across the region is unclear and influence at a system level has been limited.

Awareness raising at all levels has been key in T&L3, recognising that all parts of the system are important. As well as lobbying key strategic directors and decision-makers, the pilot has supported training and information sessions for Link Workers and other community referrers so that they know how green social prescribing works and who might benefit. Mental health commissioners *'really get it'* according to interviewees from T&L3, but other stakeholders have further to go. Children's and young people's services are supportive and are testing their own nature-based activities with young people. In certain T&L3 localities there is evidence that self-organised networking and activity is happening. Work is being taken forward through a jointly funded health development worker, networking around use of allotments, the development of a local green social prescribing strategy, and incorporation of GSP into 'dementia-friendly' policies.

In some T&L sites there were fewer positive outcomes in relation to alignment of understanding and awareness. In T&L4 it appears there is much greater awareness of the issues amongst the leadership group. VCSE project managers, given their time again, would not make these attempts considering that '*so little was produced for such effort'*. In T&L4 links between the Integrated Care Board (ICB), Primary Care Network and Green Social Prescribing (pilot) were reportedly not clear at the practice level. While health professionals who were consulted were reportedly open to joint working, they were unaware of the national or local GSP programme. This suggests lack of awareness among some key partners was still a factor.

The partial failure to build system wide alignment of understanding and awareness was related to factors such as rapid turnover of staff within certain roles, from leadership teams to Link Workers. This meant that in some sites (e.g., T&L3), training and information sessions related to GSP had to be repeated regularly.

Questions were also asked about whether there was mutual understanding of the drivers, or primary forces, of alignment. As noted in the context section above, there are often significant power disparities within systems and these can affect the nature and direction of alignment, it cannot be assumed that a centralised, co-beneficial approach will be identified. For instance, in a T&L6 interview there was discussion of the compromises and effort involved with considering if and how stakeholders adapt to an integrated, community assets approach. With questions asked about who was driving the need to re-align, who was the beneficiary, and who was the partner potentially having to undergo quite significant change. In particular, these questions were related to whether this should be considered as VCSE stakeholders being asked to 'bend' to the traditional NHS approach, or whether it should be framed as they were working in the vanguard of new ways of working (T&L4):

> *I mean, I obviously said within the NHS, so you know the perception is very much that the NHS sits at the top of the hierarchy and it, you know, it filters down and you know what we've said is, as an ICS, is that you know we're meant to be joined up as in equal partners and I think it's very much felt that, you know, people, particularly those that work in the third sector, don't perhaps get that voice or that opportunity. But not only that, they just don't know where to go. It's like, you know,*

what doors do you push, push against, or actually what? What doors are open? What doors are closed? It's difficult because it's, I mean, I've talked about it. You know, it almost feels like you become institutionalised and there's a way of doing things. And it's very difficult for people to kind of integrate. (T&L4)

Similar opinions were expressed from a number of the T&L sites. Further, these challenges are not specific to the T&L programme. Non-T&L programme interviewees who were involved through WP4 also expressed similar frustrations. One individual didn't feel that GSP was a priority for the local CCG. They suggested that some bigger organisations are getting funding to pull organisations such as the interviewee's together to address challenges in the GSP system, but *"it feels like it's the age-old problem that you're asking us to come, but we're not getting paid to come, so for a smaller organisation like ourselves, that's problematic"* (WP4, Interview D).

Ambitions and priorities

In some areas there is good evidence of alignment of ambitions and priorities. For example, in T&L3 there is evidence of realignment of institutional priorities demonstrated through, for example, the increased buy in from the ICB, and GSP is now written into population health plan: '*it's in various strategies and we've just created the personalised care strategy as well which obviously has green social prescribing within it. I think it's opening up a broader conversation now.'* (T&L3 Commissioner). The integration of GSP into a variety of policies and strategies in T&L6 is listed in the previous section. T&L2 have also made good progress in aligning and embedding GSP across different policies and strategies (Quarterly report Q4 2023):

- Social prescribing and green prescribing is referenced in the integrated care strategy and joint forward plan.
- Green Prescribing is included in the [local] NHS Green Plan.
- The [local] Wildlife Trust is progressing discussions to connect health inequalities as part of development of the [local nature recovery] Strategy.
- Green Prescribing is included in the ICS operational plan.
- GSP is embedded in health inequalities priorities and discussions.
- Green Prescribing has been discussed at the ICB meeting and conversations with Executives continue to explore opportunities.

Further, one locality within T&L5 has now commissioned by the community mental health trust and is providing sessions through a GP surgery to staff and patients. Initial engagement with GPs was reported to be like "*talking to an empty room"* but interview participants felt that engagement had strengthened since the start of the programme. In T&L6 GSP is now included in the local NHS Plan focused on sustainability, and it will be included in the next Joint Strategic Needs Assessment. The local Mental Health Partnership Trust in T&L6 are creating a Green Plan and working with the GSP project team to develop and implement that plan. Further evidence of alignment can be seen in reporting structure in T&L6, with the GSP project reporting to into Priority 1 (Mental Health and Emotional Wellbeing) of the Mental Health and Wellbeing board and to the personalised care board within the ICB. The GSP project in T&L6 was also contributing to wider strategies including the Culture Design and Development Group within the ICB. It was felt in the T&L6 that they had managed to achieve a cultural shift and some forms of strategic alignment.

In T&L5 some argued that the pilot programme had enabled them to address some aspects of alignment:

> *No [the nature for health network wouldn't have happened], I'm almost certain it wouldn't have just because wouldn't have the time, resources and links in with all of the organisations that have been involved, they would have all been there doing their separate things maybe talking to one another on the ad hoc thing and knowing about each other's work from the peripheries but probably not being connected up. (T&L5, Provider)*

However, another participant in T&L5 commented that there was a failure of alignment with specific partners and systems:

> *It's not anywhere near [embedded in the mental health system], it's just not even on the radar. It's not there so there is nice things going on, on the ground. There are some nice things being led but what it isn't is what we call it institutionalised.... It has never really been connected in....there might be some people looking mental trusts at that lower operational level who get it. So we are talking about money for next year. It's certainly nowhere near that...we are in emergency situation at this moment. (Mental health system leader, T&L5)*

In T&L4 there was also evidence of the power disparities which can prevent alignment. The majority of the leadership group highlighted a desire to focus on test & learn to create system change and not to fund delivery. The increased emphasis NHSE placed on capturing mental health outcomes, as opposed to strategic outcomes, which may lead to sustainable change, was felt to be at odds with this ambition. The project management and some of the wider leadership group expressed that:

> *We ...have this constant issue in our…structures where we just apply new ideas and thoughts onto systems, expect them to get on with it except almost expect certain results. That top-down approach…is exhausting. It keeps happening. It's just, it seems to be endemic. It seems to be part of our DNA almost now and it's just frustrating because test and learn isn't top down. Test and learn is very much growth and going upwards and understanding what's going on.*
>
> *That the sense I got was almost like desperation from NHS England to get certain results, give us certain information, give us this, give us that, you know, which really contrives things, and it's kind of stunts and stifles, you know, … the very thing that we're trying to understand. … You can't help feeling that culture just seeping through, trying to control everything and trying to steer things in a certain way. (T&L4)*

In T&L5 it appears that there remains a perception amongst some stakeholders that GSP is "*nice to do"* but that it is not a priority and, partly, as a result it is not yet appropriately embedded within the wider social prescribing and health system. For example, one interviewee working at a systems level within mental health services in T&L5, felt that GSP was not embedded in the wider social prescribing landscape due to system pressures and a lack of space for innovation, as well as a lack of evidence for clinical effectiveness. It was acknowledged that more full alignment and integration requires a change to "*hearts and minds*" and was challenging to achieve within the lifetime of the programme. However, there is evidence that buy-in has increased in T&L5 since the start of the programme and will continue after project end.

One of the challenges to the GSP programme related to the lack of alignment in the coherence and clarity of the ambitions for the programme as whole between the national partners and local pilot level leadership, but also between local pilot level leadership and the wider stakeholders (e.g., GSP providers or mental health services

(e.g., T&L3)). These differences in clarity and coherence of the ambitions, are not necessarily specific to the pilot programme but are evident in the wider system. In relation to the GSP T&L programme, and as discussed elsewhere in this report, there was an apparent difference in understanding as to what the primary aims of the GSP programme were. For the national partners there was a primary focus on addressing mental ill health, including more severe mental health challenges, whereas the local T&L pilot sites appeared to have system building as a key focus. Further, the local sites had intended to integrate a preventative health focus in the early stages of the project, which did not necessarily align with the intentions of the national partners. This lack of alignment in the ambitions of the T&L programme had implications for what each partner wanted to achieve and manifested in issues around the activities such as outcome and data collection.

Systems, tools and resources

The efforts put into alignment of systems, tools and resources had mixed results. The ongoing investment across these factors by ICBs in many of the T&L sites was felt to be evidence of this structural alignment (see also Section 4.1). However, it should be noted that such investment and ongoing funding has not been achieved in all areas (e.g., T&L1).

In some sites it was felt that there had been a lack of progress. In T&L1 it was felt that systems have not been established by the GSP programme as much as was hoped for. This was attributed to the difficulties of developing and building aligned networks at the local level and to the limited time period of the programme. T&L2 invested significant time into supporting data collection, however it was not thought to have improved at the level expected. Although there are signs of improvement in data collection, it is reportedly still poor or non-existent in some areas, and there remain differences in access to Link Worker systems (see Chapter 5 for more detail). This suggests a failure to align systems and processes sufficiently. The slow scale of progress was related to system wide (beyond GSP and, especially, beyond the GSP T&L programme) issues with data that need to be addressed. However, it was acknowledged that involvement in the T&L site has "*shone a light*" on systems issues and provided a platform to come together to collectively mitigate issues. In turn, solutions are being explored through the development of a data task group. Through this work, one area in T&L2 is now trialling a new data system.

Other challenges that were not overcome include factors such as contracts and legal processes. In T&L3, some healthcare services are locked into contracts that do not include GSP and which may not be up for renewal for several years. Further, the challenges of non-coterminous organisational boundaries remain and reorganisations in health and local government seldom align (T&L3).

Factors which affected alignment

One of the key issues that has prevented more coherent strategic and procedural alignment of the GSP system is related to the funding of the activities. Although the sites succeeded in achieving some leveraged funding within the project, little progress appears to have been made on identifying a more sustainable funding solution that would contribute to greater alignment of the GSP system (see also Section 4.1).

A second factor related to the timeframe of the T&L programme. As noted previously there is a perception that more effective strategic and procedural alignment will take a significantly longer period of time than was initially funded through the T&L programme. Previous work on whole systems has also found that such change takes time Many stakeholders considered that the timescales of the programme were too short for systems change (e.g., T&L1). In T&L5 although buy-in has increased to some degree

from GPs and mental health services, some nature-based providers still felt that GSP is seen as *"airy fairy"* and will take further time to embed. Wider pressures were also an issue here, as noted in Section 4.2. In particular, the winter pressures, recovery from COVID-19 and wider factors such as waiting lists, that put NHS into crisis mode during the programme's duration, diverted attention from strategic thinking. However, in some sites such as T&L3, GSP advocates are considering how GSP can be positioned as a way of relieving winter pressures.

Finally, but related to the resource and timeframes points, ongoing and multi-layered cycles of innovation and reorganisation have potentially prevented alignment:

> *We have this constant issue in our structures where we just apply new ideas and thoughts onto systems, expect them to get on with it, expect, almost expect certain results and you know and there's that top-down approach, is exhausting. It keeps happening. It's just, it seems to be endemic. It seems to be part of our DNA almost now and it's just frustrating because Test and Learn isn't top down. (T&L4)*

Cycles of innovation and change can cause significant fatigue, at an organisational as well as individual level. For significant change and realignment to happen stakeholders need to be invested, and to have faith that efforts made will be realised and not undone through a new cycle of innovation in the near future.

Looking to the future and implications

Systems adaptation and specifically alignment of ambitions and strategies, and of ways of working "*is not a fixed thing but instead is a fluid state that requires constant amending and adapting"* (Middleton et al. 2019). As such, resources are needed to ensure that the progress made through the T&L programme is not lost and is instead capitalised on. Whilst the funding and momentum that came with being part of a large-scale high-profile programme was felt to have been instrumental in building the case for and achieving some alignment, there was a perception that more resource would be needed to embed the progress. This is recognised in many of the sites and strategies are being put in place to embed the strategic and procedural alignment that has happened. In T&L2 the ICB will provide funding for year three of the GSP project, where there will likely be more of a focus on place level learning, in line with the co-design/place approach adopted within this T&L site. The work to align the data systems will also carry on in T&L2. In T&L5 It was reported that there is "*absolute strategic buy in*" to continue the local nature and health stakeholder network and discussions relating to the future funding, governance and management of the network are ongoing. In T&L3 Commissioners are being encouraged to consider personal care and GSP in contract renewal and transformation directors are encouraged to incorporate GSP in transformation plans. Further integration of strategies in T&L3 was detailed in a quarterly report: *'Pilot being developed with the Personality Disorder Hub to use personal budgets for green/nature-based activities. Permanent funding has been approved to appoint a Personalised Care Coordinator by [Local] Healthcare Trust. Post to be advertised in Q3. The Personalised Care Team will support the offer of PHBs to this group until the post recruited.'* (T&L3 Quarterly report). Similar efforts are being planned in other T&L sites: *Work is currently being done to engage with place-based VCSE development leads to develop place-based plans for delivery* (T&L1 quarterly report Q4 2023).

However, there are concerns over the future sustainability of the gains made once support from the programme finishes. This was reported by most of the T&L sites, and both in interviews and via the quarterly reports:

[GSP is] 'On the radar but competing against other service priorities… Other competing priorities in the Social Prescribing review, such as developing Children's and Young People Social Prescribing services.' (Quarterly report T&L1 Q4 2023)

Finally, it was argued that there is still a need to address wider systemic issues:

I feel that that is a missing piece of the puzzle here. I think the [ICB] system thinks we have social prescribing Link Workers. Happy days, done! .The reality is, it is not okay. The Social Prescribing Network is not achieving what it could achieve, and it's not supported properly. There is nobody in the ICB that supports the Social Prescribing Network. There is nobody in the [ICB] system already supporting the however-many-hundreds of social prescribing Link Workers we have across our however-many PCNs that we have. Because [the money's] not come from the ICS. The money's come directly into the PCNs. (T&L7)

4.5. Creating compelling evidence

This section describes perceptions around the availability of evidence for GSP efficacy, which is considered to be limited, not compelling, or not sufficiently rigorous by wider system partners. There were, however, various views about the nature of what "compelling" evidence would be – whether local evaluations of specific activities, RCT evidence, narratives from qualitative studies or some combination of these. We theorised that if we gather and share routine data in the GSP system, then this will build confidence in the efficacy of GSP to support people with mental ill health.

Box 11: Summary findings Section 4.5

Context

- Strategic level: evidence for GSP considered to be limited, not compelling, or not sufficiently rigorous by wider system partners.
- Strategic level: 'compelling evidence' is differentially interpreted and understood by actors around the system, and perceptions of others' understanding of 'compelling' also differs.
- Strategic level: A growing programme of national-level research in this field, including process evaluation, surveys, secondary research, and trial funding.
- Operational level: data collection poses multiple challenges (see below) but allows sites to demonstrate reach, scale, acceptability, and effectiveness.
- Generating robust evidence is a key priority for sites as it links to sustainability and grant capture.

Activities

- Nationally: System-level support for data complexity issues; from training, guidance documentation, templates, to backfill payments.
- T&L sites: Myriad activities that sought to reduce or reduce the impact of data complexity issues, from technological solutions to agreed datasets and similar.
- T&L sites: Input of time and resources through providing data support for smaller organisations from larger ones when in networks and aims align.
- T&L sites: Sites challenged and engaged in conversations about what good evidence for these sorts of pathways might look like, to challenge the 'accepted' view that quantitative, controlled evidence was always preferable.
- T&L sites: Sites took time to scope existing measures and the literature around them.
- T&L sites: External evaluation was considered important and a core activity of programmes.

Challenges

- Some measures are not well liked and therefore used by some actors in the system, which is also not consistent across areas.
- Linking data is often difficult or not possible, meaning understanding anything other than the local picture is a challenge.
- The time and resource associated with collecting, collating, and reporting data was a challenge, and often the onus was on the VCSE. There were instances where smaller providers did not bid for funds as the data collection requirements were too onerous.
- Secure, ongoing, and robust financial support for data collection and collation was missing in most cases.
- There is a lack of consistency and agreement around what evidence needs.

Implications for GSP test and learn project

- Understanding the rationale behind incomplete or patchy data collection and linkage, given siting across multiple organisations is important.
- Facilitating realistic and nuanced data collection, collation and reporting standards that recognise these myriad challenges would be beneficial.

Recommendations for spread and scale of GSP

- Commissioners to critically review what data is needed and for what purpose ensuring that requests for data are proportionate and relevant to the work being commissioned. Where possible, evaluation frameworks to be co-produced and reviewed regularly.
- Greater clarity from commissioners around specific requirements for data collection and evidence. Whatever these requirements, sufficient relevant training (and data templates) should be delivered to organisations expected to conform.
- Resourcing a role, or part of a role, around data collection and collation is key to sustainability of evidence generation.
- A single dataset would be a useful outcome, but coherence is difficult to negotiate.

4.5.1. Context

The evaluation team provided considerable support around data collection to all sites, including meetings with project managers, training, and individual site support. There was agreement amongst sites that there is a need for system change to drive both GSP scaling and to increase VCSE funding for provision (T&L5 and others). This need, argue sites, is based on a lack of buy-in from both broader social prescribing and the health sector more generally, and which they related to available evidence (T&L2, T&L4).

> *We know it makes a difference but it's, how do you demonstrate it, and sadly that's what people look for isn't it? (T&L4, stakeholder)*

Collecting data at the right scale and in the right ways is a challenge for nature-based providers but would (and the GSP programme made headway in) allow them to demonstrate reach, scale, acceptability and effectiveness (T&L3). The significant practical and methodological challenges of assessing efficacy of green activities as part of social prescribing itself is now understood across national partners (WP5).

> *And I think that's probably a side effect of the way we've delivered the programme in general, we're using quite small VCSE organisations that don't have the skills and resources and experience of managing data in that way. Some of them do, we've certainly increased our ability to do it over the lifespan of the programme, but it's still a challenge, so I think that's probably as a result of the programme. (T&L5, Project manager)*

There are some practical problems to overcome, not least that some measures are not well liked by Link Workers (T&L3, T&L7), and that linking local data is often problematic and therefore showing effect at anything other than a local level is difficult (T&L7). There has been work in broader social prescribing to look at national level indicators, (see also Jani A et al., 2020). Our interim report noted that collecting robust, accurate and accessible data is one of the key challenges faced by social prescribing and by the GSP project. Barriers include the spread of data across multiple organisations (often requiring a common unique identifier and complex data sharing agreements), data remit (covering different sections of the individual's journey through services), lack of resource to collect or collate data, and a lack of agreed standardisation (Haywood et al., 2023). The GSP project has collected a significant amount and variety of data from sites, as is reported throughout this report, so progress has certainly been made.

Ultimately, sites argue that commissioners and other central organisations require (or are perceived to require) robust quantitative data alongside convincing stories of impact as (a) part of contracting, and (b) for continued or future funding (T&L4). This was echoed by the national partners in WP5, who felt there was evidence in the pipeline from commissioned clinical studies funded by DHSC/NIHR, but there was a long timeframe to get results and it was understood that the findings would be 'narrow' relating to specific nature based activities targeting specific conditions rather providing evidence more generally for 'green social prescribing' including the pathways (this and National Partners perspectives on the challenges of generating 'robust' evidence for GSP are discussed further in 7.6 and 7.7). Our work with non T&L sites (WP4) also surfaced this need to share and communicate emerging evidence to those in commissioning positions. This also builds directly onto findings from our interim report, which notes the scepticism in some areas around GSP and the importance of evidence in addressing this push-back (Haywood et al., 2023).

4.5.2. Activities

Sites undertook a broad range of activities with the aim of creating compelling evidence as part of the programme, and they fell into four overarching areas. Firstly, sites (including T&L2 and T&L5) engaged in activities that sought to understand and mitigate data complexity issues across sites and localities, with some success. This builds on existing contextual data complexities reported in both non T&L sites (WP4) and in our interim report, where there was uncertainty raised by sites about the data requirements associated with the GSP programme funding (Haywood et al., 2023).

T&L5 noted that their model of having a larger infrastructure organisation linking to smaller ones had been a particular challenge but that they invested time and resources at the outset to try and navigate these issues. They had also, from the beginning of the programme, attempted to have larger organisations support smaller ones in terms of data capture.

The GSP programme allowed T&L2 to invest significant time and resources into supporting nature-based providers to collect data by running workshops, creating guidance documents, offering 1 to 1 support, and delivering support sessions. An additional backfill payment was also offered to social prescribing teams to encourage compliance. This culminated in the creation of a regional social prescribing data task group with representatives from each area to collectively challenge and mitigate data issues. Several activities have been undertaken as part of this group e.g., one area is now signed up to trial a data system, funded by the ICB, to test whether a consistent system can be implemented across the region. It was argued that this dedication of time and resources was key in addressing evidence issues.

Secondly, sites challenged what compelling evidence might look like for this sort of programme, echoing arguments from the broader social prescribing literature around evidence generation (Husk et al., 2019). T&L3 argued that using personal accounts is particularly powerful where generating quantitative data is tricky. These accounts have the power to persuade, but also then act as a catalyst for organisations such as local ICBs to then ask for different forms of evidence.

> *We'll showcase the impact through personal stories, you can't argue against the videos that we've got with people talking about the impact in that lovely film, the more recent one about the people using the allotment. That's what we need to listen to, that's where we need to listen to people's lived experience, coproduce solutions with people in terms of our services and that is something else we're committed to doing within our ICB and ICS. (T&L3, policy representative)*

T&L4 spent time scoping and communicating existing relevant validated measures to partners, which was seen as useful, but these were not eventually mandated and there was still significant variation.

Thirdly, one T&L site (T&L1), took the approach to build in evidence generation as a central component of the programme to the extent that they commissioned a clinical cohort study. The national partners (WP5) felt that it was important to have this level of evidence and also highlighted the DHSC commissioned trials that were underway as part of the wider national GSP project.

Lastly, a number of sites (including T&L7) explored technological solutions and software to the problems associated with generating and collating data across multiple areas. These were often significant investments and had not always been beneficial. Problems with compatibility and acceptance hindered uptake and there was a realisation, also noted in the interim report, that such platforms often do not address

the underlying problems with collecting and sharing GSP data (see Chapter 3 and the appendices for more detail on issues relating to data).

In common with other areas of the programme theory (see for example Section 1 (page) around funding and investments), a collaborative approach was seen as critical by sites, and was also raised in our non T&L site interviews (WP4). Specifically, bringing organisations together to provide group training, to share skills and to pool opportunities helped to mitigate barriers (T&L5). Whilst not perfect, the process of getting any technological solution funded and implemented, even in part, was seen as a success in terms of collaboration (T&L7), as was getting agreement and implementation of outcomes for datasets, again even if this was only partial. The variation, quantity, difficulty in agreeing and implementing outcomes for social prescribing is well documented (Polley et al., 2020a).

The perception of the GSP programme nationally and locally, was seen as positive and important (both by T&L sites, but also from outside in our non T&L sites (WP4, Interviewee 3), allowing validated time and resourcing from particular individuals or organisations which impacted on data capture (T&L2).

> *We no longer need to justify what we are doing all the time, as people understand the benefits, NHS England have funded it, real legitimacy has been added by the pilot. (Nature based provider, T&L2)*

> *I guess the thing that would change that is what? Like one person at a very senior level recognising the need for that and saying, "That's what we need." So, it could change quite quickly. (T&L7, stakeholder)*

Relatedly, the issue of breadth was validated in this programme and allowed discussions to include data relating to prevention and population health where previously that had been difficult (T&L3). This builds on related issues raised in our interim report which noted that there was a lack of clarity, initially, regarding the data requirements that were associated with the use of T&L funds. The T&L project as a whole and many of the local pilots were not, arguably, designed in such a way to deliver the data requirements (whether the monitoring or outcomes data) that developed as the projects progressed (Haywood et al., 2023). Previous research has also noted the difficulties of capturing the diversity of social prescribing pathways that individuals experience (Husk et al., 2019).

The commissioning of external research was, unsurprisingly, seen as an important supporting factor. One site funded a clinical cohort study, but all sites had some level of external input around evaluating and reporting evidence. More detail on this area is given in the exemplar presented below (Box 12).

Conversely, there were some key factors that inhibited progress in this area and chief among which was the time commitment required. T&L4 pointed out that a great deal of the onus is on VCSE partners, but that they often have the least time and resources and are reliant on goodwill to generate evidence:

> *I've been banging on saying, "Who is sorting out [software]? Who is collecting all this social prescribing data?" "Oh, well, you know, the PCNs do it separately." Well, that's no... what... what point is that? The system needs to know... know this as a totality. So, I was aware of this, and flagged it, but there was just nobody... nobody to do it. [Now the PM has taken this on]. (T&L7, project board member)*

Again, it is often the case that smaller or micro providers are excluded entirely. There were even instances where organisations did not bid for external funds as the requirements around data collection set by the funder were simply too onerous (T&L4).

It was noted in our interim report that some nature-based providers were reluctant to collect impact data as they felt that this impacted negatively on their relationship with service users. Where time was committed, evidence generation often required a lot of guidance from others (T&L5), was expensive (T&L7), and the commitment waned over the life of the programme as interest decreased (T&L2).

As with most other areas, secure, ongoing financial support for data collection was lacking. The GSP programme was viewed as positive but necessarily time-limited and it came to an end as it was starting to show benefits. It would be useful to build on this momentum (T&L5). Linked to this, national partners (WP5) reported a feeling that evidence was building but was still limited in key areas and some in clinical settings required more convincing.

The fact that in a lot of localities, and potentially nationally, the overarching evidence and programme aims were not always agreed or concrete was seen as inhibiting progress. System and policy organisations were seen as having shifting priorities which are destabilising (T&L5), and there are differences in the language used across different actors (T&L2). The VCSE is often itself undergoing rapid changes in terms of organisation and management and combined this made agreeing approaches or outcomes problematic (T&L1, T&L2).

Lastly, there were practical problems faced by multiple sites in terms of generating evidence. Almost all had data capture issues but felt these were similar at regional and national levels and not specific to T&L sites themselves (as reported elsewhere in the literature Jani et al., 2020). Even when solutions were posed – for example the technological solutions mentioned above – they were often not performing as expected or hoped in terms of their support or the product itself (T&L7).

> *Personally, I think the communication could be more effective, just an example being a green social prescribing SNOMED code, we've known green social prescribing was supposed to be coming into play way before April 2021, if we'd got a code we would be able to capture so much more data more broadly, and they would, they would be able to now say this is the position we're in. (T&L3, commissioner) (Note: the green social prescribing SNOMED code has now been implemented by NHS England)*

For some sites an over reliance from national partners and the Treasury on the importance of quantitative evidence to make the case for GSP was seen as "*disappointing*" and a step backward in terms of legitimising the work of the VCSE sector.

4.5.3. Outcomes

In terms of creating compelling evidence, there were three areas where sites agreed that success would be seen. Firstly, that there would be (and had been) immediate and tangible differences in data collection (see detail of data improvements in Section 2.4), and that communication of these data would be improved. This was certainly the case in some areas, but not always as much progress as had been hoped (T&L 2 5), particularly around the analysis and presentation of whatever data was collected (T&L4). Some reported limited success in advocating for, or achieving consistency in, the measures used (T&L3), and others felt that their external commissioning of expertise was important (T&L1). There was consistency in the view that a single dataset would be a useful outcome, but that the coherence necessary would be difficult to negotiate (T&L7).

> *From the systems and data perspective, one of the positive things about [T&L locality] and a lot has changed in [T&L locality] over the last two years on this*

particular thing, not just from a green perspective, but we're looking now at how we bring together data and systems from across the VCSE organisations where they're doing green social prescribing work, whether it's called that or not, anything community engagement related where it has a focus on health. We're looking to put an infrastructure or system in place where all of those organisations can access a system to put information in there about who they're engaging with, what benefits those individuals have had, what changes they've seen, so all of those good things in one place. So they can see the impact that's been delivered on a local level, not just at their organisation scale, but it also means we can see at a [name of T&L site] and across the localities wherever we want to narrow down into what's been happening and what some of the changes and benefits would be for many people who have taken part in these programmes. (T&L5, Project manager)

Secondly, future sustainability was considered key. T&L5 reported that some small pots of funding had been received from smaller collaborations (within their model of larger organisations supporting smaller ones), including evidence components. However, some of the smaller organisations were moving away from this area with the ending of the programme. T&L2 felt that system-wide buy-in was happening in some localities, but that this had not necessarily translated into system-wide change. T&L3 highlighted the positive move towards including the role of GSP in prevention and upstream impacts in evidence generation.

Lastly, T&L sites (as well as our non T&L sites, WP4) felt that success in terms of creating a compelling case with evidence would be demonstrated by robustly embedding GSP in relevant policy documents (see also Section 4.2).

Evidence for this change was considered broad; but included collaborative funding applications including a data component (T&L5), attendance by organisations at training or events relating to data and evidence (T&L2), a translation from reported 'enthusiasm' by some organisations into funds for evidence gathering (T&L2), the reporting of significant findings where available (increases in wellbeing, reductions in anxiety and depression in T&L1), and the inclusion of evidence relating to GSP in strategy documents.

Extending this view to the future, there was a similar view from sites in that an increase in more and broader funding bids, more embeddedness across policy, and greater focus on evidence were all cited (T&L2, T&L5, T&L3). National partners (WP5) felt that pipeline studies alongside routine monitoring data would improve the evidence base but, whilst this represents progress, it may not lead to widespread funding changes. Sites felt there should be more clarity from commissioners (and others) around the specific requirements for data collection and evidence (e.g., T&L4). Whatever these requirements were, sufficient relevant training (and data templates where appropriate) should be delivered to organisations expected to conform.

Box 12: Exemplar: Improving the evidence base for Green Social Prescribing

A key aim for this Test and Learn site was to improve the evidence base for Green Social Prescribing. An independent local evaluation was commissioned to collect quantitative data on outcomes for wellbeing, anxiety and depression for a clinical cohort participating in a range of Green Social Prescribing activities with providers across the region. The evaluation also collected data on demographics, referral routes, activity types and completion and drop-off rates.

Grant funding totalling £150,000 was awarded to 20 providers across the region for delivery of activities following a competitive application process. The project team mapped and worked with social prescribing services across the region to identify individuals with mild to moderate mental health difficulties to participate in the study and complete the outcome measures (ONS4 and Hospital Anxiety and Depression Scale) before referral to the activity and on completion of the activity or after 3 months (whichever was sooner). The project team worked with funded

providers to agree target numbers of service users who could be referred to their activities as part of the clinical cohort.

Capacity pressures and staff turnover created challenges for Link Workers in completing the outcome measures, and some lacked confidence in articulating the purpose and importance of the evaluation with patients. Given these pressures and the range of green activities service users were involved in, a relatively flexible and practical approach to data collection was necessary increasing the complexity of the evaluation and level of support required (e.g., to ensure data quality/validity). The local evaluators provided extensive support with recruitment to the study and administration of the research tools, through a range of accessible and tailored research materials and ongoing training and support for Link Workers and providers. Despite this, recruitment to the study was challenging and the number of service users completing both before and after surveys was 171 (The initial target was 480 but this was revised during the course of the study.)

Analysis of the pre- and post-activity outcomes data found statistically significant increases in wellbeing and reductions in anxiety and depression ($p<0.001$) across all measures. Average anxiety scores reduced from moderate (11.12) to mild (8.5) and depression scores reduced from mild (8.11) to normal range (5.57).

The impact of this evidence in terms of improving conviction in the efficacy of Green Social Prescribing for supporting people with mental ill health remains to be seen as data collection for the study has only recently concluded and is not yet published. However, some providers felt that it was valuable to formally measure the outcomes of their activities and welcomed this opportunity:

> *This just offered us, I think another opportunity to really measure the benefits which we hadn't, I don't think. We knew the benefits, but had we really spent time measuring them? No we hadn't, and I think it just provided us with an opportunity to add further weight to what we were doing really. (GSP Provider)*

The clinical cohort study also provided valuable ongoing learning opportunities and contributed to wider understanding of the system throughout the pilot. Link Workers highlighted challenges faced by social prescribing services in terms of referrals. For example, in many cases, patients presented with a number of complex issues which were of higher priority, including housing, employment, financial, domestic abuse or severe mental health difficulties, which made referral to GSP inappropriate or difficult. In some areas, the demographics of the population, the focus of the social prescribing system, and the availability of green activities created barriers to referrals.

> *It feels like, to me, it's been quite a good vehicle for understanding issues in the system, because it has highlighted things like referrals, you know, and lack of I suppose. It has highlighted things like the availability of activity in each of the areas. So it feels like, aside from just the data collection, which has been quite time consuming, I think the learning from the cohort has actually been much bigger. (Project team member)*

4.6. Improving networks to support connectivity

This section discusses referral pathways, and the ways in which sites have worked to try and improve linkup across the system to support people receiving GSP. At the start of the project, the network of providers, Link Workers, referrers, and funders was fractured and dispersed. We theorised that if we enhance processes to support information flow and feedback loops within the system between the network of providers, Link Workers, referrers, and funders, then we'll have better connected, efficient and effective pathways.

Box 13: Summary findings Section 4.6

Context

- Strategic: At the start of the project, the network of providers, Link Workers, referrers and funders was fractured and dispersed.
- Strategic: Participants drop-off or disengage across social prescribing pathways if they are not appropriately supported or the collation of organisations is not properly networked.
- Strategic: where responsibility lies for strengthening networks is not agreed.
- Operational: Within-sector, hyper-local and local networks were often strong, but communication and interaction across these networks were less so.
- Operational: There are often 'fractures' within systems and networks are driven by key individuals.

Activities

- Nationally: The GSP programme validated cross-sectoral working by placing the programme inside and in collaboration with the VCSE.
- Nationally: the existence of the programme validated and legitimised collaborative activity from senior individuals within the health and VCSE sector.
- T&L Sites: developing referral feedback loops (between community and health services and back again) are important.
- T&L Sites: Understanding and communicating what levels of need can be supported by which activities, where possible, and this aids in targeting groups too.
- T&L Sites: 'active' link working, where people are accompanied to the first session or otherwise supported, benefited in strengthening links.
- T&L Sites: The creation of new networks around GSP, in addition to those that came before, was important. These often required additional input in terms of resourcing however.

Challenges

- Capacity and time constraints on the individuals in each sector, preventing them engaging fully, was the biggest challenge to overcome.
- Some elements of the system are reluctant to become completely involved given the complexity and needs of the cohorts arriving for activities (in some areas).
- The pandemic and cost of living crises have impacted all levels of the system, meaning formal and informal networks are potentially less resilient than they have been previously.

Implications for GSP test and learn project

- Spending time understanding existing local networks and individual champions is important to take the next step in developing links between these.
- Understanding that GSP and aligned aims are not always the same as aims of existing networks or organisations and so finding common ground and working to develop shared vision is important.

Recommendations for spread and scale of GSP

- Resourcing networks should have longevity and outlast the GSP programme, as well as being a tangible commitment.
- A need to expand the existing model of networks through pooling resources and increasing buy-in from external partners.
- Need to develop and build strategic links to further increase the resilience of provider networks, potentially a 'web of webs' necessary to connect to wider strategies.

4.6.1. Context

Sites argued that service users dropped off or disengaged across social prescribing pathways if they are not appropriately supported or the collation of organisations is not properly networked (T&L5, T&L2, T&L4, and see also points noted under Section 4.8).

[providers delivered] onsite activities but they had somebody who's our contact, I think that's the other thing that's really important. You've got very clear contact, someone who meets the people we take. So, greets them, meets them, makes them feel ok because there's nothing worse when you're very very nervous walking into somewhere where everybody stares at you and when you don't know what you're doing, you run away. (T&L2, VCSE stakeholder)

Historically, cross-sector discussions have been challenging and have been hampered by organisational structures as well as differences in language (T&L3). This has also been reported in the wider social prescribing literature (Polley et al., 2020a).

It was reported that within-sector, hyper-local and local networks were often strong, but that communication and interaction across these networks were less so (T&L2, T&L7). This was also reflected by the national partners (WP5), who felt that the responsibility for networks lay outside their remit, and with local projects. T&L6 and T&L4 reported that there were 'fractures' within systems and that networks were, in reality, driven by key individuals. They saw the GSP project as having the potential to be a catalyst for developing these important links more robustly across and between networks. This was echoed in our non T&L sites, where fixed-term facilitation positions had been beneficial in building and maintaining networks, although these posts related to social prescribing more broadly rather than GSP specifically (WP4, Interviewee D).

4.6.2. Actions / Mechanisms

Four overarching areas of activity were reported by sites in this area. Firstly, T&L5 and T&L3 reported the importance of developing referral feedback loops as important in maintaining and strengthening networks, as has also been noted in the wider literature (Hazeldine et al., 2021). For example, to prevent drop-off a single site can pass an individual straight to another provider if appropriate and useful (T&L5, and the exemplar presented under Programme Theory 10), and also link them back to the Link Worker where appropriate. Understanding and communicating what level of need can be supported by specific activities or provision by nature-based providers also makes it clear to referrers who, what and when each organisation is appropriate and further strengthens collaboration (T&L3).

Our interim report noted that providers reported the single biggest challenge was getting users to the first session (Haywood et al., 2023). Related to this, other sites highlighted the notion of 'active' link working, detailed in other areas of the social prescribing landscape (Bertotti et al., 2019). In these instances, Link Workers can provide buddying or similar approach to better understand their customer's interaction with providers (T&L2, T&L1).

So, building trust before people are coming on. Not just saying, "yeah, we're going to run this programme" but we were there. We texted every participant who was referred through...Then we have the phone call, check we've got clothing, check so it's still that one to one, that they're happy where we're meeting, so running through every single bit of what's going to happen and then it's the intervention. So, it's kind of a lot of investment beforehand and a lot of support beforehand to get to the intervention and we found we've needed that across the board. Then once we were doing intervention we had a very low drop-out rate. (T&L5, green provider)

This would also enable greater and more robust targeting of specific groups to build reach across networks and engage sections of the population often excluded (examples of the T&L7 programme around Nordic Walking, or the T&L6 Muslim Women and Girls groups are useful here). This focus on inequalities was also noted

by our non T&L sites, who felt that targeting specific groups had been a core challenge and one they were still grappling with (WP4, Interviewee 5).

Thirdly, there was a feeling that activities should focus on validation; for example, placing the GSP programme at least in part within the VCSE sector validated the inclusion of a more diverse range of organisations (T&L3). This provides a counterpoint to the issue raised by our non T&L sites that workforce and GSP funding more generally is health-centred (WP4, Interviewee 1), and that placing communities themselves front and centre of GSP is essential for scaling it up (Interviewee 4, Interviewee D).

Further, this meant that those included could advocate and provide further credibility across sectors for bringing together those with an interest in GSP (T&L3, T&L6). This builds on findings reported in our interim report, where it was noted that the very existence of the GSP programme provided legitimacy and acted as a catalyst for further action:

> *The bit for me that is the real turning point is actually getting health on board. So having worked in the city for 25 years in the voluntary sector I've never known health actively engage in something like this, ever. (T&L3, green provider)*

Lastly, multiple sites noted that the creation and development of new networks, offering things such as taster sessions, would build further coherence and strengthen links to other existing collaborations (T&L6, T&L7, T&L4). These 'provider network' strategies are explored in the exemplar we present below. National partners (WP5) felt that they could contribute here and had actively sought to facilitate and support progress through their own national-level networks such as the Thriving Communities Programme (NASP) or the Sport England/Natural England infrastructure.

As with many of the other elements reported in this evaluation, funding was seen as the most important factor to support and facilitate cross-network working to support referral pathways (T&L7, T&L4). Again, this was not entirely about financial mechanisms, but also the validation and scope needed to assess the current provision (T&L5) and undertake the practical linking of individuals across sectors involved in referral pathways (through text, follow-ups, buddying etc.) (T&L5, T&L2, T&L7, T&L4). This funding could also be used as a 'barrier fund' (T&L2, 5), and fund collaborative meetings to seek further external input (T&L1). What all the T&L sites agreed on, as well as the non T&L sites in WP4, was that increasing the longevity of programmes should be a key consideration.

Another supporting factor was the shared values agreed across networks (T&L4), with this indicative of more general relationship building. Conversely, where there were important differences between and within organisations it was not always possible for system leaders to support GSP and be vocal advocates (T&L7). The relationship between core components of the pathway for GSP were the foundation on which broader networks were built, and so the links between service users, providers, and Link Workers were prioritised, but took time to develop (T&L5).

> *I saw it as this big trench between the voluntary sector over here, and health over here and, although there were some bridges, they were quite short-term and were drawn back quite quickly and also a lack of perhaps understanding on either side of what the other was all about and where the other was coming from and I do think that as a result of [GSP T&L] and the work we've done, that there's a lot more bridges now and that trench has started to be filled in. (T&L3, project manager)*

Where networks were robust, people provided peer support (T&L2) and took a partner approach to solving collective issues. In this vein, sites reported a serious, sustained, and meaningful engagement with the VCSE (led by the VCSE, not health) as being of utmost importance in developing networks (T&L2 3). This is demonstrated in the exemplar provided in Box 14 and is also supported in the wider social prescribing literature (Polley et al., 2020a). Importantly, this engagement should include sufficient autonomy and independence to allow for innovation (T&L6).

> *...it's worked and we can see that it's worked and but I think it's just that they've had their permission to go off and do it, without somebody saying to them, you know, or what's this and what's that and just checking in on everything, they've been trusted just to do it. Which I think is that real shift, in that's that real shift in power and that's about the trust that we've got within the relationship, I would say. (T&L4, VCSE stakeholder)*

The ability to target activities to particular areas was also seen as important in network development and strengthening. There was a feeling that – even in areas where provision was well resourced and linked together – some areas remained underdeveloped and underserved, so targeting to build capacity in those communities would be important (T&L7). Given that resources in these networks are unequally distributed, there should be good co-design work to drive collaborative models and facilitate reallocation of network resources (T&L4).

Inhibiting activity in this area was, once again, the capacity and time constraints on individuals and organisations in the system (T&L3). There was a feeling that for the most part inclusion and contribution to networks was beneficial. However, some providers were more reluctant to be involved in pathways if they perceived that the needs of the cohorts referred through GSP were more complex or severe (T&L5).

> *There's been quite a few cases where, again, we've had an individual come through a self-referral or been referred through one of the green groups and I've gone, you need more than us, you need more than green. (T&L5, stakeholder)*

Additionally, both the cost-of-living crisis and the pandemic have impacted both service users and providers in important ways and networks are often not sufficiently resilient (Westlake et al., 2022). All sites agreed that resourcing networks should have longevity and outlast the GSP programme, as well as being a tangible commitment.

4.6.3. Outcomes

There were some clear areas where sites felt progress could be seen in developing networks and harnessing assets appropriately. T&L5 felt that less service user drop-off across the pathway, through programmes that were accessible, appropriate, and available (T&L6), with individuals' basic and critical needs met (T&L2) would be clear indications of well-functioning networks. This would necessarily involve increased capacity and resilience of provider networks to manage demand (T&L5, T&L4), complexity (T&L2), and to expand provision (T&L1, T&L4), and offer training to others (T&L7).

Sites reported a need to develop and build strategic links through this programme to further increase the resilience of provider networks (see Section 4.2). T&L3 described a 'web of webs' necessary to connect to wider strategies and chimed with T&L7 who felt collaborative work in their area had increased the number and quality of connections. Linked, both T&L6 and T&L7 reported sustained interest in developing these networks and that senior leaders had contributed to and helped unlock extra funds to build, using evidence generated in this programme.

In terms of that evidence, all the sites agreed that information on referral and adherence rates would be a useful metric to assess network resilience (which was previously lacking), but it would also be useful to assess the engagement of smaller providers (T&L5), and how entrenched networks were in local policy organisations or ICBs (T&L3).

> *When you start a project, you kind of expect some information to already be there. And you say well, you know how many people are referred to green activities and what green activities do people and it just wasn't there, there just seemed to be a big gap there. (T&L4, VCSE stakeholder)*

Looking ahead, T&L4 argued that post the GSP pilot programme, there was a need to expand the existing model of networks through pooling resources and increasing buy-in from external partners. T&L5, T&L3, and T&L2 felt that progress should focus on the green sector supporting one another and seeking post-project funding to continue in this vein.

Box 14: Exemplar: Developing provider collaboratives (T&L4)

Two Provider Collaboratives have been developed as part of GSP T&L4 and through capacity building funding drawn from *Personalisation Budgets*. The Provider Collaboratives have been developed by grassroots organisations who are geographically close to one another. With the help of a facilitator, they have co-designed the governance structure and other processes that would enable them to work together. Each collaborative has a different structure and focus which has been driven by the local partners. This has enabled a diversity of provision, cross-organisational support, and cross-organisational referral. There is interest in developing the model in another district and beyond just 'Green' providers.

The idea: In many places across [the locality], there are lots of small nature-based organisations (Green Providers), but they are not sustainably funded and lack coordination. Some are interested in core/sustainable funding to secure their initiatives, but they do not / cannot engage with the 'bigger players' (e.g., Primary Care Networks, County Council, Borough Council, Active Partnership, local Community and Voluntary Service). There is recognition that bureaucracy surrounding this is impenetrable and/or weighted towards larger organisations, and they lack the skills and capacity to undertake the administrative burden associated with use of public funds. Most organisations have their own projects, volunteers, local networks and are connected, in some cases, to local infrastructure organisations. Some recognise that lack of coordination can mean that some of their clients are not supported as best as they could be.

Brought together by attending the GSP locality Green Network sessions, some providers identified an opportunity to build on what worked on the ground during the pandemic in Mutual Aid Networks. There was a recognition that they shared similar values. There was a desire to offer holistic, person centred and relational rather than clinical as it helps people get more control over their healthcare, to manage their needs and in a way that suits them.

Concurrently, the GSP pilot identified an opportunity with the Personalisation Programme Manager to secure £100k additional funding to build capacity, in the collaboratives, to co-design the governance and collaborative arrangements. Each of the two 'hubs' received £35k and the remainder supported coordination and facilitation. The processes under which these collaboratives come together are co-produced. This means that the organisations themselves decide how they will work together, make onward referrals, share knowledge and insight, gather monitoring and evaluation data, and offer peer review and reflections on each other's work. The lead organisations were those with confidence and experience of working in this way) in the collaborative. They typically had capacity to support the development of the governance and accountability framework on behalf of the rest.

> *Do things in a way that's quite hierarchical. It's structured, it's ordered, there's strong reporting upwards. There are steering groups there are, you know, very rigorous mechanisms for organising money, organising an activity. And I just don't think that they are helpful in every setting. Community building and enabling things to grow from the ground…It I think it's helpful to grow networks which are less formal. More about relationships and more about what people want to do together and then follow that*

wherever it goes and to allow that to grow, but to grow from itself and to be accountable to itself and to share what that what that network is doing within, but also outside and to kind of influence from the inside out. (Interviewee 1)

Provider Collaborative #1 Five core organisations link with each other and several other individuals and organisations including schools, foodbanks, local community mental health teams, mental health support charities, the church, the library, the housing association, and social prescribing Link Worker. These links reflect the multi-dimensional network of relationships which enable help and care for members of the community to support their wellbeing, not just a single pathway. Interventions across the providers range from facilitated walking, community gardening, and peer support groups to structured activities such as 'social and therapeutic horticulture' to one-to-one therapies e.g., animal assisted therapy. Lots of examples of individual referral success and additionally, connections were made between a community development organisation and an organisation hosting 400 refugees. This has led to an integrated provision building individual skills but also community cohesion.

Much effort was put into building referral routes by one of the organisations, social media, invitation to site visits, connection to various ICB strategic networks and groups. Referrals were not forthcoming until the very end of the GSP project (indicating that the referral network may lack capacity, opportunity, and motivation to refer, but also that timescales for change are relatively long).

Provider Collaborative #2 In this area, there is more limited voluntary sector provision. Five local organisations, led by the local VCSE, have organised themselves to improve outcomes for participants, build relationships between themselves and other organisations in the area and demonstrate the value of a community-based model. They recognised and shared insight about the unsuitability of some of the funded programmes (e.g., 12 weeks) for people with complex needs. The collaborative developed a 'trail' on which all their organisations could be found. This allowed them and clients to experience a wider range of support which could be discovered within a relatively small geography. The trail would allow them to identify and/or develop new groups, with a budget aligned to supporting set up.

Where next: The Provider Collaboratives will continue with the existing funding until the end of 2023. There are potentially opportunities for further development and learning with the newly formed Place Alliances. Commissioning structures need to be supportive of these types of collaboratives to change the Green Provider landscape in the long term.

I'm thinking specifically about the people who are leading grassroots organisations in communities. They totally care. They care about each other, they care about themselves, they care about their work. They care about the environment and that gives me huge confidence and hope that what they're doing will happen, whether or not the system helps it. (Interviewee 1)

4.7. Mutual understanding and awareness of different parts of the system and how they operate

As many of the previous sections have noted, mutual understanding and awareness of different parts of the system are critical if they are to work together around the shared goal of facilitating and building GSP. We theorised that if we want mutual accountability and shared problem-solving to enhance service users' experiences, then we need to build trust and respect so that people understand and are aware of how different actors in the system may operate.

Relationships between key actors and parts of the system are key, and there is a need to embody mutual trust and understanding between stakeholders in the system – this is particularly important within GSP (and other social prescribing) where traditionally relationships between the key statutory bodies and the VCSE sector have been unequal and understanding between them poor. GSP can be seen gaining traction through developing networks, the appearance of GSP in strategy documents for the future, investment, and funding beyond the life of the project, and commissioned VCSE GSP services. Previous research has noted that a successful shift to systems thinking places the emphasis on the robustness and sustainability of the system itself, rather

than focusing on individual actions or interventions (Garside et al., 2010). A summary of this section's findings are shown in Box 15.

Box 15: Summary of Section 4.7 findings

Context

- Lack of mutual awareness and understanding between GSP partners, particularly between the NHS and VCSE sectors. Most acute with small VCSE providers, and some health sectors (e.g., mental health, young people's services).
- Key statutory partners lacked recognition of the ways VCSE work, and what they were doing.
- VCSE partners delivering nature-based activities lacked capacity, knowledge, or skills to work with SP referrals.
- Few referrals through formal SP routes (e.g., Link Workers).
- Lack of partnership working and coordination.

Activities

- Invested in partnership, collaboration and knowledge sharing opportunities including meetings, taster sessions, social media, delivering workshops and training, outreach to nature-based providers.
- Diverse GSP T&L site project teams, and wide stakeholder participation in oversight meetings.
- Codesign work to understand the needs of stakeholders and barriers to participation.
- Networks of nature-based providers supported or initiated.
- Trusted provider schemes and "green books" of providers developed to support appropriate referrals.
- Innovative funding schemes (such as green health budgets) explored.

Challenges

- Limited capacity to attend meetings for some stakeholders.
- Short term project means a trade-off between meaningful involvement and co-production and directive action to get things done.
- Increased understanding not always positive – could lead to entrenchment of views.
- Some uncertainty about the appropriate scale of networks – hyper local vs regional.
- Trusted provider schemes/ directories require ongoing updates – unclear if/how this will be done.
- Link Worker capacity is stretched, with many of those referred having complex or acute needs.

Outcomes

- Greater awareness and understanding between different parts of the GSP system regarded as the most significant project change by some.
- Better understanding between national partners and GSP "on the ground".
- Ongoing support for green networks.
- Some perceptions that GSP understandings were not aligned throughout localities and that innovation was resisted.
- Transformation not complete, with more work to be done aligning systems, and developing shared accountability and problem solving.

Implications for GSP test and learn project

- Improved understanding between, and linking up, different parts of the system has been successful – this is critical but may not be sufficient to scale up and embed GSP, especially in a limited time period.
- Time and resources are required to understand issues facing stakeholders, develop relationships, build trust, and respect, and ensure aims and priorities are agreed.
- Trade-offs between extensive engagement / coproduction work and delivery.

- Mutual sharing of risks and benefits needed.
- Trusted provider schemes / directories need to be sustainable.

Recommendations for spread and scale of GSP

- Investment in partnerships, collaboration and knowledge sharing opportunities is required.
- Diverse partnership in decision making fora may require creative solutions to ensure that appropriate representation for all key partners is possible.
- Initial codesign work can ensure that partner and community needs and priorities and incorporated - time to do this well is required.
- Partners need to be flexible and be responsive to innovation if mutual accountability and shared problems solving is to develop.

Key findings from the interim report which highlighted the importance of relationships and connections across the GSP are shown in Box 16 below.

Box 16: Key Findings from Interim Report: Relationships and connections across the GSP system

- T&L Sites have undertaken huge amounts of work to engage stakeholders from across the GSP system, through creating networks, stakeholder groups, workshops, and management structures. Involvement in the GSP system was typically more complete than in the non T&L sites. Some gaps in active involvement remain in some sites, particularly at a strategic level, including representatives from mental health trusts, nature-based delivery organisations (particularly from smaller organisations), Link Workers and those with lived experience of mental ill-health. Capacity to attend, or not feeling like their input had an impact may be issues influencing this.
- Where existing networks, such as those for nature-based activity providers, already existed, this has facilitated sites moving more quickly to delivering nature-based activities through GSP. Elsewhere it has taken longer to understand the local landscape and develop these networks. There is a risk that overreliance on existing networks may exclude some groups and reinforce existing more dominant voices.
- Many sites report strong support and buy-in for GSP from stakeholders. However, they report that some remain unaware or sceptical of GSP benefits (including some clinicians) or are unconvinced of its relevance for specific groups (such as those with more serious or complex mental health conditions).
- Dedicated Project Managers have a central and critical role in developing and promoting GSP, including providing leadership, coordination, strategic development, relationship, and network development, and identifying additional funding streams.
- Power imbalances between statutory and VCSE sectors remain, with the latter not always feeling valued as equal partners, or able to influence project direction. They may be expected to be flexible in responding to need, where statutory partners may have less agility and flexibility.

4.7.1. Context

Prior to the GSP programme, there was a lack of awareness and understanding about GSP and this was particularly acute between the NHS and nature-based providers in the VCSE sector. This meant that the dominant infrastructure organisation (the NHS) and small nature-based providers in particular lacked mutual understanding and respect. In addition, there is often a complex infrastructure in place for social prescribing with different funders, referrers, data systems and models, which do not always fit neatly into a “standard” model of SP. There is considerable variation in SP models and level/type of investment by place, influenced by a range of contextual factors. This requires increased understanding across the system, alongside co-design of activities so that delivery reflects differences in context/place and the needs of local communities/stakeholders (T&L2).

Key statutory partners, such as the NHS (primary care and mental health) and local authorities, lacked understanding and recognition of the ways in which VCSE sector organisations work, and about what they were already doing. Similarly, within the VCSE sector, although nature-based providers were delivering nature-based activities, some did not have the capacity, knowledge, or skills to receive social prescribing referrals (T&L5), and there was limited capacity to build links between nature-based providers and social prescribers such as LINK WORKERs (T&L3). This lack of connection between sectors was particularly acute between smaller VCSE organisations and strategic partners such as the NHS (T&L2). Prior to the project, the desire to implement and embed GSP was being frustrated by organisational structures and lack of awareness of the benefits of working with VCS organisations (T&L3). Existing advocates for SP and for GSP within the NHS, VCSE sector and LAs meant that some GSP was already happening, but that this tended to be a niche activity (T&L3,7) and there was a lack of referral to GSP through formal SP routes (T&L5) (influenced both by high levels of more acute need among those seeing social prescribers, as well as lack of appropriate link up to nature-based providers). In other sites, while the infrastructure was in place to deliver GSP, there was a lack of partnership working, awareness and coordination across localities and lack of connection between VCSE organisations and health system leaders (T&L5). In addition, specific sectors, including mental health and children/ young people's services (T&L3), were seen in some areas as lacking awareness of GSP and its potential role, perhaps as this was seen as more clinically focused (T&L1). Statutory sectors were unsure how to work with the VCSE sector (T&L1).

4.7.2. Activities

Greater mutual awareness and understanding between different sectors is a key result of the GSP programme in the sites (e.g., T&L 1 and 7). The pilot has also provided partnership, collaboration, and knowledge-sharing opportunities. Commitment from T&L managers and project managers to a partnership approach has led to GSP meetings, (variously oversight meetings, management meetings, steering groups etc.) being convened which draw membership from a wide range of stakeholders. Sites highlighted the benefits of a diverse project team across key areas of mental health, social care, environment and VCSE, and this was seen as a great lever in working across systems and breaking through silos (T&L6). This also modelled a way of working which was thought will change approaches in the future (T&L6).

Sites have prioritised activities based on their understanding of local needs so, while many aspects were shared, others have been responsive and varied. In some sites, initial activities included extensive co-design work to understand the needs of stakeholders, and map barriers to participation (for example in T&L2 where this was led by the VCSE sector). Some sites have undertaken specific work targeting mental health service. For example, the project manager in T&L7 has worked with the local mental health partnership to develop a community of practice around GSP to raise awareness, understanding and enthusiasm for GSP. There are currently around 50 members, mostly clinicians. T&L3 identified a gap in children's and young people's provision and have developed activities for primary and secondary school children.

Where they did not previously exist, sites have supported the development of networks among nature-based activity providers (e.g., T&L2, T&L5) and/or communities of practice for those providers whose activities were funded through the GSP project (T&L2) to share best practice, overcome challenges and to provide training and upskilling. In T&L2, this responded to a need identified in the initial co-design stage and the content is similarly co-produced and led by the VCSE sector. Although time consuming, this co-design phase was identified as key to generate a shared vision around, and buy in for, the GSP programme. Elsewhere, networks linking nature-based activity providers and health have been developed, both across the patch and

within specific localities to share information and support around the wider SP infrastructure (T&L5). This was supported through specific resources from the programme to a central infrastructure organisation leading T&L5 site-wide work. There was also dedicated capacity and resource to develop connections and share information. Peer–to–peer networks were valuable as mutual support, sites of shared learning, and increased visibility for the community of nature-based providers (see also Box 7).

In order to affect systems change and to try and embed GSP across their locality, sites have invested in networking and partnership building to bring together partners from the VCSE delivering nature-based activity and statutory services (T&L2).

> *I think the links between the green sector and the NHS and the Link Workers is much stronger than it was before you know all of the partners. I think there's increased understanding of each sector you know within each sector and that communication is happening at sort of quite local level, you know delivery level, but also quite strategically. So that's really valuable. (T&L2, green provider)*

> *So clearly I think for green organisations that were funded through the grant pot – they clearly have become significantly more aware of this whole structure around primary care and the wellbeing voluntary sector system around primary care and the understanding that actually people with social needs or health needs that connect with social and there's a whole context of that that probably just blew their mind, I was like oh I didn't even need to know all about all of that. (T&L2, local authority stakeholder)*

Developing relationships across previously un- or poorly- connected parts of a system can be time consuming, but these are critical for successful whole systems working (Garside et al., 2010). In two areas of T&L5, the intensity of this work was recognised, and funding used to directly support members of staff with responsibility for developing relationships and referral pathways. For example, in one area the funding was used to support a green provider with responsibility for developing relationships with health professionals, who has undertaken specific work to strengthen mental health referral pathways. This work has led to the onward commissioning of GSP activities within a community mental health trust. In turn, this role has also supported the development of a "referral loop" to reduce service user drop off and ensure service users are triaged to appropriate provision (see exemplar in Box 23). In another area, funding was used to hire a new member of staff to help develop referral pathways and upskill and support green providers to support referrals. The intensive nature of the work shows the importance of having specific roles to develop relationships across the system which are adequately resourced, rather than relying on existing parts of the system. Piloting approaches before spreading these out can also be useful:

> *I think the partnership opportunities with the VCSE sector you know, local mental health services are often seen as the big, bad organisation that gets all the money but doesn't really engage, and that's completely you know, the last couple of years that's completely shifted. We're working a lot more with the VCSE and it's really good because obviously in the steering groups we've obviously got representatives from across [locality] including the VCSE as well. So, it's good I think as well to see other organisations coming together, working collaboratively, looking at actually works in one area would that replicate and work in another area, so there's a good sense of sharing of information. I think what we learnt is that actually structured support programmes can work more so than they have done previously and I think that might have something to do with the setting, you know, where we are now at the garden centre that it's not seen as, it's not a clinical environment so I think we get quite a decent uptake of people who're engaging better. (T&L1)*

One site (T&L3) used its Theory of Change workshops to develop a specific aim of 'building a multi-dimensional web of strategic links to communicate and embed the benefits of GSP across healthcare and greenspace systems, working with partners within and beyond the NHS.' This was conceived as a 'web of webs' connecting with wider strategies, policies, and practices. In the same site, voluntary sector leadership of the GSP project has enabled providers and health system actors to make connections, and supported activities that could be arranged without going through NHS institutional processes. The pilot provided dedicated capacity to make the case for GSP, build networks and share learning.

As also noted in Section 4.4, a range of approaches have been used to build understanding of, and support for, GSP across localities, including running taster sessions with nature-based providers, attending meetings, using social media, delivering workshops, training/capacity building and outreach for nature-based providers new to social prescribing. Sites have also developed case studies illustrating participant impact, as well as producing films, and holding celebratory events and festivals to showcase activity (e.g., T&L3, 7). Taster sessions for staff from different partners in the system (such as Link Workers, local authority staff, ICS members, NHS staff, including those in mental health services, and members of the national partnership) were used by a number of sites (T&L 1, 3, 5, 7). This allowed them to experience the nature-based activities first hand with the aim of building trust in and support for the providers and nature-based activities.

Sites also developed and supported training, recognising that knowledge is distributed across a complex GSP system and mobilising this expertise (Garside et al., 2010). So, for example, T&L sites 2&3 used a key nature based VCSE organisation to provide training on GSP aimed at increasing understanding across the system. Attendees included Link Worker, occupational therapists, GPs, social prescribing team leaders, and nurse practitioners. The decision to fund a VCSE green provider to lead on engagement work, including this training and developing a network of nature-based providers, was seen as key in T&L2. The project manager's attitude towards the VCSE sector, and their wider work around understanding its role, was seen as instrumental in driving change forward.

As noted elsewhere, developing trusted provider schemes or "green book" listings of providers, and capacity to support different levels of mental health need, has been seen as an essential resource for Link Workers and nature-based providers in making referrals and supporting trust between providers and referrers (T&L3, 7)

In T&L 6, the GSP project has been developed to test a different model of commissioning services and within the GSP programme to see a) how the locality can use green health budgets as an equivalent of a personalised health budget with nature as an option; and b) how to develop a community provider business model. The theory is that people could use the personalised green health budget to exercise their choice for a GSP activity. However, unlike other services (such as IAPT) which are block funded, so upfront costs such as staffing and resources are always covered, GSP services would use a "spot purchasing" model and be funded reactively, so that they were only commissioned once people had selected to use them. This was seen as the only way in the short to medium term that this could get funded. But it is not clear whether this model will work for providers, with smaller organisations particularly disadvantaged by such systems (as also reflected in Section 4.1).

In addition to the broader aspects of context – the pandemic, the cost-of-living crisis, winter pressures, the development of ICS structures and other restructuring which drew attention and effort away or made decision making difficult – a number of areas were noted which impacted on the ability of sites to move towards mutual accountability and shared problem solving.

Some providers had limited capacity to attend meetings due to workload pressures (e.g., T&L5). Moreover, there is a trade-off, particularly for a short-term project, between ensuring meaningful involvement and the need to get things done:

> *There is definitely a balance to find between being pragmatic and being fully inclusive and consultative and co-producing and all those things. And I have worried at times that we've gone a little bit too far towards just being directive and say let's get on with it. But then I comfort myself with the fact that I think we've achieved a lot and we've achieved a lot for… on behalf… it's bad, isn't it? Because you say on behalf of those partners, but it… it should be… it should be with. It's… I grapple with this… this whole sort of middle bit. (T&L7, project board member)*

Understanding between the sectors increased, but these understandings were not always positive – such as the perception of statutory bodies as rigid, and unable or unwilling to accept risk without control (T&L4). In a whole systems approach, recognising that expertise is distributed through the system, and being able to cede control away from the centre can be key (Garside et al., 2010). One site suggested that there was uncertainty about how much to try and bend traditional NHS approaches, and how much they should attempt to innovate and model new ways of working (T&L7).

> *I don't know whether that's because people feel threatened because you know, we're looking at doing things in a different way [provider collaborative model]. Or whether it again it is a power hierarchy that you know. Look at me. I'm, you know, I'm in charge and, you know, protect it. It's almost like protecting the roles [traditional NHS]. (T&L4)*

In T&L2, it was thought that communications about the community of practice and green network could have been improved, particularly in relation to understandings about GDPR and information sharing that resulted in some people missing invitations. More generally, evidence from the 2023 NBP survey suggested there were issues with respondents feeling informed about GSP. Whilst the numbers of people that agreed or strongly agreed that they were being kept informed had increased from 41.3% at baseline to 50.7%, this was still only half of respondents.

Elsewhere, there was uncertainty about the appropriate scale for networking activities. In some cases, regional fora were felt to be too large due to differences across the localities, and some people desired place-based meetings. This is currently being explored for future work, but capacity and governance is an issue.

In some areas, where lists of "trusted providers" have been developed (e.g., T&L3), these have helped social prescribers such as Link Workers to feel more confident in their referrals, and for providers to feel confident that they have the expertise to support people who are referred to them. These resources contain information about the activities offered, and the support available for people with different levels of mental health need. In most cases, however, these are static resources, and it is unclear how they will be maintained, and kept up to date over time. They may also exclude smaller, hyperlocal, or informal groups without means to join the community.

4.7.3. Outcomes

All sites reported greater awareness and understanding of the different parts of the GSP system and how other organisations operate, and this was regarded as the greatest significant change by some (e.g., T&L7). It was also felt that the national partners had a better understanding of the realities of delivering GSP on-the ground (WP5). National partners are now also better able to collaborate effectively together around GSP and bilaterally on other relevant projects. There was clear and ongoing support for networks in some pilot areas, such as the Nature for Health network (T&L5)

with over 500 attendees and growing. In turn, the network has resulted in the development of collaborative funding bids such as a successful application to the local Green Environment fund which has funded two local sites plus the infrastructure organisation to become green advisors; a paid role which involves developing the capacity of nature-based providers and encouraging applications for funding. Sites have also reported awareness spreading further, with those not involved in the pilot approaching the project team about GSP work or opportunities (T&L1). VCSE providers describe more awareness of possibilities and potential for GSP and their involvement, with GSP no longer being seen as 'too clinical' (T&L1). However, this change may not extend much beyond those directly involved in the pilot project.

Elsewhere, this remains a work in progress, and it is not suggested such a transformation is complete or even substantially achieved (T&L3,6). Links are beginning to be made and reinforced through connections outside the pilot (T&L3). T&L 1 suggested that awareness has been raised at a strategic level through the steering group connections, but not consistently across the system.

> *I think I'm trying to say that if I was confused [about GSP] as somebody who works in this area of mental health, how is the person walking past my house now going to know? (T&L1, VCSE stakeholder)*

Some areas also reported persistent perception locally of GSP as being solely about GP referral routes (T&L1) which was also thought overly restrictive and suggests that goals and understandings had not been fully aligned within the local system and between local areas and the national partnership.

Changes in the link up and awareness of others in the social prescribing system was reported in interviews and in the survey data from nature-based providers and Link Workers gathered by WP3A. Nearly half reported improved networks with other providers of nature-based activities (47%). Nature based providers responding to the survey showed that they had accessed information provided by the project and been involved in a number of networking and training opportunities whilst nearly half accessing funding (47%) (see Table 35).

Table 35: Aspects of GSP project accessed by nature-based providers

Element of GSP Accessed	Response (n=64)
Accessed funding through the project	30 (46.9%)
Taken part in activities that have involved networking with GP practice-based staff	17 (26.6%)
Taken part in activities that have involved networking with mental health services	19 (29.7%)
Taken part in activities that have involved networking with Link Workers	22 (34.4%)
Taken part in activities that have involved networking with other nature-based activity providers	29 (45.3%)
Taken part in activities that have involved developing multi-disciplinary team working with other organisations	7 (10.9%)
Accessed training related to green social prescribing	15 (23.4%)
Attended networking events	33 (51.6%)
Attended open sessions/taster events of nature-based activities	5 (7.8%)
Organised or facilitated events for the Green Social Prescribing Project	19 (29.7%)
Been part of a decision-making group for the project	7 (10.9%)

Element of GSP Accessed	Response (n=64)
Joined a community of practice	5 (7.8%)
Viewed websites for information	30 (46.9%)
Received project newsletters/correspondence	34 (53.1%)
Other	10 (15.6%)

More than half of nature-based provider respondents reported a greater understanding of social prescribing (55%, although relatively high numbers did not agree at 45%), and almost double the proportion of Link Worker respondents in the wave two survey either strongly agreed or agreed that they felt sufficiently informed about GSP compared to the initial survey (34% vs 66%).

A third (33%) reported that their nature-based activities had experienced an increase in the number of referrals from Link Workers. However, 41% said there had been no changes in how they work with Link Workers. Among Link Worker respondents to the survey 43% reporting an increase in the proportion of their referrals that were made to GSP activities, and 46% reporting no change.

Nature based providers also reported that they had greater knowledge of local mental health services (42%), with nearly a quarter experiencing an increase in the number of referrals from these routes (24%). Not all providers will be suitable for referrals from mental health services.

There were relatively high levels of trust amongst partners, with 61% agreeing/strongly agreeing at follow-up and this had increased from 49% at baseline. This highlights the positive relationships between people involved in GSP.

The vast majority of nature-based providers surveyed felt that there were benefits of GSP partners working together. At baseline, 82% agreed/strongly agreed and this remained constant at follow-up (81%).

Evidence from the survey of nature-based providers showed that nearly two-thirds of respondents (63%) reported an increase in the number of people they had supported over the life of the GPS pilot, with less than 10% (8.6%) saying they supported fewer people.

These activities aimed at increasing understanding and awareness of how different actors in the system may operate have helped to develop trust and respect between actors within it. However, it has been suggested that increases in mutual understanding have only led to mutual accountability and shared problem solving where there were shared values (around person-centredness, holistic therapy, community resilience) and humility (“I am not the expert”), and where structures and processes allowed for solutions to be developed in place (T&L4).

T&L4 noted some movement towards mutual understanding with, for example, micro providers more fully understanding the constraints and perceived inflexibility of statutory institutions especially the NHS, and Local Authority and NHS stakeholders better understanding how the VCSE works in all its breadth and nuance. In the main, however, this has not led to mutual accountability and shared problem solving, if anything, some stakeholders have become more entrenched in their own views. Examples of this in this site were the NHS concluding that they needed fewer micro providers involved, or that they needed to manage the perceived risks of working with them through rigid accountability frameworks. On the other end, some micro providers determined that they needed to work outside of the NHS.

There were concerns about the longevity of GSP and the network developed through it, beyond the current funding (e.g., T&L1,5):

> *It will just peter out, that is my worry for it and that nobody will be passionate enough because people are busy, nobody will be passionate enough to say "we must make sure that Green continues". (T&L1, VCSE head)*

4.8. Referrals to GSP (extent and appropriateness)

As noted elsewhere, there were issues with the quantity and quality of referrals to GSP at the start of the project. We hypothesised that if we build referrers' capability, opportunity, and motivation to refer to GSP, then we have improved access to appropriate green opportunities.

Box 17: Summary findings for Section 4.8

Context

- T&L sites: many sites reported a lack of clarity around referral routes, their structure and what was available to whom.
- T&L sites: Link Worker provision was fragmented with multiple different Link Worker employers across VCSE, primary care, secondary care, social care and private sectors with little coordination or data sharing.
- T&L sites: Some sites reported that Link Workers often did not have an understanding of the specifics of GSP as distinct from social prescribing more broadly.
- T&L sites: self-referral was the most common route to nature-based activities across all sites, and often this was a surprise to GSP project teams who had assumed that referral via a GP or Link Worker was the more usual route.

Activities

- Various models of support for providers have been modelled by sites, including training packages for referrers, covering GPs, HCPs and 'green social prescribers' and the wider workforce, to increase awareness of nature-based provision available, capacity training for providers to improve e.g., grant writing skills, taster sessions and training with specialist workforces, and e-learning modules aimed at helping to build understanding, education, and awareness for referrers.
- Sites have worked to increase awareness of different referral pathways, improve outreach and communication with Link Workers, and improve alternative pathways to referral to reduce pressure on Link Workers.
- Sites have also worked with nature-based providers to offer options of support to encourage participation, including peer support, buddying, and befriending, providing a specific support role alongside the delivery of the activity, undertaking work to understand specific needs or barriers (e.g., wheelchair access) to participants, providing transport or funds for bus fares or petrol.
- Specific work has been undertaken to strengthen referral pathways in mental health services including offering taster sessions within the local trusts, delivering awareness raising events, as well as continuing to drive engagement through the ICS.

Challenges

- System barriers and silo working have proved challenging to tackle alongside delivery of specific programmes.
- Lack of awareness and capacity amongst Link Workers, Health Care Providers and other referrers were the main barriers for referrals to GSP.
- Where PCNs run Link Workers 'in house' they often follow a health system agenda, and there is more focus on getting people through the door, getting people seen and moved on. This can create tension with the person-centred role of Link Workers as applied in other organisations.

Outcomes

- nature-based providers continue to explore strategies for preventing participant drop off and share good practice within their green network and community of practice.
- Sites have improved influence and support of Link Worker and referrer networks to increase representation, awareness, and communication.
- Increasing training opportunities, taster sessions and additional support has improved confidence in referrals for Link Workers and other referrers.

Implications for GSP test and learn project

- Sites would value development of a single referral form gathering necessary participant information, clear guidance on who is expected to provide support for participants, and what level this support needs to be, and basic requirements in terms of evaluation and participant safety.
- further training on safeguarding and mental health support may be useful for future delivery.
- Link Worker capacity and engagement in GSP must be addressed in order to improve referrals to GSP.

Recommendations for spread and scale of GSP

- Clear locality-wide guidance to bridge information and understanding between referrers and nature-based providers would be helpful.
- Allocate enough time and resource to meaningfully explore inequalities in access and provision.
- Improve training and access to support for those involved in provisioning GSP in key areas such as dealing with complex mental health needs and assessing risk.
- ensure that activities targeting communities reflect the diversity of those communities both in planning and delivery.

4.8.1. Context

Unclear referral routes

Initially, many sites reported unclear referral routes, with a lack of understanding around referral routes, who refers to what, what activities exist and what activities are available amongst GPs, Link Workers, and providers. Some sites such as T&L3 found Link Workers were not referring significant numbers of clients to GSP activities, and this was echoed in the NBP 2023 survey in responses from the T&L4 locality.

Fragmented link worker provision

Link Worker provision was fragmented with multiple different Link Worker employers across VCSE, primary care, secondary care, social care and private sectors with little coordination or data sharing.

> *Some of the PCNs are really challenging what these Link Workers are doing for the money that they're funding them. Because the PCNs control this. So, what's happening here is that some of the PCNs... just want to get the numbers through the door. So, they're basically saying to them, "You're just a signposting service now. We want you to up your caseload. So, you can only see this person..." …They're reducing the number of appointments they can have with them. "You need to signpost them to activities. You need to almost get them off your caseload." Whereas, what we know needs to happen, is you need to spend time with these individuals to really make a difference. Otherwise, all you're doing is you're keeping the revolving door going. (T&L7 stakeholder)*

What makes GSP different

Some sites reported that Link Workers often did not have an understanding of the specifics of GSP as distinct from social prescribing more broadly. Where service users were referred to nature-based activities (as noted in Section 4.6) supporting people to attend the first session can be critical and, at the other end of the experience, there were few move-on options after an initial course of activity.

Self-referral

All sites reported that self-referral was a common route to nature-based activities, and often this was a surprise to project teams who had assumed that referral via a GP or Link Worker was the more usual route. Many sites also reported that it was more difficult than anticipated to generate interest in GSP activities from referrers:

> *I just felt like we would say to people we've got this brilliant program, you can do this, it works, etcetera, and people would be more interested, and they would refer into it. But there wasn't the level of interest that I was surprised at really. So that's when I realised that the social prescribing Link Workers are not often…the way that people find out about activities, lots of people are self-referring. …I realised that the social prescribing Link Workers were not referring in basically. (T&L4 stakeholder)*

4.8.2. Activities

Sites have developed creative approaches to addressing common issues around prioritisation and stratifying need, raising awareness amongst professionals and volunteers, targeting specific groups, and overcoming some of the systemic barriers present across the programme.

Levels of support for providers

T&L4 developed a shared reference framework that was used by a variety of providers and some strategic leads, with practical tools such as postcards created to help with effective triage of service users.

Several sites have created training packages for referrers, covering GPs, HCPs and 'green social prescribers' and the wider workforce, to increase awareness of nature-based provision available (T&L 1,2,3,4,5 and 7), improve recognition of the GSP system, and foster greater collaboration between different groups. In T&L7 they created more capacity training for providers including taster sessions for high quality collaborations and greater understanding across the GSP network. This site also created taster sessions and training with specialist workforces, and e-learning modules aimed at helping to build understanding, education, and awareness for referrers. Within this site they have also developed and delivered dedicated training for capacity building amongst providers, e.g., grant writing workshops, peer-to-peer models for mutual support, taster sessions with professionals. In addition, the T&L7 project manager has worked with the local mental health partnership to develop a community of practice around GSP. In T&L1, the project worked directly with existing referrers to increase their awareness and number of referrals into GSP activities. One social prescriber reflected that the project had enabled her to spend time meeting with providers which she doesn't usually have capacity to do, and it has helped to build relationships, which she will continue to utilise in the future.

Strengthening referral pathways

One key activity in T&L3 has been to increase awareness of green social prescribing options, not only among Link Workers but among other referrers (including probation

services and community development workers), supported by information available in the green directory and the trusted provider scheme. Within the 2023 NBP survey, raising awareness of GSP was linked to increases in delivery as reported by respondents in T&L1, T&L4 and T&L7: “Green social prescribing is more widely known about and accepted as treatment by people.” (T&L5 NBP survey respondent).

Throughout the project there has been a concerted programme of outreach and communication with Link Workers, including presentations and training sessions, and there has been evidence of increased engagement among Link Workers as a result (e.g. T&L1). In addition, the GSP pilot made a targeted effort to identify other sources of referral, recognising the pressure on Link Workers with their existing caseload and the severity of need among those referred for social prescribing. 'Community connectors' (i.e., community development workers) and specialist services including acute mental health and probation have been added to the list of referrers. The pilot has also strongly supported self-referral, recognising that for those with low levels of mental health need there may be a stigma attached to referral routes via GP surgeries.

As noted elsewhere, in T&L5, specific work has been undertaken to strengthen referral pathways in mental health services including offering taster sessions within the local trusts, delivering awareness raising events, as well as continuing to push engagement through the ICS. This has now led to one organisation being commissioned by a community mental health service on a rolling contract to provide GSP activities.

Combining schemes across localities

In T&L5, several nature recovery projects were implemented in tandem with the GSP project, with the aim of improving the natural environment and ecosystem, and to encourage more use of green space. Following the start of the GSP pilot at this site, boundaries of included areas were increased to include the smaller infrastructure areas which are urban and located in areas of highest deprivation. The health impact of nature recovery is now being considered alongside improving the ecosystem for habitats and species, with shifts in strategic priorities because of the GSP pilot.

> *So the wider benefits of getting out into the environment and connecting with nature, that’s part of the focus. But the actual developing potentially a green social prescribing offer, in an urban area, that wasn’t there…I know that, so the [key performance indicators - KPIs] for the Nature Recovery, I guess like kind of our priority areas that are focused, they’ve all had ‘develop a health offer’ as part of their KPIs...how are we going to judge this Nature Recovery Project or Nature Recovery area in terms of whether we’ve achieved an outcome, is develop a health offer. I think that didn’t happen before the pilot. (T&L5 stakeholder)*

Support for service users

In T&L2, nature-based providers offered service users various options of support to encourage participation, including peer support, buddying, and befriending, providing a specific support role alongside the delivery of the activity, undertaking work to understand specific needs or barriers (e.g., wheelchair access), providing transport or funds for bus fares or petrol. Some providers also encouraged clients to catch public transport together as a form of peer support (See Section 4.10) for more examples of support generally to support participation in GSP).

T&L6 highlighted that in aiming to create meaningful and lasting system change, they have repeatedly needed to make the case for cross-sectoral working at multiple levels across referrers, policymakers, commissioners, and different stakeholders within the system. This is distinct from simply creating a new referral pathway or referral service, which is often what others within the system are expecting – and instead is focused

on embedding GSP across the whole system and making substantial cultural shifts along the way to create the conducive conditions for this change to happen.

4.8.3. Outcomes

Tailored support to improve referral pathways

One T&L site (T&L4) developed a model which described categories of nature-based activity. These consisted of five levels from self-managed access, to group access, up to bespoke, supported 1-2-1 care. Providers were able to self-audit and suggest which level of provision they could offer. Referrers were able to use the framework to refer people to the most appropriate level of activity. In the same site, they found success in communicating complex information in a simple and logical format through postcards to help social prescribers make appropriate referrals for service users. Initial piloting of a small number of postcards resulted in 100% appropriate referrals. However, despite improving communications and relationships, T&L4 has not seen a seismic shift in referrals because underlying issues around capacity among referrers, and unmet basic needs among the population, remain. Some sites reported improved referral pathways as a response to initiatives, as identified in the 2023 WP3a NBP survey. This is related to the provider's greater capacity to connect with referrers: *"We have added a new wellbeing project as well as increased capacity in the team to connect with referrals and advertise our projects. Being linked in with the Green Social Prescribing group has been beneficial too as it has allowed us to reach more referrers."* (T&L7 NBP survey respondent).

Improving outreach and awareness

GSP funding allowed T&L2 to test new approaches, for example a mental health buddy programme, where peer support from within the GSP network and community of practice shared best practice with their peers in supporting service users with mental health issues. The trusted provider scheme and the green directory have made activities more accessible in T&L3 as highlighted in Box 18, although there is little direct evidence of any impact on health inequalities to date. While more diverse groups are using green spaces, this use increased during the COVID-19 lockdowns in 2020 which preceded the T&L pilot.

Outreach and awareness raising activities were mentioned by respondents in the 2023 WP3a NBP survey and linked to increases in delivery across T&L1, T&L4 and T&L7; "We proactively made links with all the social prescribers in the area and the Occupational Therapists working in Community Mental health services" [T&L4 NBP survey respondent]. Targeting referrers to demonstrate activities was also a success: *"The workers visited the garden so they were more aware of what we offered and the level of support so they were more informed when introducing people. The feedback from those who did refer was positive and that they felt more confident in suggesting an introduction"* (T&L4 NBP survey respondent). This had been achieved through a number of routes including advertising across T&L1, T&L2 and T&L6:

> *We have a range of events/activities on, and these are well advertised in the park and on social media. People opt to attend themselves for their own mental health and wellbeing. We also have a 'Friends of' membership and therefore our newsletter reaches over 1000 people in the local areas, so this also informs people of what is on offer. (T&L1 NBP survey respondent)*

In T&L7, outreach and communication activities have involved running training and taster sessions for GPs and Link Workers to build understanding, education, and awareness for referrers, and for providers to see what others are doing and build up practitioner networks. They have also run several targeted pilots to increase

collaborations and recognition of opportunities amongst Link Workers, GPs and providers. In T&L3, public communication and advocacy is a key element of the GSP pilot to publicise the benefits of green activities to a wide audience. It is not known how many people have engaged in green activities because of such publicity, but it is likely to be a significant proportion among those engaging in activities targeted at people with lower levels of need.

Change/lack of change in referral patterns

Some survey respondents within the NBP 2023 survey from T&L1 also reported improved referral routes, whilst others within T&L1, T&L2, T&L3, T&L4 and T&L7 reported that the programme had not changed the referral pathway or that further improvements were needed: *"Develop better patient pathway for GSP provision with IAPT services, NHS counselling services and Primary care services so that GSP session[s] can help support people on long waiting lists for these services or those people who didn't meet the eligibility criteria to receive support from these services"* (T&L6 NBP survey respondent). The NBP 2023 survey also indicated a lack of understanding around why some referrals were so low: *"There is a need to understand whether the lack of referrals is a lack of demand or a lack of understanding from the health sector. We need to understand why referrals are not being made"* (T&L4).

The 2023 NBP survey respondents demonstrated that referrals across localities still present a very mixed picture. Some respondents reported inappropriate referrals, for example *"Social Activities for patients with less than 2 weeks to live who are unable to walk and sleep almost 24 hours per day"* (T&L4 NBP survey respondent) and *"from Learning Disabilities, it feels like they refer to us if they are not able to provide a service to the client."* (T&L6 NBP survey respondent). Some respondents reported referrals of people who were not ready to engage or interested in nature-based activities.

Some people reported too many referrals across T&L2, T&L4 and T&L6 localities: *"For the last 5 months I was the only Social Prescriber and it was very difficult to provide a quality service to the number of referrals we were getting. At one point I had 80 patients in my caseload. I believe the figure of 250 patients per year which was set by the NHS is very unrealistic."* (T&L4 NBP survey respondent). Lack of information on referrals made was also an issue, with a lack of key safeguarding information or mental health details and poor or non-existent risk assessments also raised within the NBP 2023 survey.

Too few referrals were reported across T&L2, T&L4 and T&L5 within the NBP 2023 survey, with reasons covering seasonality (fewer options in winter, and fewer people interested or able to take part), transport challenges with people unable to access provider sites, lack of client awareness, and COVID-19 related poor health and anxiety.

Transitioning into and beyond referrals

A common referral theme across sites was how service users transition into and out of the nature-based activities and services initially offered to them. According to the NBP 2023 survey, some providers (T&L1, T&L2, T&L4 and T&L7 localities) offered mentoring and coaching into training, employment, and apprenticeships: "We have supported a few people into employment where we have mentored and coached them" [NBP 2023 survey respondent from T&L7 locality]. Others offered employment in the programme directly: *"We have been able to offer part time employment to around 6 per year and that has worked well, using our services as a steppingstone. The first six months, for many, who have been isolated in bedrooms for 3-5 years, is focussed on attendance, integration, and confidence primarily because many have lost the capability to mix and talk and have little to talk about"* (NBP 2023 survey respondent from T&L7 locality). Several providers, however, had no specific progression out of the

activities: *"Most of our activities are based on long term and maintenance not an objective to move on. We have a hierarchy of mental health services within the organisation from counselling through, therapies, classes and support groups and people access all as they need"* (NBP 2023 survey respondent from T&L4 locality). For some this was related to challenges of capacity: *"We have identified an opportunity to support transition from high support needs to more of a volunteering or independent gardening role, however, this requires additional funding. All projects are challenged with chasing short-term funding, so it is difficult to provide long-term plans and partnerships"* (NBP 2023 survey respondent from T&L2 locality).

Creating system change

One reflection from T&L6 was that in focusing on mental health pathways, the GSP project national partners have to an extent directed activities towards generating further green health and wellbeing referral pathways. This motivation sits at odds with the site's ambitions of creating meaningful system change by moving beyond siloed pathways between which people transition to a truly embedded green social prescribing approach across the network. As a result, T&L6 has experienced ongoing tension between the need to continually make the case for more radical shifts by showing people what system change could look like, alongside trying to achieve demonstrable results in the present day. T&L7 has seen challenges presented with primary care networks running Link Workers 'in house' where they follow a health system agenda, and there is more focus on getting people through the door, getting people seen and moved on. This can create tension with the person-centred role of Link Worker as applied in other organisations.

GSP-specific guidance

Observations in T&L5 suggested that the focus of national funding and strategic guidance around nature recovery is heavily focused on habitats, meaning GSP activities – especially incorporating urban environments – often do not readily fit these objectives. However, T&L5 reported a genuine and ongoing commitment to focus staff and resources on nature recovery project moving forward, but currently there is no further detail on this. Several of the T&L sites (T&L2, T&L3, T&L4, T&L6, T&L7) have observed that there would be benefit in creating clear locality-wide guidance to bridge information and understanding between referrers and nature-based providers. For example, development of a single referral form gathering necessary information, clear guidance on who is expected to provide support for service users, and what level this support needs to be, and basic requirements in terms of evaluation and safety. In T&L2, nature-based providers continue to explore strategies for preventing service user drop off and share good practice within their green network and community of practice. The next steps for individual services is unclear and will be dependent on what funding sources are acquired post programme to support delivery. The lack of confidence discussed in green provider meetings indicates further training on safeguarding and mental health support may be useful for future delivery. Aligned to this, T&L3 have created a directory of NBPs alongside a list of trusted nature-based activity providers and this is detailed further in Box 18.

Box 18: Exemplar on improved access to green opportunities (T&L3)

One of the biggest challenges in implementing green social prescribing is to link a diverse mix of greenspace organisations with a healthcare referral system that is in continual flux and often fragmented, with multiple referrers and ways of being referred to social prescribing. In T&L3 the response to this challenge was to find ways to build confidence among referrers as well as greenspace organisations that appropriate activities and support would be available for people referred to them, and confidence among greenspace organisations that referrers were aware of the opportunities on offer.

Central to this process is an accreditation scheme in which organisations can show that they are 'trusted' providers. To become a trusted provider, they need to satisfy the GSP project team that they have appropriate policies and insurance in space and can deliver support appropriate to service users' levels of need. Once they have been through this process they can use a logo and advertise their activities accordingly, and feature in information provided through the green social prescribing programme.

Five simple mental health levels have been identified to enable referrers (or individuals referring themselves) to know what support is on offer. These are:

- Zero: for those who are feeling well and want to look after their physical and mental health.
- One: for those who have anxiety or mild depression or are seeing their GP about their mental health or receiving support from a social prescriber or health worker.
- Two: for people receiving GP support, counselling, CBT or medication, or need assistance to access activities.
- Three: for people with complex needs or who require individual support, including support to take part in sessions, or have long-term mental health issues.
- Four: for people with serious long-term mental illness or who are in or recovering from crisis or need activity in a hospital-based location.

A directory has been developed to enable referrers or members of the public to choose activities near them that meet their needs. This directory is available online and sorted geographically. An initial directory for the [urban locality] has been updated twice, and directories have now been produced for other areas covered by the T&L site parts of the [county locality]. These are supported by local maps to inform the public of local green and blue spaces. It was initially hoped that the directory could be a live database updated in real time by green organisations, but the need for verification meant it had to be organised centrally. This means that resources will need to be found following the end of the Test and Learn pilot to ensure the information is kept up to date. In T&L3 this will be taken forward by a local volunteer service. It is hoped that local authorities and health organisations across the county will take develop directories further in each locality:

> *We don't want to reinvent the wheel, we want to replicate some of the really good work that's gone on with the directory …in the city and I think especially the stuff that's gone down really well around recognising the levels of mental health support that each of the projects can offer. (PCN development manager)*

4.9. Inequalities in access to nature

Linked to Section 4.8 above, inequalities were noted in access to nature linked to issues such as socio-economic status, physical and mental health, ethnic minority, and gender. We hypothesised that if we want equitable access to appropriate green opportunities, then decision making must be made through an inequalities and instructional lens.

Box 19: Summary findings for 4.9

Context

- Complexity and severity of need for those referred was an issue in many sites.
- Some providers lack culturally appropriate and relevant offers for different communities, and the additional resource required to fully and meaningfully engage ethnic minority groups proved challenging.
- Geographical complexities such as urban/rural mix include particular variations in deprivation associated with rurality and isolation, refugee communities housed in specific areas, and people in ethnic minority communities without ready access to green spaces.

Activities

- National and local: many sites harness existing networks with strategic partners such as Natural England to explore routes to tackling inequalities.
- T&L site: public communication and advocacy has been used to publicise the benefits of green activities to a wider audience.
- T&L site: one site has trained instructors from the local ethnically diverse community and now have a team of GSP instructors who represent these diverse communities.
- T&L site: online events focussed on accessibility and inclusion showcased best practice across the region, highlighting what reasonable adjustments for physical and hidden disabilities look like in the context of VCSE group.
- T&L site: one site is supporting their local practitioner network to diversify their reach across the nature and health community, with additional subgroups created around tackling inequalities and serving ethnic minority communities.
- T&L site: one site held co-design workshops at the start of the project with people with relevant lived experience (such as of mental health issues) alongside place partners who then developed criteria for the T&L site's grant panel.

Challenges

- The main barriers cited were transport, lack of awareness of available activities, and a lack of safe and available green provision that could enable continued participation in deprived areas and underserved communities.
- Issues around Link Worker capacity and strain on the system were highlighted across T&L sites.
- Problems are compounded by the wider cost of living crisis for both service users and providers.
- Some providers reported a lack of confidence in supporting people with complex mental health needs. Specific training to support this would be helpful.

Outcomes

- One provider collaborative allowed for raising of issues and opportunities across providers which highlighted a cohort of refugees and a lack of general provision for them. Through the provider collaborative, a local community garden is now providing some opportunities for local refugees, and they are doing this in an integrated way which is helping to build community cohesion.
- One site developed local solutions driven by local groups and individuals, not 'packaged' as a targeted programme or project. Key to this success was allowing time for individuals to spend together building connections and finding common ground to build place-based green activities for diverse communities.

Implications for GSP test and learn project

- Meaningful user engagement with people most likely to be subject to health inequalities should be standard practice for national and regional initiatives.
- Full and careful consideration should be given to sensitive involvement of groups most likely to be subject to health inequalities within specific geographies.

- Decision makers must consider creative and non-standard ways to include the voices and views of people most likely to be subject to health inequalities, such as peer research and engaging community gatekeepers in good time.

Recommendations for spread and scale of GSP

- Involve people most likely to be subject to health inequalities at every stage of the process, including question setting and commissioning services.
- Allocate enough time and resource to meaningfully explore inequalities in access and provision.
- Improve training and access to support for those involved in provisioning GSP in key areas such as dealing with complex mental health needs and assessing risk.
- Ensure that activities targeting communities reflect the diversity of those communities both in planning and delivery.

4.9.1. Context

The complexity and severity of need for those referred to GSP was an issue in many sites. T&L4 reported a lack of acknowledgement/awareness within potential referrers (HCPs and Link Workers) of the variation in relation to both the person's mental health needs from GSP and the capability of GSP providers to offer appropriate support. Similarly, some providers were inappropriately referred those with higher needs or greater complexity of needs than could be managed (T&L1, 2, 7). Providers were generally clear what their limitations were, but service users with higher or more complex needs, as well as people needing help with other basic challenges (such as housing and poverty) required more and different support from Link Workers and VCSE organisations (T&L1, 2) which potentially impacted their potential and actual engagement with the programme. Some service users experience barriers to participation such as poverty and lack of access to transport (T&L2, T&L3, T&L5). These findings resonate with review evidence of the psychosocial and economic barriers to accessing green space for racialised people (Robinson et al., 2022), which showed that perceptions of safety and costs of travel and access to green spaces were the most commonly cited barriers by racialised individuals and families.

Some providers lack culturally appropriate and relevant offers for different communities, and the additional resource required to fully and meaningfully engage ethnic minority groups proved challenging (T&L6). In one example, green social providers delivering a taster session offered ongoing support to one refugee group that was not offered to other groups, which created resentment between case workers supporting those groups:

> *When Ukrainian refugees started coming to the UK, [the provider] offered them a six-month free membership that's never been offered to Syrian refugees or anyone else. … I went back to [the provider] and [raised this as an issue]. And they said, "Okay, we'll give... everyone that comes on the taster session, they'll get a free ticket that they can come another time". (T&L7 stakeholder)*

There was a lack of a pre-existing nature recovery strategy in areas of high deprivation across several sites, including T&L2, T&L5 and T&L7.

In T&L3, initial activities were targeted at more disadvantaged communities although engagement with diverse ethnic groups has been relatively limited. There have been some successes in this site, including efforts by one green provider to engage more Black men with some of their activities. There has been encouragement and support for self-referral, recognising that many people who experience disadvantage may be less likely to enter the healthcare system at a point where green social prescribing would be most helpful. On the other hand, some felt that people not experiencing

disadvantage may be more likely to self-refer into GSP, potentially reinforcing inequalities (T&L1).

In T&L4, as with T&L6 and T&L7, the urban/rural mix has particular variations in deprivation associated with rurality and isolation, refugee communities housed in specific areas, and people from ethnic minority communities without ready access to green spaces.

4.9.2. Activities

Many sites (T&L5, T&L6, T&L7) used networks with strategic partners such as Natural England to explore existing routes to tackling inequalities such as improving access to green space and encouraging inclusive practices. Sites also linked with providers already working with disadvantaged communities, using their expertise and knowledge to reach people subject to greater inequalities by existing systems (T&L3).

Across T&L3 and T&L6, public communication and advocacy has been a key element of the T&L pilot to publicise the benefits of green activities to a wider audience. It is not known how many people have engaged in green activities as a result of such publicity, but it is likely to be a significant proportion among those engaging in activities targeted at people with lower levels of need.

In T&L7, a walking group was created as a direct result of a walking instructor meeting a community activist at one of the pilot's Community of Practice events. This group was created with the explicit aim to encourage more people, particularly those from African, Caribbean, South Asian and other ethnic minority communities in England, to improve their mental and physical health and feel a sense of belonging in the locality's parks and other green spaces. For the T&L7 GSP pilot, the walking group developed a programme of Nordic Walking for Black, Asian and other ethnic minority groups specifically targeting diabetes prevention and improvement in the locality and have been successful in securing additional funding from various sources including the locality ICB Diabetes Prevention programme. The walking group have trained instructors from the community and now have a team of instructors who represent these diverse communities. As well as receiving initial funding from the pilot, they have received continuity funding to expand their programme to communities experiencing health inequalities in the wider locality.

Also in T&L7, their GSP directory is currently being reviewed and amended to reflect the growing provision of GSP across the region. The directory is supported by the development of a GSP provision map and bespoke illustrated flyers for each PCN, identifying the local offer, with the aim of strengthening referral pathways and reaching as broad a group of providers, referrers, and service users as possible. An event funded by the pilot and organised by the community for the community, showcased experts in nature and health from diverse communities. In terms of reaching areas of greater deprivation across T&L7, locality networks supported by the pilot are becoming self-sufficient and run from within the communities with support from the T&L project team. The T&L7 pilot is supporting their local practitioner network to diversify their reach across the nature and health community, with additional subgroups created around tackling inequalities and serving ethnic minority communities. An online event run by T&L7 focussed on accessibility and inclusion showcased best practice across the region, highlighting what reasonable adjustments for physical and hidden disabilities look like in the context of VCSE groups.

T&L4, took a different approach to tackling inequalities by working through local nature-based providers. This meant targeting specific groups was secondary and generally based on assumptions that these organisations typically worked with people experiencing deprivation, either because of long-term chronic ill health and or because

of where they are situated. There was a small amount of tactical targeting through developing relations with certain groups e.g., people from ethnic minority backgrounds in one area of the locality. The provider collaborative's activities led to highly engaging work with refugees in another area of the locality.

Another example of the work undertaken to target specific cohorts is shown in Box 20.

Box 20: Exemplar of targeted funding mechanisms aimed at reducing inequalities

In T&L2, co-design workshops were undertaken at the start of the project with people with relevant lived experience (such as of mental health issues) alongside place partners, e.g., CCGs, local authorities, social prescribing teams and programme partners, to map the GSP infrastructure, coproduce programme objectives and develop target cohorts for each place (e.g., one area targeted those living in high deprivation whilst another focused on ethnic minority communities). These insights were used to develop criteria for a grants panel for nature-based providers. Nature-based providers across the region were invited to bid for grants (small/medium/large scale) which targeted specific population groups. Panel members were brought together to discuss each application and decisions were made on the basis of coverage, scale, potential impact and target population. Applications for funding scored more highly if they focused on any of the target groups and even higher if they targeted communities on their placed-based priority list. Offering different sizes of grants allowed engagement from a range of nature-based providers with different levels of capacity.

In some areas not all the funding was allocated, so further work was then undertaken by place partners alongside providers to coproduce new applications that met the programme objectives and plugged gaps in provision. For example, further work has been undertaken in one area to target those experiencing severe mental health needs as well as blue activities due to a gap in provision. The social prescribing lead in the area contacted groups to encourage participation and through this work the panel received two more applications focused on the target cohorts. In one area – whose original focus was the clinically vulnerable and those who are shielding, findings from workshops with stakeholders revealed the need to focus on ethnic minority communities due to a lack of available groups. Further work was undertaken to target these groups, such as contacting the local ethnic minority community network and delivering workshops. This resulted in another application from an organisation with a track record in engaging with ethnic minority communities but who had not previously delivered green activities.

4.9.3. Outcomes

Barriers to referral

The main barriers of referral highlighted in T&L4 were a lack of awareness of activities taking place, poor understanding of green provision and deeper disconnects across the range of social prescribing pathways. Other compounding factors included support to access and readiness to use modes of available transport; motivation, confidence and agency; and physical and cultural accessibility of nature-based activities. Other barriers highlighted by T&L2 were a lack of safe and available green provision that could enable continued participation in deprived areas and underserved communities. Several sites (T&L2, T&L5, T&L6, T&L7) set up funds to address existing barriers to participation such as cost of travel, equipment, or caring needs (see Section 4.10) more information on this in relation to supporting service users across the referral pathway). Some sites (T&L2, T&L7) clearly articulated taking a partnership approach, with a *"need to work together as providers"* (T&L2) as well as external agencies such as food banks to provide appropriate support for people. Sites (T&L2, T&L6) also highlighted the importance of adapting activities to *"bring nature indoors"* (T&L2) rather than, for example, cancelling due to weather.

Link Worker capacity

Issues around Link Worker capacity and strain on the system were highlighted across T&L sites.

> *We could have another hundred social prescribing Link Workers and you still wouldn't have enough, and we can't recruit anyway, we've got a number of posts we can't recruit to, so how do we get everyone to be thinking in this way, everyone becomes a social prescriber, not just Link Workers. (T&L1, member of the project board)*

Disproportionate impact of health inequalities

Specific challenges for service users were regularly identified by Link Workers around financial issues, housing, poverty, lack of access to or the affordability of transport, with problems compounded by the wider cost of living crisis (T&L1,6&7). Some providers also spoke of how the cost-of-living crisis was impacting their own delivery - "*we are all struggling*" (T&L2). The effects of COVID-19 were recognised as having a "*massive impac*t" (T&L2) on length of time and level of support required to get people to activities. In addition, GSP providers regularly reported seeing a deterioration of mental health issues within the community. Sometimes people will speak to providers on the phone but are not able to attend GP or Link Worker appointments for over a year, and this requires a huge amount of additional resource and support from providers.

T&L2 also reported a lack of confidence from some providers in supporting people with complex mental health needs. Some providers discussed how it would be useful to have specific training to support this. Some activities were created to address this such as the mental health buddying service and were funded through T&L GSP pilot budgets, raising questions for the site around how to support onward sustainability of these more intensive activities.

T&L4 attempted to capture sociodemographic data as part of the mini-site Test and Learn but this was not completed by all parties. Engagement with ethnic minority groups went only as far as capturing insight about barriers. These ethnic minority groups highlighted three key issues; a) perceptions of safety, specifically around dogs b) perception of culture clash around appropriate use of green space, for example, some people would like to be able to hold barbecues in green spaces, but this was often not allowed; c) lack of provision for appropriate cultural activities such as women-only sessions. This aligns with systematic review evidence (Robinson et al. 2022) which demonstrates that cultural barriers to accessing green spaces are significant and reflect existing evidence highlighting the role of a lack of cultural adaptation across communities (McHugh et al. 2013) and inequitable access to care (Kapke & Gerdes, 2016) amongst racialised communities.

Increasing accessibility

In T&L4, the provider collaborative allowed for raising of issues and opportunities across providers. One discussion highlighted the lack of provision for refugees. Through the provider collaborative, a local community garden is now providing some opportunities for local refugees, and they are doing this in an integrated way which is helping to build community cohesion.

Respondents to the NBP 2023 survey reported improved delivery across T&L2, T&L4, T&L5 and T&L7 including increased accessibility: *"Due to the groups we work with being marginalised and minoritised communities it has had an outstanding impact on those people's lives"* (NBP 2023 survey respondent from T&L7 locality).

T&L4 found that they could increase opportunities for different groups to make links with providers and referrers by providing the conducive conditions that supported these to develop in an organic and natural way, facilitated by better connectivity and joint problem solving in the provider collaborative. They characterised this as local solutions driven by local groups and individuals, not 'packaged' as a targeted programme or projects. Key to this success was allowing individuals to spend time together building connections and finding common ground to build place-based green activities for diverse communities.

Continuing challenges

Across many sites (T&L3, T&L6, T&L7), there is an explicit recognition that more work needs to be done to engage minority communities. In T&L3, there is also awareness that the profile of people working for green organisations or involved in groups does not reflect local diversity, being mainly white and retired, or approaching retirement age.

There are some stand-out examples of successful and sustainable development in addressing inequalities such as those shown by T&L7 and creating slow-but-steady system change as highlighted in T&L2, T&L4 and T&L6. An exemplar of the co-design workshops developed by T&L2 is shown in Box 20.

4.10. Engagement of users in GSP processes

This section focuses on the engagement with, and involvement of, users and other non-professional individuals and communities in relation to different aspects of decision-making associated with the Test and Learn programme. It was theorised that if there was a desire for the green social prescribing system to be person-centred, then the user voice was important to illuminate the changes across the pathway.

Box 21: Summary findings for Section 4.10

Context

- The involvement of users with lived experience of mental ill health or service use was an ambition for all local pilot sites but did not appear to be so at a national level.
- Securing the ‘effective engagement’ of community members, lay members, members of the public, people with lived experience of MH across a system undergoing transformation has been recognised as a critical enabler of success.
- Involvement can enhance decision making, improve transparency, and ensure services meet the needs of the community.

Activities

- Involvement strategies, at both the national and local level, appeared to be underdeveloped.
- Nationally: it appears there was no strategic involvement of service users or people with lived experience of mental health challenges in the definition or design of the T&L programme as a whole.
- Locally: although an ambition of many pilot sites, few had meaningful involvement.
- T&L sites: a small number of sites involved people with lived experience of relevant issues in the design, delivery, and governance of the programmes.
- T&L site: one pilot included people with lived experience of mental ill-health in review and quality assurance process.

Challenges

- Power imbalances and lack of meaningful ways in which users could actually contribute to decision making.

- Excessive burden on individual lay members, challenges with retention.
- Legitimacy of reliance on one individual representative.
- Little capacity and resource were available for user involvement.

Outcomes

- It is difficult to trace the consequences and outcomes of the different depths and breadths of user and other individual and community involvement in T&L processes.
- User engagement and involvement informed what was delivered to whom and in what ways, in some T&L sites.
- Even if not achieved, there appeared to be greater appreciation of the importance and potential of involving community members in decision making and governance.

Implications for GSP test and learn project

- Future GSP systems building, at all levels, should include relevant communities as standard.
- Involvement should be sufficiently broad (relating to inclusivity of the individuals and communities affected), and deep (extent of a community's involvement) to represent the different experiences and needs of different communities and individuals.
- Consideration should be given to power hierarchies and dynamics and whether these prevent meaningful contributions.

Recommendations for spread and scale of GSP

- Follow established principles of user involvement.
- Sufficiently resource strategies and activities.
- Sufficiently empower individuals to contribute.
- Ensure involvement is sufficiently broad and deep.

4.10.1. Context

The engagement of users, and other groups with an interest or investment in GSP was a key component of the T&L programme. One site, for instance, planned to include people with lived experience of relevant issues, alongside community, health, and environmental partners, in decision making sub-groups focusing on specific priorities for delivery in the pilot area (Application Documentation). This follows established good practice across relevant sectors, from health services management (Beresford, 2020), community investment (Lewis et al., 2019), through to health research (NIHR, no date). More specifically, the importance of securing the 'effective engagement' of stakeholders across a system undergoing transformation has been recognised as critical for some time (McCarron et al., 2019).

Engagement with, and subsequent involvement in, decision making, and governance can enhance both the process and the outcomes in a number of ways. Effective processes can help integrate and reflect the lived reality of individuals and communities ensuring that those processes, and decisions and the service delivery they are associated with, are appropriate and acceptable (McCarron et al., 2019). Involvement can ensure transparency and build trust, and it can help empower individuals and communities (Lewis et al., 2019).

Previous work has shown that while 'participation' and 'involvement' are necessary conditions for inclusive decision making, it is the depth of involvement and the breadth of inclusion that are crucial (Lewis et al., 2019). Here depth relates to the extent of a community's influence or control over decision making, their effective involvement in governance. Breadth relates to inclusivity of the individuals and communities affected, the necessity to recognise and avoid exclusionary practices and processes (Beresford, 2020).

Prior to the T&L programme (and beyond established activities in relation to ICBs, mental health trusts, within specific organisations, and so on) there appears to have been limited involvement of users and other non-professional individuals and communities specifically in GSP decision making. In T&L3 users had some influence on social prescribing and the integrated care systems through the local patient and public involvement and engagement forum (PPIE forum) for people with lived experience of mental health conditions, caring or disability. In T&L6 and T&L7, users were involved in pre-bid workshops to identify key groups and geographic areas and the results of these workshop discussions contributed directly to the areas of focus highlighted in site bids. Elsewhere however, it appears that there was limited to no specific and systematic involvement of users in GSP decision making, design, governance, commissioning, or evaluation design in the T&L sites. This finding was also reflected in the discussion with non-T&L sites in WP4. Again, whilst recognised as of value, there were no reports of specific involvement.

4.10.2. Activities

Engagement and involvement nationally and locally

At the national scale there was some effort to include people with lived experience of relevant issues in the Programme Board. This was a new approach for Defra, who followed NHS best practice guidelines. However, the majority of involvement was expected to have happened at a local level.

At the local scale, and through the first wave of Theory of Change workshops, the T&L site leadership teams identified that user involvement was an important enabler of success. They aimed to achieve:

- High levels of stakeholder involvement and engagement – good coverage across their localities.
- An understanding of lived experience within the programme.

There was recognition that the system needed to be inclusive, that offers needed to be appropriate and responsive to community need, and that partnership working was necessary.

For some T&L sites, service user or lived experience engagement and involvement was a general ambition and element of good practice in service design and delivery. Many sites, including for instance T&L4, had specific ambitions to establish trusting relationships and partnerships between the different stakeholders. In the early stages of bid development, users were engaged to select priorities to address through the T&L programme in a small number of T&L sites (2 and 6). In T&L6, workshops held with users and people with lived experience of mental ill-health during bid development indicated that certain barriers would need to be overcome if GSP would reach those in most need. However, in other T&L sites it was felt that, although the benefits were recognised, service users and people with lived experience of mental ill-health were not strategically or meaningfully integrated into the planning process for the T&L programmes. This appeared to be due to time and capacity limitations.

Involvement strategies

Involvement strategies, at both the national and local level, appeared to be underdeveloped. There was no evidence of any systematic approach to ensuring a sufficient depth (the extent of a community's influence or control over decision making), or breadth (inclusivity of the individuals and communities affected) of user involvement (Beresford, 2020).

As noted above, at the national level it appears that there was little engagement with, or involvement of users or other individuals or communities with lived experience of mental ill health or other relevant issues in programme governance. The national level Programme Board included one user member. Whilst this is positive, there are questions about the sufficiency of the breadth of user voice with the inclusion of just one user at the project governance level.

At the local T&L pilot site level user involvement was more extensive. There were a range of intentions for, and ways in which users were involved in the design, delivery, and governance of the local T&L programmes (see following sub sections). Some strategies were active and participative, such as inclusion of users and others in local steering groups, however there were also passive methods used. For example, in T&L3 users' experiences were highlighted through films and personal stories.

T&L6 took a structured approach to including patients and people with lived experience of relevant factors in the local pilot:

> *To facilitate structured and timely engagement of people from thematic communities throughout the programme, a co-design protocol is being agreed that will set out some clear stages and opportunities for people with lived experience to inform the design and delivery of the programme. The protocol has kicked off with a survey to understand the people with lived experience and on-going engagement is happening through our online platform: Have Your Say Today [locality GSP] Commonplace. This platform gave us the ability to share multiple, accessible, user friendly and community specific questionnaires, so that we could understand the specific needs and challenges within each community. The collection, collation and reporting of the data is all automated by Commonplace so easy to understand results and insights without requiring a huge amount of time or resource from the programme. (T&L6 Quarterly report, 2023 Q4)*

Across the T&L sites, involvement was sought from individuals with lived experience of relevant issues such as poor mental health; service users; advocacy groups (such as an ethnic minority forum in T&L4); and other community representatives. Some sites built on existing systems (T&L1) whereas others developed new relationships and roles. Some sites took a targeted approach and sought involvement which would support specific priorities. For T&L1 user representatives were involved to help address their focus on inequalities related to ethnicity and gender.

Some sites, such as T&L4, involved representative or specific specialist provider organisations rather than individual service users. This was done with the assumption that providers can 'represent' the user as they have experience of working with diverse communities and gather case studies and examples which they can draw on to inform decision making. Further, there was the intention that involvement of representative or specific specialist provider organisations could advocate for multiple types of experiences and communities.

Resources to support user involvement

T&L6 used a number of approaches for meaningful involvement of users. Specifically, efforts were made to ensure that service users were involved as “equal panel members” (T&L6):

> *They were paid for their time, their title was a project support officer, and they very much sat next to us in this workshop rather than just a sort of addition to ask some type of questions from time to time. (T&L6, project management team)*

These kinds of actions can help disrupt power imbalances inherent in much user involvement. As King and Gillard note, structures, processes and tools need to be created to ensure that communities, including those who experience marginalisation and structural disempowerment, can feel safe and empowered to fully participate (King & Gillard, 2019). Ideally these should enable the individual to go beyond a primary identity as 'service user' and instead share their own skills and experiences.

It was recognised that in some T&L sites there were not the tools or resources available to support meaningful involvement of users or other individuals or communities with lived experience of mental ill-health or other factors.

User involvement in local GSP and T&L programme priority setting

Co-production with communities and delivery professionals in T&L4 had helped clarify the nature of issues that could be addressed through the T&L project. Initial conversations, gathering lived experience insights, highlighted that certain issues such as a feeling of safety is vital for people to feel comfortable accessing nature and would affect the success of GSP. Through user engagement processes, it was also identified that some groups would ask for culturally specific requirements such as women only sessions. Other issues such as transport to the site or access to the site itself, e.g., quality and accessibility of footpaths, were surfaced through engagement with users and other individuals and communities with lived experience of mental ill health.

> *We've got lived experience experts supporting green space and they also sit on the delivery group, so we've got a really strong co-production group for personalised care, [organisation name], and they're a strategic co-production group and one person in particular is really passionate about social prescribing and green social prescribing, he's involved in the green social prescribing primary project. (T&L3, Delivery)*

User involvement in green activity development

Some sites emphasised co-production of nature-based activities with communities. Bids for delivery funds which evidenced this were prioritised and more likely to receive funding in the open calls in T&L2. Co-production methods were used by nature-based activity delivery organisations to develop contextually and culturally appropriate activities in several T&L sites:

> *I mean it's crucial isn't it, you know, to have people who have a lived … So, nothing, no policy gets drawn up within the organisation without our membership from a community point of view looking at it, challenging us on it and making sure that it's fit for purpose. No employee comes into our organisation without somebody from our community sat on that interview panel having an equal say in whether or not they believe that that person is a suitable candidate for that post. … There is nothing we do as an organisation that doesn't involve them shaping it in one way or another and it's good to be challenged, we should be challenged. (T&L1, Provider)*

In T&L4, efforts were made to identify and overcome barriers to accessing green spaces, particularly for ethnic minority communities. Feedback was gathered from individuals who have overcome barriers to accessing nature or GSP themselves and organisations who support individuals to access nature to inform strategies.

User involvement in funding decision making

In some T&L sites (T&L1, 2, 6) service users were involved in grant giving panels. For T&L2, they were brought in late in the process due to a recognition that more service

user involvement was required. In T&L6 specific lived experience groups were involved in the prioritisation of use of funds for developing and supporting GSP delivery:

> *For the project's funding under the T&L pilot, service users from the [local T&L pilot team] for disabled people were involved in workshops to decide funding priorities and were equal panel members for the project funding interviews. This was explicitly designed by a member of the project team with [T&L locality] to be meaningful co-design, rather than tokenism. (T&L6, Delivery)*

T&L6 detailed their rationale further in a quarterly report (2023 Q4):

> *Lived experience consultants have been recruited to support on-going project delivery. Having co-designers join us in the [GSP] Fund workshops meant that the plans of each provider could be reviewed by a person with lived experience of mental health concerns. This made for a richer discussion and a more genuine approach to creating an offer that's accessible to people with mental health concerns. (Quarterly Report, 2023 Q4, T&L6)*

User involvement in GSP and T&L governance

User representatives were included within the strategic and operational GSP boards of some sites (T&L3, 7). In T&L3 they provided input into the design and management of the T&L pilot. They also provided a link to user involvement in the personalised care system more generally. T&L1 included a service user on the steering group.

> *I think there is far more user voice than there has been previously, partly because of how the governance is set up, so it's set up to have a much, much closer contact with participants. (T&L3 Delivery)*

User involvement in review and quality assurance process

T&L7 used a 'Mystery Shopper' exercise to explore the delivery of what had been funded through the T&L programme locally. Eight people with lived experience of mental health conditions attended six sessions on a T&L7 funded project of their choice and completed a brief feedback form about the experience. The overall feedback was very positive and constructive, with all participants reporting the experience of being in nature benefitted their mental health. An awareness of mental health issues and the challenges they pose as well as projects providing information about what to expect on the day, accommodating additional needs and promoting inclusion were key to the positive outcomes identified. In turn, activities need to be patient centred and tailored to individual service user needs.

To address lower engagement in GSP the project team in T&L6 commissioned research with ethnic minority communities, the local Coalition of Disabled People and Youth Focus group to hear more about their insights, barriers, motivations in relation to involvement. Similarly, in T&L4 organisations including the local Wildlife Trust, County Community Trust and local ethnic minority Forum were approached to share their learning with the project leadership. Initial insights were shared, but the slow pace of working with communities meant that resulting projects are still in their infancy at the end of the T&L funded period.

In T&L7, participants in T&L funded GSP delivery were asked to provide feedback, via questionnaire, on their experiences of the following areas:

- Getting enrolled onto the course.
- Registration process.

- Information provided/finding further information about the course.
- Preparation.
- Attendance.
- General thoughts about the experience of attending.
- Impact on mental health.

The report was delivered back to the T&L7 leadership to inform later waves of delivery.

Challenges faced in user involvement

Existing literature has identified that challenges of user involvement can include the rigidity of the professional context and processes, professional identities, and reluctance to cede control and power over decision making (Hickey & Chambers, 2019). Further, cultures of knowledge - particularly those which place a lower value on experiential knowledge over that of the 'experts' - can influence whether or not public involvement is recognised as valuable and worthwhile (Hickey & Chambers, 2019). Similar challenges were experienced in relation to the T&L programme.

Specific issues that prevented meaningful collaborations related to low capacity to collaborate on the GSP pilot from all stakeholders and related to differentials in allocation of funds within the system; mismatches in expectations; challenges of geography and accessibility of collaborative opportunities; and communication issues. In some sites the reasons users hadn't been as involved in processes, as much as was hoped for, related to issues of access (to communities by the leadership teams), as well as to time and prioritisation. In T&L7 for instance, getting projects funded and supported was the main priority, alongside influencing system change. Where engagement was part of the strategy, there were issues with retaining meaningful involvement. In T&L1 a patient representative was recruited to join the GSP Steering Group, however they resigned from the group (and from other representative and participation groups) for personal reasons and the team struggled to find an alternative.

Lack of user involvement

Several sites reported that although there are good links with communities (of practice or need), there was little meaningful involvement of people with any kind of lived experience in influencing the priorities or strategy of the programme, how it was managed, or how funds were used.

T&L4 did not seek to include user or lived experience (for example of mental ill health) within its leadership group. Interviewees who were asked about this considered that this would be 'too big' or conversely 'tokenistic' because of a focus on tackling systemic issues, as opposed to issues in providers or projects.

4.10.3. Outcomes

Impact on T&L programme delivery or patient benefit

A specific challenge with this theme is the difficulty with tracing the consequences and outcomes of the different depths and breadths of user and other individual and community involvement in T&L processes. The challenges of demonstrating the impacts of user involvement in health systems, service delivery and so on, has been acknowledged elsewhere (Noyes et al., 2019). Whilst it is not questioned whether the involvement of people with relevant lived experience was of value, it is not yet clear whether a focus on co-creation led to better outcomes for participants or if and how it has enhanced the process of embedding GSP. In relation to T&L3, for example, it was

reflected that it was difficult to identify decisions or plans that have resulted directly from users' input. It was also noted that for some T&L sites (e.g., T&L4 and 6), the strategies for meaningful involvement of service users and individuals with lived experience of mental ill health were still in their infancy. However upstream indicators, such as achievement of user engagement by those leading the T&L were positive.

Influence over priority setting and governance

Existing literature has noted that participatory involvement tends to focus on the micro, at the individual level, rather on the macro, the system level (King and Gillard, 2019). For T&L4 the challenge of including people with relevant lived experience in attempts to change structures and processes which are one (or more) steps removed from 'delivery' was highlighted. There was a fear that involvement in this level of governance would be tokenistic and/or working at a level of complexity and bureaucracy of little interest to the individual. In T&L3 users' experiences were highlighted through films and personal stories. These were thought to have proved effective to some extent in making the case for wider adoption of green social prescribing in ICS plans and strategies.

Influence over what was delivered, how, where and to whom

There is some evidence that user engagement and involvement, whether passive or active, informed what was delivered to whom and in what ways, in some T&L sites. In T&L3, one specific project could be said to have come directly from engagement with service users. The survey of GSP users in T&L6 allowed the leadership team to reflect on experiences and, alongside published research and wider focus groups with communities, informed how they developed their environmental volunteering strategy.

Experiences of individuals and communities

In T&L1, where a user had been included in the steering group, the individual had dropped out of attending quite quickly as, it was reported, he felt he wasn't being heard (the user was not interviewed for this evaluation). Elsewhere representatives from a public engagement group at a different T&L site that had joined as the original board members had to drop out because of personal circumstances.

Experiences of T&L leadership

It does appear that there was limited success in ensuring sufficient depth and breadth (Lewis et al., 2019) of engagement and involvement of people with relevant lived experience in the T&L programme, at a national or local level. The perception of community or lived experience members who had a role in governance being somewhat tokenistic or marginalised was highlighted by several sites, with, for example, two interviewees at T&L1 both highlighting this: *"Where we failed is around the patient involvement." (T&L1), and "So we failed there I think and that's something we should reflect on"* (T&L1). The T&L1 leadership team reflected that it would have been helpful to have a patient community group engaged to inform and support the grants programme (thus making it more user-led) and to provide valuable insight in terms of challenges they face.

A steering group member (T&L1) reflected that service users, or potential service users, could have been engaged prior to structuring the project to assess actual demand rather than people 'following the money'. In some T&L sites it was not felt that it was appropriate to involve users in the day-to-day governance of the GSP programme. There appeared to be a lack of understanding of how to involve users in a way that is "meaningful" when programme management meetings are "dry" and

based around core business of the programme. An interview from T&L2 reflected on this:

> *…And I think my ... has been that if you are involving individuals, it's got to be meaningful involvement. And I wasn't sure how we could approach those meetings in a way that would be meaningful to kind of individuals without that broader reference. The meetings can be, to be honest can be a little bit dry you know. It's kind of business. So, we did at the early grant panel meetings, we did bring in people with little experience. And that was really beneficial in that context to think there's people got something from the experience we recently did. But how we then carried on and sustained involvement, it's probably been a little ad-hoc. (T&L2, Delivery)*

Similar challenges in meaningful user engagement have been discussed in the wider literature, where professionals maintain a hold on the role of 'expert' and control agendas (King & Gillard, 2019). It is acknowledged that there are many reasons that it may be difficult to share power to enable more extensive involvement and influence over what is done, when and how within (Hickey & Chambers, 2019). These can relate to rigid decision-making processes, limited agency of professional leadership to shape a system to be more inclusive, as well as the need for traceable accountability.

Looking to the future and implications

Some T&L sites discussed the future development of strategies to better engage with and involve patients, activity participants, and people with relevant lived experience. For example, T&L site 3 discussed future plans for user engagement. It is hoped that service users will be central to a future co-production group for the area, there is an intention to work with the wider ICS, which has a co-production strategy which recognises the need to value what works for them. Further it was hoped that personal health budgets may encourage green activities which would support further user involvement.

Learning from the challenges faced in the T&L sites

Approaches to more effective involvement in future activity around GSP systems, whether at the level of priority setting and governance, through to what is delivered to whom and how, may need to be bespoke, responsive to the context and form of transformation underway (Greenhalgh et al., 2019). There are principles that can be drawn on from existing initiatives and frameworks of good practice that could enable a more coherent, systematic, and meaningful involvement of publics, including users, in transformation around GSP. An example from the field of health research is INVOLVE (NIHR, no date) which has the principles shown in Table 36.

Table 36: INVOLVE standards (NIHR, no date)

Standards	What
Inclusive opportunities	Opportunities which reach those who are affected, and which are accessible.
Working together	Collaborative approaches which recognise, acknowledge and value all contributions. Mutually respective and productive relationships.
Support and learning	Mechanisms of support, including learning opportunities, that help build confidence and skills.
Communication	Appropriate, including plain language methods, and timely communications using suitable channels.
Impact	Identifying and sharing the impact of more inclusive involvement.
Governance	Involvement of the public going beyond decision making, to include management, regulation, and leadership.

Other important factors relate to sufficiency of time and resources given to ensuring meaningful involvement with adequate representative breadth and depth of relevant individuals or communities. Resources are also needed to overcome some of the costs of participation faced by individuals who volunteer their time, as well as to adequately recognise their expertise. It is important to focus on ensuring depth, breadth and with enough people involved so as not to overburden individuals.

As King and Gillard note, structures and processes need to be created where communities, including those who experience marginalisation and structural disempowerment, can feel safe and empowered to participate (King & Gillard, 2019). Ideally these should enable the individual to go beyond a primary identity as a service user and instead share their own skills and experiences. Professionals involved in the decision-making processes also need to be empowered to integrate engagement and involvement approaches into their work (King & Gillard, 2019).

Addressing power imbalances is also a necessity in effective processes of engagement and meaningful involvement. This can relate to the enabled agency of non-professionals to take part and be heard, through to values placed on different forms of knowledge and experience:

> *Coproduction suggests a move away from academics and academic institutions as the sole arbiters of what constitutes scientific knowledge, introducing a social accountability to research whereby an "expert laity" contributes to shaping the research process in a less hierarchical, more distributed structure. (King & Gillard, 2019)*

Finally, a specific challenge is that this involvement needs to be maintained with systems and processes continually critically reviewed, and investment already made protected (Quick & Feldman, 2011). It cannot be considered or undertaken in isolation from the wider processes to which it is hoped it will contribute (Beresford, 2020).

4.11. Level of retention/drop-out of users in the GSP system at different points in the pathway

Service users face many barriers in accessing and maintaining support with GSP. Interventions should take this into consideration and develop ways to support them to meaningfully engage with GSP and prevent drop off across the pathway. We hypothesised that if we want referrals to be fulfilled, then service users must have a positive experience across the GSP pathway.

Box 22: Summary findings for Section 4.11

Context

- There were issues with service users disengaging with GSP across the different points of the SP pathway.
- Service users face barriers to engagement with social prescribing, and those in vulnerable populations are often disproportionately affected.
- Service users face many barriers to participation in GSP such as poverty, a lack of access to transport or kit or deterioration in mental health status and drop off can occur at different time points across the pathway.

Activities

- T&L Sites: to address the need to support individuals to attend and maintain support with GSP activities, sites have developed strategies to support service user engagement and prevent drop off.
- T&L Sites: creating referral loops and ongoing support for service users was successful, supported the upskilling of nature-based providers in the local area to support mental health referrals, helped redistribute capacity across the system and ensured service users were receiving the correct level of mental health support.

Challenges

- Additional services and support functions for service users with higher and/or more complex needs were expensive and carried a greater administrative burden.
- Providers who offered additional support such as food and drink to those experiencing food poverty were in turn struggling to continue resourcing this support although it was seen as essential.
- Longer term maintenance may be required for those with higher support needs.

Implications for GSP test and learn project

- Key to the success of approaches which appeared to positively impact on participant retention were providing patient centred care to understand participant needs, supporting participants to attend initial sessions, providing consistent contact along the pathway, referral to other provision either within the same organisation or close by, working with external organisations (such as food banks) and addressing the underlying barriers preventing engagement with GSP.

Recommendations for spread and scale of GSP

- Providing patient centred care is central to understanding participant needs.
- The cost-of-living crisis has a disproportionate and uneven impact upon service users. Individual needs assessments allow tailored and specific support for people with higher or more complex needs.
- Creative approaches are needed to support service users through the GSP system, and there must be resources to allow these approaches to be used strategically.
- Greater understanding of the disproportionate challenges faced by service users would allow the strategic allocation of resources to better support them through the GSP system.

4.11.1. Context

Several T&L sites experienced issues with service users disengaging with GSP across the different points of the SP pathway. The wider literature, reinforced by our evaluation findings, highlights how service users face several barriers to engagement with social prescribing such as the wider determinants of health such as poverty and low income (Wildman et al., 2019), lack of knowledge of activities, and physical and mental health issues (e.g., Simpson et al., 2021). This is particularly pertinent for vulnerable populations such as those being targeted by the GSP pilot. Several key barriers to engagement emerged from both the first and second round of interviews as well as the survey responses with nature-based providers and Link Workers, for

example: deterioration in mental health, lack of understanding of what activities involve and their benefit, practical barriers such as poverty and a lack of access to or the affordability of transport and kit, as well as lack of confidence to use transport independently even when this was available locally.

It was clear from the interviews and case studies that service users led complex lives and often experienced a multitude of issues alongside their mental health which impacted on their engagement with GSP, such as: low income/unemployment, learning difficulties, claiming refugee status, bereavements, alcohol misuse, physical health issues, social isolation and loneliness, having caring responsibilities, or issues with housing such as living in poor quality housing or needing support with housing. In particular, issues relating to the wider determinants of health (such as poverty) had a great impact on service users and their ability to engage and sustain involvement with GSP activities. As discussed elsewhere, Link workers reflected that there had been a rise in complex cases who required support with basic needs for which a GSP referral was not appropriate. Even when service users were referred, issues such as the cost of transport and kit hindered continued participation. Often these issues needed to be resolved before people could meaningfully engage with GSP. Such issues are complex and interrelated with poor mental health, and often compound each other creating multiple barriers for participation. Issues such as poverty have become even more pertinent due to the cost-of-living crisis, further entrenching inequalities in access to social prescribing (see Section 4.9). In turn, some sites reported inappropriate referral of service users with high support needs or frailty which meant GSP was not always appropriate (T&L1) (Holding et al., 2020).

> *It's my situation; after my husband passed away 2017… And at that time he was asylum…And then 2021, it was they accept, so my change in circumstance so I'm just now a refugee [leave to remain]. So I've lived that property and you know I'm homeless. So struggling...I live two and a half months in a hotel…And, after seven months it was temporary property. And then I got this house. And house was - I make her like a home, but I don't feel like home…and every time I saw the doctor I say every time what I do and what happens and you know? (Service user, T&L site 5)*

Disengagement with the programme can occur across the pathway, including at the start of the referral process due to delays between the initial consultation and start of the activity (T&L3) as well as later on due to a lack of Link Worker capacity to support service users to attend activities (e.g., by going with them to sessions (T&L3). By the very nature of the target population, deterioration in mental health status impacts on engagement with GSP across the pathway. It was clear that even when service users were able to initially attend activities, they often required a lot of extra support to sustain engagement which Link Workers or small-scale providers were not always able to provide (Haywood et al, 2023). Key to this is ensuring service users have a positive experience across the pathway.

> *There's often that gap between social prescribers referring someone to a service or something and then them actually attending, that's a big thing and that really goes for self-referral as well. (Stakeholder interview, T&L3)*

> *Link Workers' involvement is inconsistent due to high workloads and staff turnover…some participants do not show up…they may be insecure or worried. (T&L3)*

4.11.2. Activities

Recognising the need to support individuals to attend and maintain support with GSP activities has led to T&L sites developing several strategies to support service user

engagement and prevent drop off. Activities include: undertaking work to understand mental health need and triage service users to appropriate provision (T&L 4, 5), buddying schemes to support service users to initially attend activities by ensuring someone accompanies them to GSP sessions (T&L 2, 3, 4, 5), providing peer support from other service users (e.g. using transport together) (T&L 2, 5), providers regularly contacting service users via the telephone to check progress and encourage continued participation (T&L 2, 5), providing transport (T&L 2, 3, 5) or funds to access transport and kit (T&L 2, 5), providing food and refreshments as part of the activities (T&L 2) and supporting service users to volunteer (T&L 2, 5).

Several T&L sites have trialled similar types of buddy systems to support people to attend activities (T&L 2, 3, 4, 5). Recognising the complexity of client barriers, some nature-based providers in T&L2 funded a member of staff to provide a specific support role to encourage engagement alongside the delivery of the activity. For example, one provider used the funding from the T&L site to develop a mental health befriender role who would meet with the client alongside the referral agent to discuss needs and build rapport (T&L2). At that point they still may not be ready for activities so the befriender will continue meeting them or take them to activities such as pottery or walking in the local park, before introducing them to formal GSP activities.

Although this was considered important and was having a positive impact on engagement, it was also time consuming and resource intensive. Similarly, T&L3 developed a buddying scheme to support users to attend activities. The proposal was developed early in the programme in response to feedback from referrers and nature-based providers that many clients would value a befriender or buddy to support them through the referral and prescribing process – indeed one social prescriber said such a scheme would be a 'game-changer' in reducing drop-out. As the buddying programme had not been costed within the original plans, support was sought from NASP and Natural England to scope and test the proposal. Scoping was due to start in December 2021 with live testing from March 2022. However, administrative delays meant that testing did not start until mid-2022 and this was due to finish in May 2023. A toolkit for prescribers was finalised in April, and Natural England is expected to oversee national dissemination.

It became apparent through the testing stage that matching volunteers with participants and activities was challenging. As GSP works from a menu of activities that participants can choose according to their interests and capacity to take part, it was difficult to arrange regular contacts between volunteers, participants, and activity organisers. As this initial pilot was continuing at the time of writing it is too early to assess its impact. In the meantime, the challenge of retention or drop-out has been addressed in part through the development of a range of referral routes (including self-referral) to circumvent blockages in the system.

Another site (T&L4), attempted to co-design a buddying system with a service user support group. This was to help with motivation to attend, actual attendance, and retention. The plan was to support the volunteer through a partner organisation to ensure sustainability. But was problematic due to lots of organisations being short of volunteers and a perceived unwillingness to 'share' or refer volunteers to different projects due to their scarcity. It was learnt that several issues needed to be addressed in order to realise the potential benefits of buddying, including building awareness of activities and shared responsibility for the support of volunteers. Although buddying schemes have encountered challenges, the fact that schemes now exist as a result of the T&L is a significant change and shows how retention of service users is a pertinent issue for sites.

Some approaches have been more successful. T&L5 used the funding to test an approach to prevent drop off by referring service users who have finished with one

service onto another in the local area if further support is required. This creates a "referral loop" across the system. In addition, if people require support for issues outside of their mental health for which GSP is not appropriate, they will be referred to a local Link Worker who can provide support for basic needs by signposting to other activities. This approach also supported the upskilling of nature-based providers in the local area to support mental health referrals, helped redistribute capacity across the system and ensured service users were receiving the correct level of mental health support. As with Moffatt et al. (2017) and (Pescheny et al., 2018), key aspects of the project success included staff having capacity to work with service users to understand their needs and to tailor support accordingly. Stakeholders felt that this level of engagement would not have been possible without the T&L pilot (see exemplar in Box 23).

Box 23: Exemplar on creating a referral loop to prevent servicer user drop out (T&L5)

One of the areas in T&L5 set up a nature partnership focused around one local park in the area. Before the project there was already an established group of providers delivering GSP in the park such as an organisation delivering outdoor therapy and horticultural sessions, an ecotherapy project offering specialist provision and a gardening and food growing project. In 2020 key groups came together to create the nature project – aiming to support people to connect with nature to improve physical and mental health.

Funding from the T&L pilot was used to support a member of staff to act as a link between service users and the different providers within the park. Before the pilot was in place people would usually be referred to the specialist organisation for more severe mental health needs. When support had finished, if the person was still unwell, they would either drop off and/or regress in their mental health condition, increasing the likelihood of re-entering into the NHS system. Through the new approach the worker would signpost the service user to appropriate provision within the park, and once support had ceased with that group, would signpost to other green provision within the local area. In turn, after receiving funding from the T&L pilot the nature project partnered with the local Social Prescribing service. If service users required further support for issues outside of their mental health for which GSP is not appropriate, they would be referred to the Link Worker who would signpost to onward provision. This partnership creates a “referral loop” to prevent drop off by ensuring service users have access to further support if required:

> *So I’m acting as a bit of a signpost and we’ve also had individuals come to [name of organisation] and they’ve referred them through to me and they are [specialist organisation] participants and they do need specialist support, and it really has worked in that little loop. I’ve not even touched on [name of Link Worker] with the social prescribing as well, and how with the social prescriber that’s all linked in because there’s been quite a few cases where, again, we’ve had an individual come through a self-referral or been referred through one of the green groups and I’ve gone you need more than us, you need more than green. Then [name of Link Worker] being able to pick them up as a social prescriber and offer them that kind of support package as well… So it’s that proper capturing and supporting people rather than sort of they would have probably joined a bit with [name of step down organisation] and then their health had probably deteriorated and they wouldn’t have been able to find that support.*

The T&L funding allowed for further resource and time for staff to understand service user needs as well as to provide continued contact with them across the pathway (including regular phone calls/texts before the session and attending meetings with them) This engagement work has been time consuming and required specific resources from the project for success. It was felt that having a dedicated member of staff who was able to concentrate on providing patient centred care so that support was better tailored to service user needs significantly reduced drop off across the pathway:

> *Then we were able to contact individuals, really understand that it’s about supporting those conversations beforehand. So building trust before people are coming on, not just saying, yeah, we’re going to run this programme but we were there. We texted every participant who was referred through...Then we have the phone call, check we’ve got clothing, check so it’s still that one to one, that they’re happy where we’re meeting, so running through every single bit of what’s going to happen and then it’s the intervention. So it’s kind of a lot of investment beforehand and a lot of support beforehand to get to the intervention and we found we’ve needed that across the board. Then once we were doing the intervention we had a very low*

drop out rate. So those that referred and came to the first session pretty much finished. I think we had probably about one or two people drop out of the whole each eight weeker...a couple of people have done their thing and they did the eight weeks [and then finished]...But we have had that next step where we've then had quite a few people from the bespoke session then being referred on to our community [specialist organisation] sessions. They're now at the point where I'm supporting them on to the other different groups where we've had people going off to real range and I have done a bit more hand holding where I've actually gone along to the session, for a session with them, but they're now an active member of these different interventions. So it's the absolute success of that's the story and that's what we wanted and it's been amazing to actually prove that and there it is and it works.

As well as preventing drop off, the T&L site funds has provided further capacity to the larger infrastructure organisation to upskill and support smaller nature-based providers within the local park to support mental health referrals including co-facilitating sessions, providing training and equipment, and being readily available for any queries or concerns. This has meant that small scale organisations are now supporting mental health referrals who were not previously. This has resulted in small providers "*feeling connected to something bigger*" and has increased their capacity to support individuals across the spectrum of mental health need. In turn, it was felt that this approach had reduced pressure on the specialist organisation and contributed towards redistributed capacity across the GSP system. Previously, several service users that may be referred to the specialist organisation did not require specialist provision, whilst those that have been referred to other organisations may need further support. This new approach therefore ensures that services are receiving the appropriate level of mental health support. However, providing such support to nature-based providers has been time consuming and resource intensive, requiring sustained effort and "*hand holding*" from the larger organisation. This shows the importance of providing adequate resources to fund staff time who have a dedicated role to deliver these types of complex interventions. Developing referral pathways that prevent service user drop off and building capacity in existing nature-based providers to meet demand is instrumental to the successful delivery of GSP, but this requires adequate resources.

Although the partnership existed before the pilot, the initiative required funds from the T&L site to develop the "referral loop" and to test its effectiveness. Due to the positive outcomes which are being seen from this approach, the model has now received further funding to continue delivery in the area 2 days a week. This will continue to involve close partnership working with the Link Worker to ensure clients' needs are met. Key learning from the model was the importance of building mutual capacity and support across the green/community sector. Therefore, future delivery will continue to use resources to upskill green groups to support mental health referrals. However, due to reduced resources it will not be possible to support green groups with access to funds for equipment or materials, although support will be available to assist groups to apply for further funding.

In addition, T&L5 used the funding to embed a worker inside a GP surgery to improve referral pathways as well to provide patient centred care and wrap around support for individuals. This has resulted in a number of positive outcomes, including improving access and being responsive to patient needs as they arise to reduce disengagement.

I'd say probably what we've already covered around, you know, people just having that accessibility at a surgery, and being able to see people has made a difference…That's had a really positive impact on patient care in that, when we've got people who're accessing our services, if we spot something, if we're concerned about someone, the team know exactly who to pick that conversation up with at the GP surgery. And, they're able to have that really, really good conversation that puts that support packages in place for somebody, we've had loads of examples where that's worked really, really well and got somebody into some support. They then, you know, got them the support they needed very quickly. Whereas, in the past, you know, we've seen lots of examples in the past where we've made a referral to a health service or a counselling service or whatever and it takes time and all of that stuff. And there's been cases where we've been able to do that and it's support to be put in place that same day. And that's to me, is definitely one of the most amazing outcomes that we've had, really. That has been a direct result of being there and being embedded in the surgery,

not just putting a poster up and getting people to refer to us. (Nature-based provider, T&L5)

T&L5 also used funds to develop a barrier fund to support service users with transport costs, purchasing kit/clothing and other barriers depending on their individual needs. This was discussed early on in their journey so support could be put into place quickly. Providing such support was deemed even more important due to the cost-of-living crisis. The site is keen to continue this work and is currently exploring applying for funds to support this. Some service users who had accessed the barrier fund reported that it was essential for their continued participation in GSP activities. Again, the T&L site funds were essential in facilitating this element and testing its effectiveness.

I would not be able to attend without the transport that is offered. I am on a limited income and due to the cost of public transport I probably wouldn't go. (Service user, T&L5)

The main block for me was transportation now that we have monies available to get us all back and forward to the activities. Without this I wouldn't be able to go. (Service user, T&L5)

Similarly in T&L 2, some providers have used the T&L pilot funds to provide refreshments and food during activities to help sustain engagement particularly for those living in poverty. However, due to the cost-of-living crisis and rising business costs the providers are now struggling to provide this element. As this was deemed essential, some providers are now exploring applying for loans to cover this.

There were other practical challenges associated with providing this level of support to service users and supporting them to attend activities often went above and beyond what small scale nature-based providers were able to provide. For example, in T&L2, a huge amount of resource had been invested in supporting service users to initially attend activities, e.g., some had received regular phone calls from staff for over a year but had not attended activities. Supporting people in this way meant that several staff members were now working overtime, a level of support which the organisation found "*very tricky*" to manage and went above the level of support expected at the start of the programme (T&L 2). In T&L 1&5, funding from the pilot provided further capacity to facilitate patient centred care by working with service users to understand their needs. For example, some providers had initial conversations with people before developing care plans to help triage them to appropriate activities and to ensure the correct level of support was in place prior to commencing sessions (e.g., whether they needed kit etc.).

Similarly, the scheme allowed nature-based providers to categorise the level of need that they were able to support aimed to reduce inappropriate referral and triage service users to appropriate provision (T&L3, 4). Similar to T&L2, providers in T&L5 invested lots of resource into supporting service users through regular calls and texts to provide continued contact across the pathway alongside co-attendance at sessions. Although they were seeing positive outcomes from this approach such as less service user drop off, this approach required T&L site funds to provide staff with capacity to deliver (see exemplar in Box 23). Underpinning all approaches was the need to build relationships with service users and to provide patient centred care, a finding that was echoed by two participants in the WP5 interviews.

At times, even when adequate support was in place, service users would still disengage with the programme. It was acknowledged that this level of support is resource intensive which has implications for the ongoing sustainability of such activities now support from the pilot has ceased.

We can go with people one time to something so I've had a couple of people where I've gone along with them and they've gone oh yes this place is great and then never gone back again. And I think it's sort of across the board something that we see quite regularly is that we you know we'll have like an initial like an hour with people in our first consultation and we'll talk to them about all sorts kind of their hobbies, their support networks, what their needs are etc, and then like I say we can go along with them to like a first session of something and we'll look at obviously you know any barriers and things like that. Sometimes I'm sort of literally you know going tiny step by tiny step with people and actually getting along to something will be like our sixth session particularly if there's kind of anxiety…I'm not sure if it's quite enough a lot of the time so yes I had a lot of people where it seemed like they were going to be eligible to do the thing and then they didn't actually get along. (Social prescriber, T&L1)

Similar challenges emerged from the Link Worker survey (WP3A) which showed the myriad of barriers faced by service users in accessing and maintaining support with GSP including transport/kit, lack of confidence due to anxiety and low mood and motivation. Similar to the findings from the qualitative work, Link Workers responses to the survey discussed the time-consuming nature of supporting those with mental health problems:

Anxiety and inability or unwillingness to leave their homes. Fears creating barriers to stepping out of their comfort zone. Whilst we work with these, it can often take longer than the expected length of time to work with referrals. (WP 3A Link Worker survey)

The green networks and community of practice appeared to be instrumental in providing peer support to nature-based providers to share best practice and discuss the challenges in supporting service users to prevent drop off in T&L2. Several sessions were delivered on the specific requirements of supporting service users with mental health problems and included presentations from nature-based providers on their experiences within the T&L. It was clear that attendees found this element challenging and that the support required went above what they expected at the start of the pilot. Attendees felt that a "*partnership approach*" and "*a need to work together as providers*" and with external services such as food banks to provide appropriate support for people with their wider issues was key for continued engagement. Adapting activities to "*bring nature indoors*" rather than cancelling during the winter was also suggested.

Findings from the survey with nature-based providers showed they are utilising similar strategies to improve accessibility to GSP and prevent service user drop off (WP3A). Examples of work include improving accessibility through providing public space for activities, transport, and food. Others provided support workers and volunteers to improve attendance alongside peer support. As with the T&L sites, ongoing support such as regular calls and check-ins and one-to-ones were required for some. Being flexible and tailoring activities according to mental health need was also deemed important.

In turn, challenges around ending support can arise when support ceases, such as with one service user who had completed the same course twice due to a person dropping out. Although they felt less isolated than before the support, issues such insomnia and loneliness soon returned after support ceased. This shows the difficulties in ending support without dealing with the underlying causes (Thompson et al., 2023).

I had the best night's sleep [after the support]. And I found, since I've stopped going, my sleep's… you know, I'll be up at three o'clock in morning. You know? I think because I'm not switching off like I did. I totally switched off when I went

there. For two hours, you know, the outside world didn't exist. But now, I'm back in the real world again! (Service user, T&L2)

The difficulties of supporting service users who wish to carry on support was discussed by a nature-based provider in T&L5. Even with several conversations with service users to understand their needs, and referral to other activities, by the vulnerable nature of the population drop off is sometimes unavoidable. Although the importance of supporting people to transition was acknowledged, this was again considered time consuming.

So there's a few different [approaches], we try and do it very person-centred around what they do. But as you can imagine, it's very time consuming, especially if they've got additional needs. So, that does really, so that, way that that's how that bottle neck starts to form, because you can't just really go, sorry, but you can't come anymore, it's for six weeks and that's it, you know? But, it's kinda not how we like to work at [name of organisation] so we like to make sure that, you know, we support people to transition. (Nature-based provider, T&L5)

Findings from the survey show the myriad of approaches providers use to move people from activities. Like with the exemplar in Box 23, several providers signpost to other site or local activities at the end of support:

We have different projects that people can take part in, people who have attended our wellbeing groups are encouraged to attend our site management volunteering days if that's the right thing for them, they have the opportunity to try out the site management days without losing their place in the wellbeing group they attend. We regularly signpost people to other projects. (WP3A Nature- based provider survey, T&L7)

Other activities include offering training into support services users into employment and apprenticeships. One provider was able to provide part time employment into the programme directly for six service users per year after progressing within GSP activities:

We have been able to offer part time employment to around 6 per year and that has worked well, using our services as a stepping stone. The first six months, for many, who have been isolated in bedrooms for 3-5 years, is focussed on attendance, integration, and confidence primarily because many have lost the capability to mix and talk and have little to talk about. (WP3A Nature- based provider survey, T&L7)

In turn, several providers have signposted or supported service users to become volunteers, including the development of a volunteering training programme. Similarly, T&L2 and 5 had supported service users to become volunteers as a means of meaningfully moving people on from activities as well as ensuring sustainability of provision. One service user we interviewed in T&L2 described how they had become a volunteer helping to run craft groups. This has had a positive impact on their wellbeing:

So I run a craft group, I do other stuff, obviously… knowing that someone cares, it also helps me. So that's what I do, so I run a craft group every Thursday for [name of organisation]. Help, honestly I help them, but then, if they end up coming where they like, you know, believe in me and they're letting me run the sessions and everything. ..so I've come, like, a volunteer for them. But like, I more or less, like, plan all' sessions, plans. And, to tell you truth, this last few weeks, stuff I've done, it's like, wow, it's like, it's opened other doors for me. (Service user, T&L2)

However, survey respondents encountered challenges with volunteer schemes due to a lack of places, capacity, and funding to support people through the journey, particularly for people with higher support needs:

> *We have identified an opportunity to support transition from high support needs to more of a volunteering or independent gardening role, however, this requires additional funding. All projects are challenged with chasing short term funding so it is difficult to provide long-term plans and partnerships. (WP3A Nature- based provider survey)*

For such service users, a route out of services may not be appropriate, and long-term maintenance and support may be required. This has implications for onward sustainability, particularly for smaller scale providers. Previous studies also found that longer term intervention through social prescribing may be required for those with long-term conditions and who face complex social issues (Holding et al., 2020, Wildman et al., 2019), however this raises potential issues for dependency on services.

4.11.3. Outcomes

Several actions have been undertaken within the T&L pilot to prevent service user drop off, but approaches were resource intensive, time consuming and sometimes dependent on T&L funds, which has implications for onward sustainability. Despite continued effort, it was clear that retention was an ongoing challenge and concern for nature-based providers. Providers described how people would still disengage with the programme even when support was in place. This shows the challenging nature of providing GSP to vulnerable populations and the need to address key causes of inequality before engaging in interventions. Such a need goes beyond what the T&L can provide. The complex nature of barriers facing service users which prevents them from meaningfully engaging with GSP shows that there may not be a 'one size fits all' approach. However, there have been some positive outcomes, such as the exemplar given in Box 23 which led to a marked improvement in service user engagement.

Key to the success of approaches which appeared to positively impact on retention were providing patient centred care to understand needs, supporting service users to attend initial sessions, providing consistent contact along the pathway, referral to other provision either within the same organisation or close by, and addressing the underlying barriers preventing engagement with GSP. Working in partnership across services, such as with food banks, to mitigate the underlying barriers facing service users may be increasingly crucial within the context of the cost-of-living crisis. Such approaches are time and resource intensive. Our findings echo a realist review of approaches to social prescribing and the contexts within which they work which found that service users are more likely to engage with social prescribing if schemes are accessible (e.g., affordable, and available locally), and they are supported to attend their first activities (Husk et al., 2020). As with our findings, support is time consuming and requires the development of networks and partnerships to facilitate and increase the likelihood of successful uptake. Ensuring meaningful support so service users see GSP as a legitimate treatment may also improve engagement (Garside et al., 2020).

4.12. Summary of key learning

To summarise the key learning from each of the programme theories, we generated theories of change for each, which summarise the key issues of context, activities, outputs (proximal and distal), outcomes and possible indicators of success. These are reproduced below.

ToC for PT1. If we have new commissioning and procurement arrangements and agreements, then we will ensure that nature-based providers are embedded within the delivery and wider social prescribing landscape.

The challenge to be addressed	The actions taken (what and by whom)	The conducive conditions in short and long term		The thing we want to achieve	How do we indicate success? Measures etc.
Context:	**Initial activities that respond to the context:**	**Outputs (proximal):**	**Outputs (distal):**	**Outcomes:**	**Indicators:**
Nature-based providers were funded piecemeal and unsustainably resulting in sector fragility and competition. Precarious, short-term funding cycles barrier to GSP engagement and sustainability. Sustained collaboration resulting in shared values and vision hard to achieve given turnover of staff owing to funding cycles. Smaller or micro-providers often unheard and facing greatest challenges.	Reps from T&L sites able to contribute to strategic discussions locality/regional levels Creation of co-design forums around commissioning issues to develop strategies. Refine existing spend through nuanced understanding of appropriateness of referrals. Strategies to redistribute existing funding structures. Seeking external funding leveraged on the success of the GSP programme.	Green book directories of activities that were agreed and shared. These green books are maintained and resourced to be kept up to date. More equitable access to commissioning and investment.	Ability for organisations to work together in partnership through coordinated bids.	New networks developed. More joined up commissioning process. Dedicated co-design work amongst partners to develop future bids.	Better integration with the existing social prescribing landscape. Successful funding bids from new collaboratives. Increase in self-referrals indicating a population more aware of offers.

Conducive conditions

Commitment (and a set of shared values) that is both ongoing and broad from all included partners.
Important for each actor in the system to be clear what their sphere and level of influence is.

ToC for PT2: If political and strategic power and influence is directed to support GSP, Then there will be shifts in policy and budgeting

The challenge to be addressed	The actions taken (what and by whom)	The conducive conditions in short and long term		The thing we want to achieve	How do we indicate success? Measures etc.
Context:	**Initial activities that respond to the context:**	**Outputs (proximal):**	**Outputs (distal):**	**Outcomes:**	**Indicators:**
Strategic level: Lack of awareness & recognition of GSP, lack of leadership and investment. Operational level: lack of link up between parts of the GSP system – particularly between (small) VCSE organisations and statutory sector. Other large scale systems change (eg ICS/ICB). Cost of living crisis, NHS pressures.	**Nationally** Cross dept support provided critical leadership, support, funding. • Commitment to GSP visible policy **Locally:** Role of the project manager(s) pivotal. Wide range of strategic partners on management groups. Relationship building, key (funded posts). VCSE partners embedded in strategic decision-making. Ensuing GSP and learning form the T&L pilot is embedded in key strategy documents locally Leveraging other funding, for example with aligned projects, to support GSP.	Greater connection and understanding between different parts of the GSP system. GSP recognised in relevant local strategy documents, although shifts from policy to practice and resourcing may take longer to enshrine. Some additional funding for the pilot, and/or further work in GSP.	Reduced power imbalances, between VSCE and statutory sector. Aligned priorities, Resources for stakeholders to fully participate in decision-making fora. Strategic leadership beyond the T&L site GSP team. Sustainable funding and longevity remain	Shifts in policy and budgeting	GSP visible and supported across a range of health, planning, inequalities and environment policy. Those outside immediate GSP circles support GSP Sustainable funding streams for VCSE providers

Conducive conditions.

Capacity/dedicated role to facilitate, alignment of aims & goals to ensure buy in, trust and relationship building, understanding and respect between partners, decision-making fora include experts by experience and VCSE, ongoing cross departmental national support for GSP, health and environment recognised in each other's strategies & policies, strategies to facilitate flow of funds to be used in innovative ways

ToC for PT3. If we grow or harness nature-based assets, then there will be a range of appropriate, diverse, geographically spread opportunities for service users

The challenge to be addressed	The actions taken (what and by whom)	The conducive conditions in short and long term		The thing we want to achieve	How do we indicate success? Measures etc.
Context:	**Initial activities that respond to the context:**	**Outputs (proximal):**	**Outputs (distal):**	**Outcomes:**	**Indicators:**
Local variation but overall good coverage of nature-based providers and delivery capacity high. Connectivity and the ability to receive social prescribing referrals is sometimes insufficient. Fragmentation and variability across the system is sometimes compounded by a lack of communication.	Needs to be dedicated and accessible funding in provider organisations. Increasing capacity must be accompanied by accompanying training resources for those involved. Funds to provide basic practical elements; transport, equipment and similar. Presentation of referral pathways as 'additional' to existing routes.	Successful efforts matched need and availability. Funding decisions devolved, and autonomy given to more of the system. Clarification and communication of safeguarding criteria to prevent inappropriate referrals would be an indicator that assets were being harnessed appropriately	Increased trust across systems, demonstrated by (e.g.) trusted provider programmes. Broadening and deepening the use of matching levels of need to existing provision important to address sufficiency. Providers starting to work together as consortia	Greater flexibility and therefore perceived sufficiency of provision. Developing collaborative funding bids to extend the programme.	Increase in referrals an indicator that provision for GSP was seen as sufficient. Particular an increase in self-referrals was viewed as positive. New VCSE organisations delivering GSP activities that had not previously done so.

Conducive conditions
A collective vision for provider availability and deployment, and for that vision to be clearly articulated across all elements of the system

ToC for PT4. If efforts were made to remove perceptual and structural barriers and create aligned structures, then there would be coherence and clarity of roles and responsibilities across the system

The challenge to be addressed	The actions taken (what and by whom)	The conducive conditions in short and long term		The thing we want to achieve	How do we indicate success? Measures etc.
Context:	**Initial activities that respond to the context:**	**Outputs (proximal):**	**Outputs (distal):**	**Outcomes:**	**Indicators:**
GSP is a complex set of activities and structures, with crucially, multiple interdependencies for the system to 'work'. The lack of alignment of ambitions, systems and processes related to GSP poses challenges to it's efficient delivery	Alignment at a national and local level written into strategies for GSP Collaboration between relevant organisations, clarification of responsibilities and accountabilities Steps taken to agree shared ambitions, ways of working and indicators of success Address aspects of mis-aligned systems and tools, such as funding and data capture and transfer	Importance of alignment was commonly agreed Time and resources are made available to support alignment generating activities Alignment of ambitions through policy and strategy documents	Where relevant, shared systems, strategies and structures are trialled and, if successful, expanded and embedded	Sufficient alignment of structures, systems and strategies Collaboration is sustained Delivery is more efficient and cost-effective Alignment is not undermined by perverse incentives (such as continual cycles of innovation and disruption)	Shared policies and ambitions 'Smoother' collaborative working Reduced challenges with factors such as data availability and sharing Reduced duplication and conflict in delivery

Conducive conditions
Alignment recognised to be important Scope to adjust strategy, ways of working, and processes and indicators of accountability Sufficient time is available Address perverse incentives

ToC for PT5. If we gather and share routine data in the GSP system, then this will build confidence in the efficacy of GSP to support people with mental ill health.

The challenge to be addressed	The actions taken (what and by whom)	The conducive conditions in short and long term		The thing we want to achieve	How do we indicate success? Measures etc.
Context:	**Initial activities that respond to the context:**	**Outputs (proximal):**	**Outputs (distal):**	**Outcomes:**	**Indicators:**
Considered to be limited, not compelling, or not sufficiently rigorous by wider system partners. 'Compelling evidence' is differentially interpreted and understood by actors around the system. A growing programme of national-level research in this field. Data collection poses multiple challenges.	System-level support for data complexity issues, and activities that sought to reduce impact of this complexity. Time and resource to support data collection for smaller organisations. Sites challenged and engaged in conversations about what good evidence looks like. External evaluation considered important.	Process of getting any technological solution funded and implemented, even in part, was seen as a success in terms of collaboration. Getting agreement and implementation of outcomes for datasets, again even if this was only partial.	External commissioning of evaluation and expertise was important. Including evidence components in funding bids. Positive move towards including the role of GSP in prevention and upstream impacts in evidence generation.	A single dataset would be a useful outcome, but the coherence necessary would be difficult to negotiate. Success in terms of creating a compelling case with evidence would be demonstrated with robustly embedding GSP in relevant policy documents.	Immediate and tangible differences in data collection. Funding linked to evidence for sustainability. Collaborative funding applications including a data component. Attendance by organisations at training or events relating to data and evidence.

Conducive conditions
A collaborative approach seen as critical, bringing organisations together to provide group training, to share skills and to pool opportunities helped to mitigate barriers. Clear, transparent guidance from funders and others about evidence needs; recognition of the value of a mosaic of evidence about GSP.

ToC for PT6. If we enhance processes to support information flow and feedback loops within the system between the network of providers, Link Workers, referrers and funders, then we'll have better connected, efficient and effective pathways

The challenge to be addressed	The actions taken (what and by whom)	The conducive conditions in short and long term		The thing we want to achieve	How do we indicate success? Measures etc.
Context:	**Initial activities that respond to the context:**	**Outputs (proximal):**	**Outputs (distal):**	**Outcomes:**	**Indicators:**
Initially, network of providers, Link Workers, referrers and funders was fractured and dispersed. Participants drop-off or disengage across social prescribing pathways if they are not appropriately supported. Within-sector, local networks often strong, but interaction across these networks less so. Often 'fractures' within systems and networks are driven by key individuals.	GSP programme validated cross-sectoral working by placing the programme inside the VCSE. Developing referral feedback loops (between community and health services and back again) are important. Understanding levels of need matched to activities aids in targeting groups. The creation of new networks around GSP, in addition to those that came before, was important.	Programme validated and legitimised collaborative activity from senior individuals. Less participant drop-off across the pathway, through programmes that were accessible, appropriate and available.	Expand provision. Offer training to newer providers. Sustained interest in developing networks and helped unlock extra funds. Expand existing model of networks through pooling resources.	Increased capacity and resilience of provider networks to manage demand. Increase the engagement of smaller providers. Entrench networks in local policy organisations or ICBs.	A 'web of webs' to connect to wider strategies. Collaborative work increased the number and quality of connections. Referral and adherence rates a useful metric to assess network resilience.

Conducive conditions
Develop and build strategic links through this programme in order to further increase the resilience of provider networks.

ToC for PT7: If we want mutual accountability and shared problem-solving to enhance participant experiences, then we need to build trust and respect so that people understand and awareness of how different actors in the system may operate

The challenge to be addressed	The actions taken (what and by whom)	The conducive conditions in short and long term		The thing we want to achieve	How do we indicate success? Measures etc.
Context:	**Initial activities that respond to the context:**	**Outputs (proximal):**	**Outputs (distal):**	**Outcomes:**	**Indicators:**
Lack of mutual awareness and understanding between GSP partners Key statutory partners lacked recognition of the ways VCSE work, and what they were doing. VCSE partners delivering nature-based activities lacked capacity, knowledge or skills to work with SP referrals. Few referrals through formal SP routes Lack of partnership working and coordination.	Investment in partnership, collaboration and knowledge sharing Diverse GSP T&L site project teams, wide stakeholder participation. Codesign work to understand needs of stakeholders & barriers to participation. Networks of nature-based providers supported/ initiated. Trusted provider schemes Innovative funding schemes explored.	Greater awareness and understanding between different parts of the GSP system. Mutual respect and trust among stakeholders Better understanding between national partners and GSP "on the ground". Ongoing support for green networks.	GSP understandings aligned across the system Innovative solutions welcomed Shared accountability and problem solving.	Participant experience enhanced across the system	Decision making fora include all relevant partners, with agency to affect change. Low pt drop out across pathways & high satisfaction

Conducive conditions

Time to build understandings, relationships and trust; understanding local conditions to foster agency and accountability; willingness to innovate; consider decision making context and ensure key stakeholders have agency where decisions are made; commitment to mitigate power imbalances between (for eg) VCSE and statutory sectors.

ToC for PT8. If we build referrers' capability, opportunity and motivation to refer to GSP, then we have improved access to appropriate green opportunities

The challenge to be addressed	The actions taken (what and by whom)	The conducive conditions in short and long term		The thing we want to achieve	How do we indicate success? Measures etc.
Context:	**Initial activities that respond to the context:**	**Outputs (proximal):**	**Outputs (distal):**	**Outcomes:**	**Indicators:**
Lack of clarity around referral routes, their structure and what was available to whom. LW provision fragmented with multiple employers across VCSE, primary & secondary care, socialcare and private sectors - little coordination or data sharing. LWs often not understanding specifics of GSP (as distinct from SP broadly. Self-referral common.	Training packages for referrers, (incl. GPs, HCPs, LWs and 'green social prescribers'), to increase awareness of provision available. capacity training for providers (e.g. grant writing skills) Taster sessions and training with specialist workforces. E-learning modules aimed at helping to build understanding, education, and awareness for referrers. Activities to increase awareness of different referral pathways, improve outreach and communication with LWs, and improve alternative pathways to referral to reduce pressure on LWs. Working with nature-based providers - peer support, buddying and befriending, providing a specific support role alongside the delivery of the activity, undertaking work to understand specific needs or barriers to participants, (eg providing transport). Taster sessions, awareness raising events, engagement through the ICS aimed at strengthening referral pathways in MH services.	Use of referral form gathering necessary participant information, clear guidance on who is expected to provide support for participants, level of support needed, & basic requirements in terms of evaluation and participant safety. Upskilling of providers through training on safeguarding and mental health support Link Worker capacity and engagement improved Sufficient time and resource allocated to meaningfully explore inequalities in access and provision	Clear locality-wide guidance to bridge information and understanding between referrers and nature-based providers. Improved training and access to support for those involved in provisioning GSP in key areas (eg complex mental health needs, assessing risk) Activities targeting specific communities reflect the diversity of those communities both in planning and delivery	Nature-based providers continue to explore strategies for preventing participant drop off and share good practice within their green networks and communities of practice Sites have improved influence and support of LW and referrer networks to increase representation, awareness and communication Increasing training opportunities, taster sessions and additional support has improved confidence in referrals for LWs and other referrers	Referrers and link workers have the capability, opportunity and motivation to refer to GSP

Conducive conditions

Improved access to appropriate Green opportunities; mutual understanding between part of t GSP system about what is available for whom

ToC for PT9. If we want equitable access to appropriate green opportunities, then decision making must be made through an inequalities and instructional lens

The challenge to be addressed	The actions taken (what and by whom)	The conducive conditions in short and long term		The thing we want to achieve	How do we indicate success? Measures etc.
Context:	**Initial activities that respond to the context:**	**Outputs (proximal):**	**Outputs (distal):**	**Outcomes:**	**Indicators:**
Complexity and severity of need for those referred is an issue Some providers lack culturally appropriate and relevant offers for different communities, and the additional resource required to fully and meaningfully engage minority ethnic groups can be challenging Variations in deprivation across localities, incl. urban areas, those associated with rurality and isolation, refugee communities in specific areas, and people in minority ethnic communities without ready access to green spaces.	Harnessing existing local and national networks with strategic partners to explore routes to tackling inequalities Public communication and advocacy promote the benefits of green activities to a wide audience Training instructors from diverse local communities around GSP Promotion of accessibility and inclusion can showcase best practice. Dedicated groups focused on tackling inequalities and serving minority ethnic communities. Co-design workshops at the start, involving people with relevant lived experience (such as of mental health issues) alongside place partners, who can prioritise criteria for funding.	Meaningful user engagement with people most likely to be subject to health inequalities as standard practice. Decision makers use creative and non-standard ways to include the voices and views of people most likely to be subject to health inequalities, (eg peer research, engaging community representatives.) Sufficient time & resources allocated to meaningfully explore inequalities in access and provision	•Those experiencing conditions most likely to drive health inequalities are involved at every stage of the process, including question setting and commissioning services. •Improved training and access supports those involved in provisioning GSP in key areas (eg complex mental health needs and assessing risk) •Activities targeting communities reflect the diversity of those communities both in planning and delivery.	Increased amount and diversity of GSP offers responsive to local population need. High quality green space available for all populations.	Equitable access to appropriate Green opportunities. Quant. data on participant characteristics, uptake and retention in GSP. Qual data on experiences of users (and of those who don't take up the GSP offer)

Conducive conditions

Planning undertaken with an inequalities lens; support and resources to support the creation of equitable access to appropriate GSP opportunities; decision making includes members fo targeted communities and organisations working with them; targeting aligns with local need / population priorities.

ToC for PT10. If there was a desire for the green social prescribing system to be person-centred, then the user voice was important to illuminate the changes across the pathway

The challenge to be addressed	The actions taken (what and by whom)	The conducive conditions in short and long term		The thing we want to achieve	How do we indicate success? Measures etc.
Context:	**Initial activities that respond to the context:**	**Outputs (proximal):**	**Outputs (distal):**	**Outcomes:**	**Indicators:**
Involvement strategies, underdeveloped. Need for service users/ publics to be involved at all levels. Securing the 'effective engagement' of community members, lay members, members of the public, people with lived experience of MH across a system undergoing is a critical enabler of success. Involvement can enhance decision making, improve transparency, and ensure services meet the needs of the community.	Opportunities for meaningful involvement of users need to be identified. Time and resources need to be given to establishing appropriate links, giving support, facilitating engagement in decision making and planning.. Involvement in the design, delivery and governance of (funded) GSP activities. Include people with lived experience of mental ill-health in review and quality assurance process	Involvement/ engagement represents the different experiences and needs of different communities. Established principles of user involvement followed.	Sufficiently resourced strategies and activities are the norm. Individuals from diverse communities empowered to contribute.	User voice illuminates issues and creates pressure to change GSP offers and processes reflect user needs and preferences.	Users involved at multiple levels of decision making and planning Experience of those users shows that they feel their contribution is valued, supported and has influence

Conducive conditions

Green Social Prescribing System is person-centred; understanding of the importance of ensuring the user voice has influence; commitment to breaking down power hierarchies.

ToC for PT11. If we want referrals to be fulfilled, then service users must have a positive experience across the GSP pathway

The challenge to be addressed	The actions taken (what and by whom)	The conducive conditions in short and long term		The thing we want to achieve	How do we indicate success? Measures etc.
Context:	**Initial activities that respond to the context:**	**Outputs (proximal):**	**Outputs (distal):**	**Outcomes:**	**Indicators:**
Cost of living crisishas a disproportionate and uneven impact upon service users. Service users disengage across the different points of the GSP pathway Service users face barriers to engagement with social prescribing, and those in vulnerable populations are often disproportionately affected Service users face barriers such as poverty, a lack of access to transport or kit or deterioration in mental health status and drop off can occur at different time points across the pathway.	Ensuing level of need & barriers understood Tailored support Support for participants to reach the first session (eg buddy schemes) Providing a consistent contact for users across the pathway. Addressing practical barriers (eg transport, providing kit/equipment) Creating referral loops and ongoing support for service users Upskilling/ training for nature-based providers to support mental health referrals, Directories/ green books help ensure referral matches level of need to appropriate provider – updated and resourced.	Practical and process barriers to engagement with GSP mitigated. Specific support for people with more complex needs or more greatly affected by practical and process barriers.	Individual needs assessments allow tailored and specific support for people with higher or more complex needs Resources to allow these approaches to be used strategically Greater understanding of the disproportionate challenges faced by service users allow the strategic allocation of resources to better support them through the GSP system	Appropriate referrals made Appropriate support provided High levels of retention across the GSP system	Users have a positive experience across the pathway High retention across GSP pathways GSP referrals are fulfilled

Conducive conditions
Green Social Prescribing System is person-centred; mutual understanding across the GSP system of what partners do and need; finding creative solutions

Understanding outcomes for people accessing GSP

5

Summary

People experienced improved mental wellbeing when accessing nature-based activities indicating that GSP is having a positive impact. However, due to the diversity of activities and number of interactions, it is unclear which activities are having the greatest impact on mental wellbeing.

Across the sites, there was a statistically significant improvement in mental wellbeing for all of the four ONS4 wellbeing domains after accessing GSP. This is for participants with pre and post ONS4 score, so demonstrates individual-level change across the sample. In addition, people may experience further improvement given that many were continuing to attend nature-based activities. Across the sample, the improvements in the average (mean) scores were *life satisfaction* - 4.7 to 6.8; *worthwhile* - 5.1 to 6.8; *happiness* - 5.3 to 7.5; *anxiety* - 4.8 to 3.4.

These changes mean there was an overall **improvement across the sample from people typically having 'medium' wellbeing (a score of 4-5) before accessing GSP to having 'high' well-being (a score of 6-8) afterwards**. Likewise, there was a **shift from being classed as 'medium' to 'low' anxiety**.

T&L1 utilised the **Hospital Anxiety and Depression Scale** (HADS) alongside the ONS4 which showed a statistically significant improvement in both anxiety and depression symptoms. A score greater than 8 indicates a person has a clinical level of depression or anxiety. Depression symptoms reduced from 8.1 to 5.6 and anxiety decreased from 11.1 to 8.5. The baseline scores were not particularly high **indicating that GSP was supporting people primarily with pre-determinant and moderate mental health issues**.

T&L2 and T&L6 utilised the nature connectedness outcome measure. **T&L2 showed an improvement in nature-connectedness**, whilst T&L6 showed no improvement. However, there were a number of data errors, making interpretation difficult.

T&L6 collected physical activity data and showed a **statistically significant improvement in people increasing their physical activity following a nature-based activity** (from 84.2% in the seven days before the activity to 94.7% post activity).

Even **when fully analysed these data will have number of limitations**, including: uncertainty about how representative they are of GSP participants as a whole, including as a proportion of all GSP participants; several sources of bias, including survivor bias (i.e. people who completed a whole course of nature-based activities), optimism bias and measurement error (i.e. data collected inaccurately); heterogeneity and multiplicity of intervention (i.e., type of nature-based activity, other types of support accessed); absence of a control group leading to uncertainty around attribution; and a lack of outcome data from two sites. However, despite these challenges, the data indicates that GSP is having a positive impact on people's mental wellbeing and supports the evidence of the wider literature.

This chapter focuses on the evidence for impacts to the mental health of people involved in GSP activities. The chapter first gives the mental health context of the GSP Project followed by a brief review of the current evidence regarding the mental health benefits of GSP and a description of *how* GSP is thought to be of benefit. The next section presents the findings from the monitoring data collected by T&L sites. This includes describing the demographics of who accesses GSP, the GSP pathway and impact of GSP on mental wellbeing. Please note, these findings supersede the data provided in the interim report (Haywood et al., 2023). As described in the methodology, different sites provided different amounts of data and it is unknown how representative the data is of all people that access GSP. We reflect on this later in this chapter where we discuss the limitations of the data. The chapter then describes the findings on the experiences of different stakeholders, including participants of GSP activities as well as those providing and delivering them, regarding mental health impacts. The chapter ends with a reflection on the complexity and limitations of the data, and a final conclusion section.

5.1. Context

5.1.1. Mental health context of the programme

At the time the bids were submitted the majority of the T&L sites reported they were facing significant rates of poor mental health either at locality level, or within specific wards or LSOAs. In T&L2 mental wellbeing overall was lower than the national average across all localities (initial bid document). T&L3 had significantly higher rates of common mental health disorders and long-term mental health problems in comparison to the England average. T&L4 reported that the prevalence of poor mental health and rates of anxiety and depression were worse than the national average (initial bid document). One T&L site also referred to a local citizen survey which revealed low rates of self-perceived wellbeing; 52.4% of people reporting that their mental health had worsened, and 58% reporting worse emotional health (initial bid documents).

Service user interviews undertaken for this evaluation illustrate the lived experience of poor mental health:

> *I suffer with mental health for quite a long time… like I'd been dealing wi' lots of different traumas in my life, and obviously I think being in lockdown, it was, I was pretty lonely like being unable to be around people, even having support. Cos obviously then I had, like, support workers, but they couldn't actually come to me house, so everything were over the phone…, but it made me depressed, and I was, like, more or less trapped in a bedroom a lot. Erm, and, and then, obviously I went to Shelter for help, because [name of worker] weren't really helpful. And, it weren't a good situation, cos obviously my partner got killed…Erm, and then obviously ended up moving somebody on our, on my street. But, they were relatives of the guy who killed my partner…. So it made it really impossible for me to just be, have a normal life, and he were just no help. (Service user, T&L2)*

5.1.2. Other health outcomes

The sites also reported high rates of other adverse health outcomes. T&L2 highlighted the high rates of obesity, smoking, diabetes, and low rates of physical activity. Life expectancy in T&L2 was significantly below the English average. T&L3 had higher than average rates of mortality due to cardiovascular disease and cancer; falls in those aged 65+; alcohol-related hospital admissions; adult obesity; teenage conceptions; and child obesity. T&L2 faced higher than national rates of cardiovascular and respiratory premature mortality.

5.1.3. COVID-19 and mental health outcomes

COVID-19 has had a significant impact on the mental health of people in the T&L pilot sites. One site reported that the locality had been impacted '*more than most by the pandemic, with consistently high rates of infection, and, along with other areas in the [region], a higher-than-average COVID death rate*'. Another site included quotes from local professionals working on the front line of dealing with the impacts of COVID-19:

> *Our network of coordinators has found themselves at the end of the phones as lifelines for deeply lonely and isolated people. (Manager, VCSE sector)*

> *During a recent supervision with my food bank worker I had no idea that she had had to deal with 4 deaths in as many months. Although not all COVID related, the pandemic and lockdown had compounded the misery surrounding them, one being a suicide. I think we have in previous years probably known of 3 or 4 deaths per year. (Manager, VCSE sector)*

5.1.4. Deprivation and structural disadvantage

Sites also faced additional and related challenges of high rates of deprivation and structural disadvantage. T&L2 had communities in the most deprived 1% of Lower Layer Super Output Areas (LSOAs) nationally. T&L3 also ranks as one of the most deprived areas in England. T&L5 had higher levels of deprivation than the national average, with about a quarter of residents living in the 10% most disadvantaged areas in the country. Many target communities in the T&L sites also had low educational outcomes, high levels of poverty and experienced structural inequality.

5.1.5. Inequalities in health in the T&L sites

Inequalities in health within or between communities were reported by most of the T&L sites. Several of the T&L sites reported significant inequalities in life expectancy:

- T&L2 had a 9.6 years life expectancy difference for women between the most deprived and least deprived areas, with a 12.4 years difference for men.
- The gap in healthy life expectancy between the most deprived and least deprived areas in T&L5 localities was between 12.4 and 19.8 years.

The T&L sites noted inequities in health outcomes for specific communities. With worse mental health outcomes post COVID-19 for people with learning disabilities and autism in T&L4. T&L5, an area with a high proportion of people from ethnic minority communities in the locality, highlighted the disproportionate impact of COVID-19: 'BAME communities have been hit particularly hard by the pandemic both in terms of morbidity/mortality but also in terms of the wider determinants of health, with many of our ethnic minority BAME population experiencing deprivation' (T&L5 initial bid document). A different T&L site, one of the less deprived sites overall, still had areas of acute socio-economic inequity in health:

> *There are 4 LSOA communities in [locality] within the 20% most deprived in the UK, and a further 15 in the 30% most deprived. The relative deprivation of these residents is uniquely acute in [locality], as these 19 deprived communities live alongside communities in the least deprived centile in England. (T&L6 initial bid document)*

5.1.6. What is known about how GSP benefits health of those who participate

> *When I work with a client who has tried all other ways to get help either by a GP, medication, mental health teams etc, to be suddenly offered something that is so unexpected, it makes them stop in their tracks. It gives a client something to think about, time out for themselves and purely for themselves, often a time to give their brain a rest from the life they are trying to fit into. So being offered free places and transport takes those hurdles away, takes away reasons people can say 'no' (T&L3, Link Worker).*

Green social prescribing is a complex intervention (Garside et al., 2020; Fullam et al., 2021). Complex in terms of the plurality of practices and pathways, but also complex in terms of how it 'works' to affect mental health and other outcomes:

- GSP operates across a number of different systems, including the healthcare system, VCSE system, and sometimes local council and social care system.
- There are a range of behaviours, expertise and skills required by those delivering and those receiving the intervention.
- There is a high degree of flexibility or tailoring of the intervention or components to accommodate individual needs and preferences.
- Often the intervention could influence a number of outcomes of relevance and importance to both the healthcare system (such as reduced primary care visits) and participants (e.g., quality of life).
- There are multiple pathways by which intervention components may affect outcomes, and how these pathways operate will vary by context.
- GSP is concerned with addressing common mental health conditions which are complex in and of themselves. Individuals may be experiencing more than one condition at a time, and the symptoms of specific conditions can vary greatly in their presentation in different individuals and how they are experienced by individuals.

There are two key components to GSP, a) the referral pathway and b) the activities people are referred to (see Figure 1). While research relating to either component is still relatively limited there is a growing body of evidence of efficacy relating to each component. For the social prescribing component, syntheses of the evidence have shown that while the evidence is mixed, social prescribing processes can benefit a number of outcomes including greater self-esteem, positive mood, mental wellbeing; reduction of anxiety, depression and negative mood (Chatterjee et al., 2018; Dayson et al., 2020). In relation to the activities component previous work undertaken for Defra found some evidence of benefit but that it is, again, mixed (see Box 24 for details).

Box 24: Summary of evidence review of what is known about the impact of nature-based interventions aimed at supporting people with mental ill-health (Garside et al., 2020)

- ***Quantitative studies:*** there is little robust evidence of effectiveness, with few high-quality, reliable RCTs available. Only four RCTs were identified, and these are generally small in size. A further seven used some kind of control or comparison group. Much of the quantitative evidence, therefore, comes from uncontrolled before and after studies which are subject to a range of potential biases. Although studies reported impact across a range of wellbeing, quality of life, psychological, behavioural, and occupational measures, the lack of a control group makes it difficult to attribute such change to the intervention. There is some evidence from the trials that nature-based activities may positively impact on depression, anxiety, mood and feelings of hope.
- ***Qualitative studies:*** qualitative studies showed broad and wide-reaching perceived impacts on wellbeing, mood and functioning from participants. They also reported appreciating increased knowledge and a sense of achievement from what they were doing, enjoying being physically active, and even being tired-out by taking part. The groups they took part in were important, generating a sense of belonging and support. Nature itself provided quietness and calm, away from their usual day-to-day living environments. Participants also found solace in nature as a "patient receiver" of their needs and symbolically in the rhythms of the seasons, growth, and renewal. Participants weaved these understandings of nature into their own narratives of recovery. Moments of pleasure and beauty in nature could resonate strongly and provide nurturing memories.

How nature-based activities 'work' was explored in recent work by members of the evaluative team (Fullam et al., 2021). Through evidence synthesis and consultation with stakeholders such as practitioners ten active mechanisms, common across the main types of GSP activities, were identified.

5.1.7. The ten mechanisms of effect for GSP as identified in previous research (Fullam et al, 2021)

Caring

This includes the ways in which people can take care of things through taking part. Examples of activities that include the 'caring' mechanism might include looking after animals, building and/or putting up bird or bat boxes, tending plants, or helping others with difficult experiences.

Evidence has demonstrated that the sense of accomplishment in creating life and helping it to thrive can be a powerful promoter of wellbeing for people, it can represent an important personal achievement. Maintaining farms, orchards, and gardens is a collective endeavour, a focus on individual performance and results that can be a source of stress can be put to the side:

> *It's the nurturing side of what horticulture is, that is helpful for somebody's wellbeing…you plant this dot of a seed, which looks like nothing, and within weeks it's a beautiful pink flower or purple flower…and you care for it…you've helped it to survive. Not only have you survived but you've helped something else survive and thrive. (Therapeutic horticulture Participant (Fullam et al., 2021))*

Creativity

This includes many different ways of being creative or creating things. Examples of activities that include the 'being creative' mechanism might include creating a piece of art, whittling a spoon, designing and creating a flower bed, writing a poem, weaving willow, or making food.

Reviews -linked to mental health through refuge from stress and self-development. Individual studies have indicated that craft activities, making things and acts of creation relate to wellbeing through self-management and empowerment, coping mechanisms, enjoyment and meaningful activities, performance and, for some populations, reaffirmation of identity. Creative approaches may also help participants access and articulate their sensory experiences of nature, which may otherwise be fleeting or difficult to express.

Physical activity

This includes being physically active in all its forms and intensities. Examples of activities that include the 'physical activity' mechanism might include walking and talking, digging vegetable beds, pruning bushes, warm up and cool down exercises, or sawing wood.

The connection is well researched, and the findings are consistent; exercise and physical activity has beneficial effects on both physical and mental health. In a study of one million Americans, regular exercisers matched with sedentary individuals (controlling for age, gender, education, and income) reported 12 to 23 percent lower rates of mental health problems. In terms of specific effects, exercise has modest but significant positive effects on aspects of cognitive function including memory and improves quality of sleep.

> *The point is that it's so much more than a walk in nature, it's about developing a base for someone to have a sense of belonging to something and that might be the natural world, they might not have otherwise been able to access. So, by prescribing it you're in some way giving it value as a worthy thing to engage with. (GP and Nature-based provider (Fullam et al., 2021))*

Personal growth and Having fun

This includes many different ways people can experience personal growth – psychologically, emotionally, physically, interpersonally, or in terms of skills and capacities – through taking part. Examples of activities that include this 'personal growth' mechanism might include learning to understand or express an emotion, developing a new skill in nature identification or willow weaving, beginning to trust others, gaining a qualification, sharing a personal skill or knowledge with teammates, or developing new capacities to help themselves and others beyond the programme. Having fun includes the ways in which people can have fun through taking part. Examples of activities that include the 'having fun' mechanism are broad (probably almost any activity!) and relate more to the mode of delivery (is a sense of enjoyment and fun fostered by leaders or teammates) and the individuals' experience (do participants appear to enjoy, be entertained by, take pleasure in what they are doing).

Personal growth, a sense of worthwhileness and achievement, and "Having fun", or enjoyment, is an important component of wellbeing, helping contribute to a worthwhile and satisfied life. Enjoyment of the activity is linked to completion and adherence of health-related interventions. At the population level enjoyment of life has been linked to greater healthy life expectancy. For individuals, undertaking an enjoyable activity can lead to the state of 'flow'. Flow is where an individual is 'fully involved in the present moment' and includes deep concentration, loss of a sense of time and a sense of undertaking an intrinsically rewarding activity.

Being in and part of a group

This relates to working in a group or taking part in activities that are group based. The group may be consistent over time (e.g., the same people work together over the whole

or most of the programme), or it may be different groupings depending on the session or activity.

GSP can target individuals who may be socially isolated, this isolation may be a result of mental health issues or may be a factor that contributes to poor mental health. Reduction of social isolation, the creation of meaningful and lasting relationships and increased confidence in the ability to interact socially have been reported as outcomes of group nature-based interventions. Sustained engagement is important in any intervention, the experience of belonging to a community has been noted as a key motivation to engagement in therapeutic horticulture. Being in a group where there is an element of shared life experience between the participants can contribute to a safe environment where there is no judgement and mental health issues are accepted but can be put to the side.

Relationship with nature and being outside

Relationship with nature includes the ways in which people can develop, rekindle or nurture a relationship with nature through taking part. Examples of activities that include the 'relationship with nature' mechanism might include caring for a natural space, learning about different species, expressing how nature makes you feel, or observing nature. Being outside relates to whether sessions are delivered outdoors, whether in the natural environment or not, or in a setting which includes many plants or animals, such as a greenhouse.

There are many different ways in which exposure to and engagement with nature through an intervention can affect health, both physiologically and psychologically, and these effects can vary between different people. Various theories have been proposed to explain the mental health benefits of exposure to natural environments. These include improving mental health by counteracting stress and increasing the ability to focus and concentrate, known as 'Attention Restoration Theory'. Emerging evidence around enhanced immune function, and improvements in the cardiovascular and respiratory systems is promising and provides some basis for observations linking better health with time spent in nature.

> *One of the most common bits of feedback that we get from people is that they don't feel judged and they feel that they are able to be themselves and they feel safe. So that makes you realise how unsafe people feel a lot of the time in their lives. They come to the wild woods and they feel safe. (Nature-based provider (Fullam et al., 2021))*

Making a difference

This includes the many different ways people can make a difference to the community and/or to the environment through taking part in nature-based activities. Examples of activities that include the 'making a difference' mechanism might include litter picking, clearing public pathways, creating a piece of art for the community, helping with a community event, or growing vegetables for a local food scheme.

Activity directed toward making a difference can promote a condition whereby participants feel that their work and personal recovery becomes something that is part of a larger 'whole', in which they feel less isolated and more empowered. Moving the focus from personal to natural recovery can be a positive experience for some, and people can form a metaphorical identification with nature and cycles of growth and recovery. The link between achievement (at a scale beyond that of personal achievement) and contribution to mental health, social function, and wellbeing is well evidenced. Longitudinal research has suggested that committed social and political involvement promotes greater life satisfaction. This is supported by the UK's Mental

Health Foresight review which concluded that intentional activities, including 'striving towards goals that reflect deeply held values rather than being driven by external rewards', are strongly related to psychological wellbeing.

> *The biggest thing is providing opportunities for individuals to have that connection with nature but also to do something positive where they feel valued, valuable and they're actually making a contribution... And then, obviously, year on year you see the benefit. I think that's really important: connection with nature, somebody that you can trust and depend on but also seeing that you are contributing in a very valuable and positive way. (Nature-based provider (Fullam et al., 2021))*

Beyond the core active mechanisms associated with the nature of the activities there are numerous other factors that can affect whether or not an individual benefits. These include the types of spaces that the activities are delivered, nature and quality of leadership, and the individual participant's own motivations, perceptions, and prior experiences of factors such as nature, health services and group-based activities (Dayson et al, 2020; Fullam et al., 2021)

5.2. Wellbeing outcomes

Change in mental wellbeing when accessing nature-based activities

People experienced improved mental wellbeing when accessing nature-based activities. For each question we present average change for service users who completed both a pre and post ONS4 measure. We also consider the proportion of population change. This latter measure includes anyone who has completed a pre and/or post ONS4 measure (analysis explained in Chapter 2).

Table 37: ONS4 Overall change all sites where data were available[7]

		Pre		Post		Change		
ONS4 dimension	**N**	**Mean**	**SD**	**Mean**	**SD**	**Mean Change[8]**	**95% CI**	**P-Value**
ONS4 Happiness Change (national average: 7.4)	1267	5.3	2.5	7.5	2.0	1.9	1.3 to 2.5	<0.001
ONS4 Anxiety Change (national average 3.2)	1270	4.8	3.0	3.4	2.5	-1.0	-1.7 to -0.3	0.003
ONS4 Satisfaction Change (national average 7.5)	534	4.7	2.5	6.8	2.0	1.7	0.7 to 2.6	0.001
ONS4 Worthwhile Change (national average 7.7)	533	5.1	2.3	6.8	1.9	1.3	0.7 to 2.1	<0.001

Footnote: Overall mean change estimated using random effects meta-analysis. Consequently, the mean change presented in the table is not necessarily the direction calculation of the difference between the pre and post mean.

National ONS4 data accessed from: https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/bulletins/measuringnationalwellbeing/april2022tomarch2023

Throughout the analysis, for happiness and anxiety domains includes data from T&L sites 1,2,5,6 and 7. Throughout the analysis, for life satisfaction and worthwhile domains includes data from T&L sites 1, 2, 5 and 6. T&L7 did not collect these domains.

[7] Key of terms used in the table:

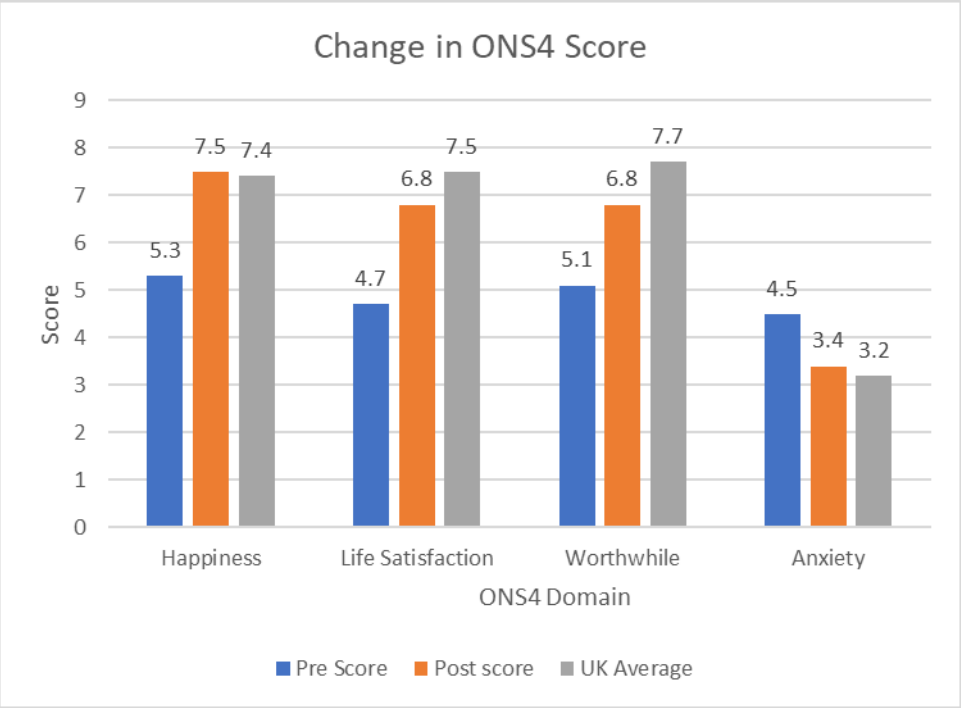
- ONS4: This measure enables people to score out of ten their perspective on aspects of their wellbeing. A higher number for feeling worthwhile, life satisfaction and happiness indicates greater wellbeing. For anxiety, the lower the score the better. Each domain is scored independently. As the score is 0-10, this is an 11 point index so a one point change would indicate around a 9% change.
- Mean: This is the average ONS4 score amongst people completing a measure.
- SD: This is 'Standard Deviation' and is how much the sample differs from the mean, the smaller the number the less diversity there is in wellbeing scores.
- 95% CI: This is the confidence interval. This means that it is anticipated that 95% of people have a mean change score within the range cited. If the number does not include '0' it indicates that the majority of people.
- Experienced a positive change.
- P value: If the P value is less than 0.05, this indicates that the identified change is statistically significant and has occurred rather than being chance alone.

[8] Overall mean change estimated using random effects meta-analysis.

Box 25: Key terms used in table

- **ONS4:** This measure enables people to score out of ten their perspective on aspects of their wellbeing. A higher number for feeling worthwhile, life satisfaction and happiness indicates greater wellbeing. For anxiety, the lower the score the better. Each domain is scored independently. As the score is 0-10, this is an 11-point index so a 1 point change would indicate around a 9% change.
- **Mean:** This is the average ONS4 score amongst people completing a measure.
- **SD:** This is 'Standard Deviation' and is how much the sample differs from the mean, the smaller the number the less diversity there is in wellbeing scores.
- **95% CI:** This is the confidence interval. This means that it is anticipated that 95% of people have a mean change score within the range cited. If the number does not include '0' it indicates that the majority of people experienced a positive change.
- **P value:** If the P value is less than 0.05, this indicates that the identified change is statistically significant and has occurred rather than being chance alone.

Figure 12: Change in ONS4 scores and national average ONS4 scores (April 2022-March 2023)



National ONS4 data accessed from:
https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/bulletins/measuringnationalwellbeing/april2022tomarch2023

Footnote: Throughout the analysis, for happiness and anxiety domains includes data from T&L sites 1,2,5,6 and 7. Throughout the analysis, for life satisfaction and worthwhile domains includes data from T&L sites 1, 2, 5 and 6. T&L7 did not collect these domains.

The analysis highlights that **across the sites who collected data, there was a statistically significant improvement in mental wellbeing for all of the four ONS4 domains when people access GSP**. This data is presented for people with both pre and post ONS4 score so demonstrates individual change across the sample. In the sample, people's wellbeing was lower than the national average before receiving GSP support (scores highlighted by red in Table 37). Post support, happiness had increased to the point that it was above the national average (7.5, national average: 7.4). For the other three domains, there was a statistically significant improvement, but the mean score for life satisfaction, happiness and anxiety indicated a lower level of wellbeing than the national average. However, given that the programme was aimed at people

with mental health issues, a statistically significant improvement in wellbeing demonstrates that the GSP is having a positive impact. Furthermore, given that many people continue to attend nature-based activities, they may experience further improvement.

Alongside mean change, we were interested in the proportion of people that moved from lower to higher categories of mental wellbeing. This is described below, broken down by each of the ONS4 domains alongside an explanation of the individual change presented above (Table 37).

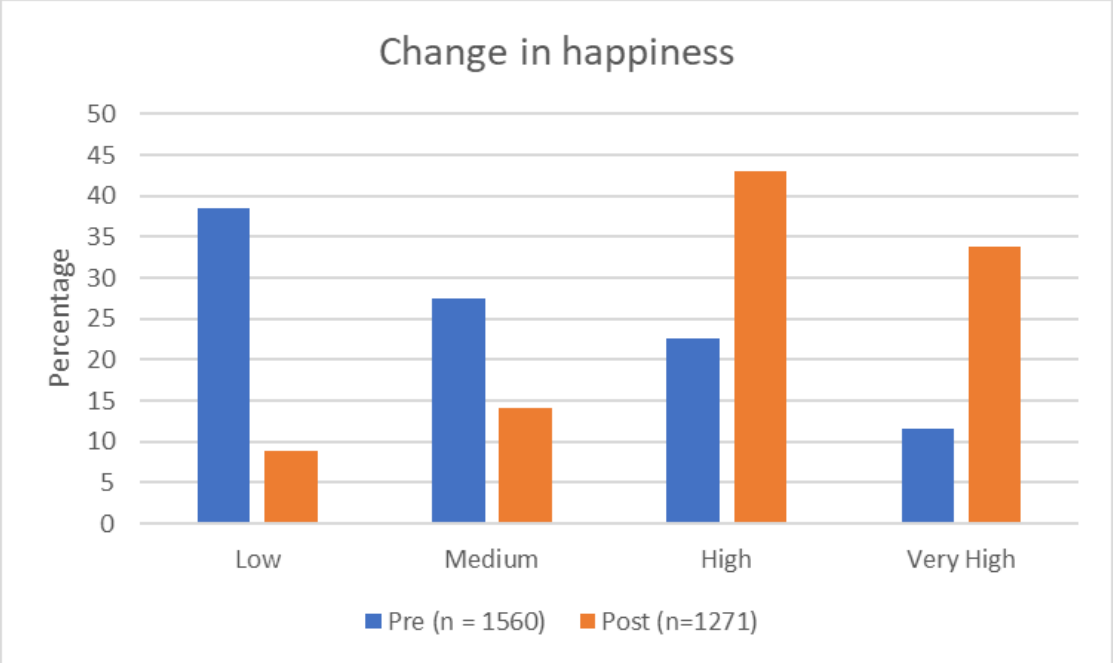
Happiness

There was a statistically significant increase in happiness from 5.3 to 7.5 (1.9, 95% CI:1.3 to 2.5, *p*=<0.001) (n=1267). Overall, 72.1% (913/1,267) had an increase in happiness score. Furthermore, as a population there was a considerable reduction in the proportion of people being considered as having a low level of happiness from before and after accessing GSP (Pre: 38.5%, n=600/1560. Post: 8.9% n=113/1271). The analysis excluding participants without both a pre and post measure shows that 40.3% (510/1,267) that had low happiness before accessing GSP reduced to 8.8% (112/1,267) after the activity. McNemar's test comparing the paired data shows a statistically significant change *(p*=0.001). Furthermore, the proportion of people categorised as having high levels of happiness was comparable to national averages after they accessed GSP (GSP; 43.1% v national average: 43.8%).

Table 38: Change in happiness categories

Category	Pre (n = 1560)	Post (n=1271)
Low	600 (38.5)	113 (8.9)
Medium	427 (27.4)	181 (14.2)
High	353 (22.6)	548 (43.1)
Very High	180 (11.5)	429 (33.8)

Figure 13: Change in happiness



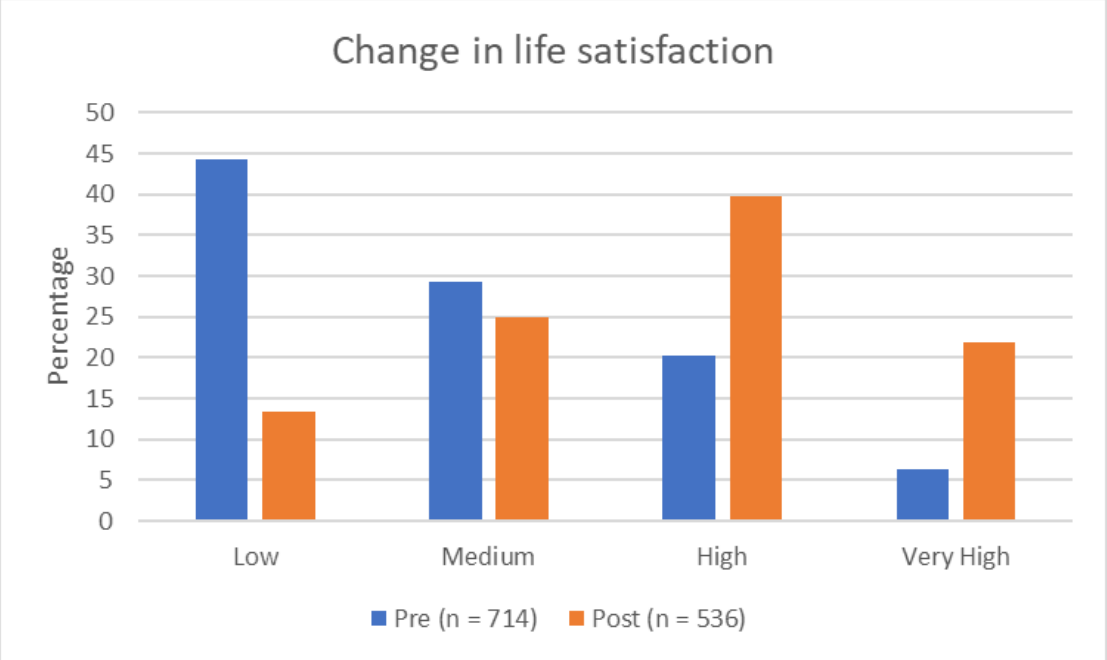
Life satisfaction

There was a statistically significant improvement in life satisfaction when people accessed GSP. There was an increase from 4.7 to 6.8 (1.7, 95% CI: 0.7 to 2.6, p=0.001) (n=534). Overall, 70.4% (n=376/534) had an increase in life satisfaction score. We then undertook an analysis of people who just had a pre and post ONS4 score. In this analysis we found that 47.9% (n=256/534) had low life satisfaction before accessing GSP and this reduced to 13.5% (n=72/534) after the activity. McNemar's test comparing the paired data shows a statistically significant change(p=<0.001).

Table 39: Change in life satisfaction

Category	Pre (n = 714)	Post (n = 536)
Low	316 (44.3)	72 (13.4)
Medium	209 (29.3)	134 (25.0)
High	114 (20.2)	213 (39.7)
Very High	45 (6.3)	117 (21.8)

Figure 14: Change in life satisfaction



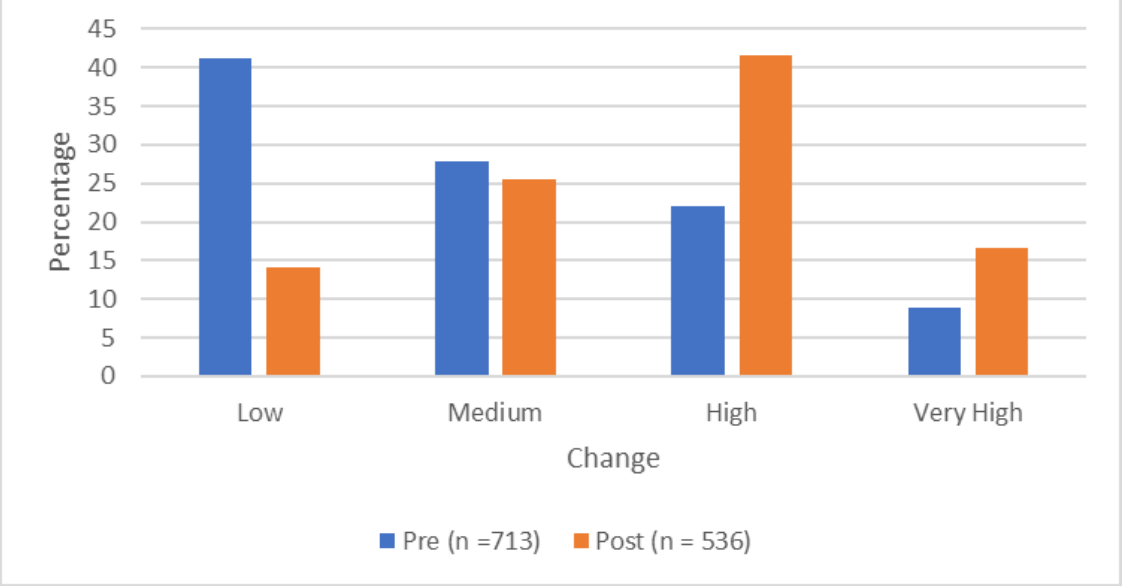
Life worthwhile

There was a statistically significant improvement in whether people felt their life was worthwhile amongst people accessing GSP (1.3, 95% CI:0.7 to 2.1, p=<0.001) (n=533). Overall, 65.7% (n=350/533) had an increase in the worthwhile score. The analysis, excluding participants without both a pre and post ONS4 score shows that 46.5% (n=248/533) had a low worthwhile score before GSP and this reduced to 14.3% (n=76/533) after the activity. McNemar's test comparing the paired data shows a statistically significant change (p=<0.001).

Table 40: Change in whether life is worthwhile

Category	Pre (n =713)	Post (n = 536)
Low	294 (41.2)	76 (14.2)
Medium	199 (27.9)	137 (25.6)
High	157 (22.0)	223 (41.6)
Very High	63 (8.8)	100 (18.7)

Figure 15: Change in whether people consider their life is worthwhile



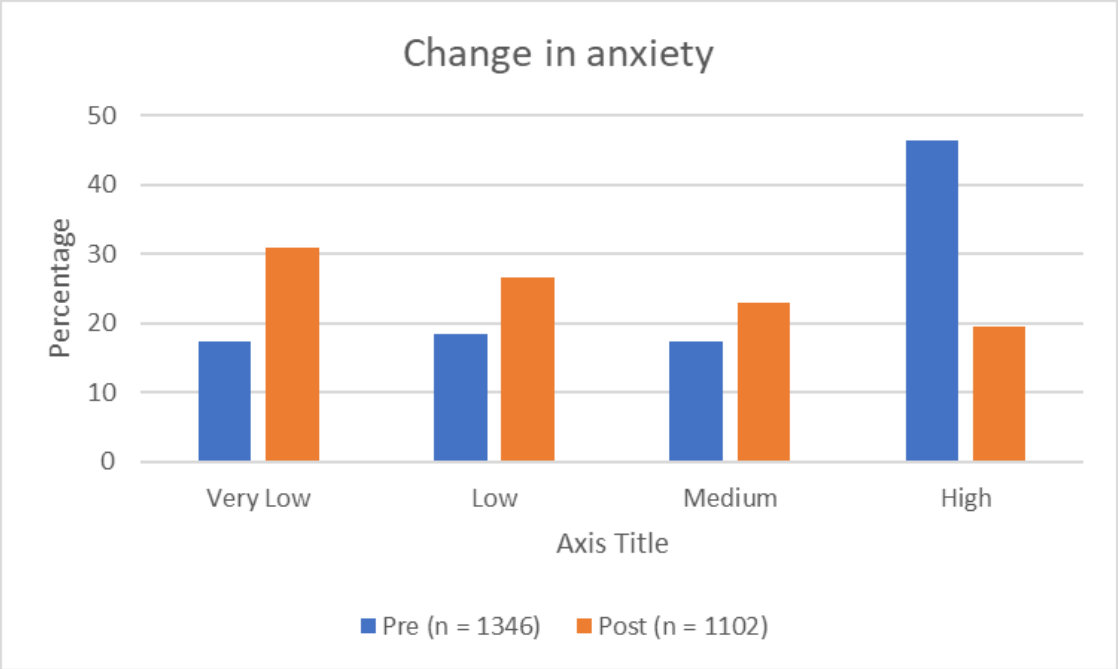
Anxiety

There was a statistically significant improvement in people's anxiety when accessing GSP. There was a decrease from 4.8 to 3.4 (-1.0, SD: -1.7 to -0.3, *p*=0.003). Overall, 57.7% (n=733/1,270) had a decrease in anxiety score. This is important given that GSP is seeking to improve mental health outcomes. The analysis, excluding participants without both a pre and post ONS4 score, demonstrates that 47.0% (n=597/1,270) had high anxiety and this reduced to 21.0% (n=267/1,270) after the activity. McNemar's test comparing the paired data shows a statistically significant change (*p*=<0.001). After receiving support, the proportion of people having very low anxiety was comparable to the national population (32.8%). This is again positive given that over 80% of people accessing GSP had mental health issues.

Table 41: Change in anxiety

Category	Pre (n = 1346)	Post (n = 1102)
Very Low	236 (17.5)	340 (30.9)
Low	249 (18.5)	294 (26.7)
Medium	236 (17.5)	253 (23.0)
High	645 (46.4)	215 (19.5)

Figure 16: Change in anxiety



Change in anxiety and depression in T&L1

Alongside the ONS4, T&L1 utilised the Hospital Anxiety and Depression Scale (HADs) (Stern, 2014). This measures whether someone is experiencing depression and or anxiety. Completing the measure on more than occasion, e.g., before and after accessing a nature-based activity enables changes in symptoms to be captured. In relation to both anxiety and depression, people experienced a statistically significant improvement in anxiety and depression symptoms. Both measures are out of 21, with a score of under eight indicating that the person does not have a clinical level of depression or anxiety. In terms of depression, the cohort mean score reduced from 8.1 to 5.6, that is, from a 'mild' level of clinical depression to a non-clinical level. In terms of anxiety, there was a decrease from 11.1 to 8.5, indicating a change from 'moderate' levels of anxiety to a 'mild' level of clinically diagnosed anxiety. This reflects that GSP was supporting people primarily with pre determinant and moderate levels of mental health issues, The decrease is positive as indicates that people did experience an improve in their anxiety and depression symptoms, to the point that they are either no longer meeting the clinical cut-off or are only just above the point of a clinically diagnosable level of anxiety (score of eight).

Table 42: Change in depression and anxiety as measured by HADs in T&L1

		Pre		Post		Mean Change	95% CI	P-Value[1]
	N	Mean	SD	Mean	SD			
Anxiety	171	11.1	4.7	8.5	4.0	-2.6	-3.4 to -1.9	<0.001
Depression	171	8.1	4.5	5.6	4.4	-2.5	-3.3 to -1.8	<0.001

5.3. Limitations of the data

There are a number of limitations of the monitoring data we received including:

- The monitoring data is only for a proportion of people that accessed GSP as it was reliant on nature-based providers to collect data including outcome measures.
- There are limitations of outcome measures like ONS4 in terms of people feeling they need to give a positive response because of loyalty to their service provider or people having a 'bad' day when responding to a measure. There may be some measurement errors amongst individual providers. Both of these issues are related to using outcome measures in routine practice and are not purely related to GSP. By aggregating the outcome measures across the sample because it should overcome some of these issues.
- Providers were delivering different types of nature-based activities for different lengths of time. We explored whether there were changes in wellbeing across GSP as the remit was to explore programme changes, but it could be that some interventions were more effective than others.
- People could be accessing other support alongside nature-based activities which may have contributed to improved wellbeing. For example, someone may have started on a new antidepressant at the same time as accessing nature-based activity. Thus, we do not know how much impact the nature-based activity has had compared to other support a person may be accessing. However, this issue is relevant for any study where there is no control intervention.
- Providers collected post outcome measures at different stages. For some it was when an activity completed but in other cases it was whilst someone was still attending the activity. Thus, the data includes those who had finished and were still attending the nature-based activity. This may impact on effect size e.g., people still attending may experience further improvement in their wellbeing whilst accessing the programme.
- Data is not included from two sites (described in the methodology). One site was not included because it did not collect post-support data. The other site did not use the ONS4 but a unique measure they had chosen which meant it was not possible to include it within this overall analysis.

Despite these challenges, the data does indicate that GSP is having a positive impact on people's mental wellbeing. Our findings are also supported by the wider evidence about the positive impact that accessing nature-based activities have on improving mental wellbeing.

5.2.1. Change in nature connectedness

Two sites collected the nature connectedness outcome measure to explore whether people felt more engaged in nature following GSP. However, the data was poorly completed with a number of errors in the data and potentially the measure collected the wrong way round by some providers. In T&L2, there was an improvement in people's nature-connectedness with a change from 6 out of 7 to 4 (decrease indicates an improvement) (n=46). In T&L6, amongst the n=171 that completed the measure, the interquartile range did not change indicating that generally across the sample people may not have experienced an improvement in their nature connectedness. However, as explained initially there was considerable measurement error in the nature connectedness measure making it difficult to quantifiably interpret the impact of GSP on people's engagement with nature. Separate from the quantitative data, the qualitative data has highlighted that GSP has helped some people to engage more in

nature. Future studies may want to collect nature connectedness scores to develop the evidence base in relation to GSP.

5.2.2. Change in physical activity

T&L6, collected data on whether people had increased their physical activity following a nature-based activity and showed a statistically significant improvement. The analysis, excluding participants with missing data, shows that 84.2% (n=224/266) of participants did exercise in the last seven days before the nature-based activity and this increased to 94.7% (n=252/266) after accessing the activity. McNemar's test comparing the paired data shows this is statistically significant *(p*=0.001). Furthermore, almost two thirds of people that had not undertaken physical activity before accessing nature-based activity, had increased their physical activity when accessing GSP (62.5%, n=35/56).

Table 43: Change in Physical Activity levels in T&L6

		After Activity		
		Yes	**No**	**Total**
Before Activity	**Yes**	222	2	224
	No	30	12	42
	Total	252	14	266

5.4. Experiences of stakeholders and participants

Interviews with service users and professional stakeholders also revealed the ways in which GSP was considered to or experienced to benefit mental health. Participants discussed the different types of benefits and ways in which it had impacted mental health outcomes. They also briefly discussed the ways in which benefits come about.

5.3.1. Participants

In the interviews and case studies service users were overwhelmingly positive about their experiences of GSP and listed several outcomes from their activities such as: socialising and becoming less socially isolated, learning new skills (such as drawing), feeling more connected to the local area, being with likeminded people with similar experiences, appreciating nature, peer support, losing weight, making friends, accessing nature by themselves outside of the support, encouraging others to access nature, increased physical exercise, better quality sleep, finding out about/accessing other groups and reduced use of alcohol.

> *It helps me relax, feel tranquil and stops me thinking about alcohol. Stops me thinking about alcohol and getting back into bad habits. (Service user, T&L5)*

> *After the [name of group] I feel joyful, happy, feel calm, have a sense of achievement and I feel my wellbeing increasing. I look forward to attending. (Service user, T&L 5)*

Others also discussed an increased appreciation for nature, describing *"taking notice*" of nature by drawing or taking pictures. Crucially, some discussed improvements in mental health, including feeling genuinely "*happier*" and more "*relaxed":*

It's amazing, it's so lovely. And relaxed. You know, so some days… well, on the first occasion I just got my sketchbook, and I just went and sat out in the walled garden because it was so lovely and warm; it was September, early September…there were all the butterflies and everything and… I just went and sat and I just shut my eyes and I just got my face to the sun and listening to the birdsong and it were absolutely amazing. (Service user, T&L2)

I've started doing [name of service], and, it's like obviously to learn you about enjoying nature more, so we go for walks, we do things near' woods, so like we'll make fires, and, um, do all stuff like that. And obviously everybody there, you know, shares stories. But nice to, like, even though we're doing a lot of nature stuff outdoors, we're all, like, getting along and opening up, and then making friendships out of it. (Service user, T&L2)

In turn, one participant has been seeing their doctor less as a result of GSP:

At the moment, I just go continually because I had medication so I see [the doctor] every couple of weeks [inaudible]. Before, it was - I'm six months this group, I cut down, I don't see [the doctor] as much like where I'm used to be… Because I'm come here is happy. (Service user, T&L5: note English not their first language)

Several other interviewees, who had experienced poor mental health for several years, recommended GSP as an alternative treatment for mental health issues:

It works better than medication for me...It works better than CBT for me. Most of my stuff is related to trauma, so NICE guidelines don't recommend medication for borderline personality disorder. I have my counselling and that is really, really valuable, but this is on a par with that. Medication, no, I take a little bit of medication but a lot of it I haven't found helpful. I don't take antidepressants or anything, this is kind of one day a month of antidepressant. (Service user, T&L7)

I've took antidepressants for 19 years and it's not changed the way I feel. But doing what I've been doing, like obviously going out for walks, getting in nature, meeting up with people, these are things are helping me. So all I'm asking for is some therapy to further me on, you know, in, like, trying to get more help. And it's like, well, why don't you take some more antidepressants? And it's like, that's not always the answer for everybody. (Service user, T&L2)

Experiencing and connecting to nature was an important pathway for a number of the service user interviewees. Some spoke of the wider impacts that participation has had on how they feel about the environment. Others discussed a perception that nature was the 'best medicine':

I would 100% recommend it… I think a more natural approach to things… you know, getting people out in the fresh air and… you know, I think more should be focused on that…You connecting with nature and… oh, it's definitely made me look - you know, I've take dog for a walk now, and I will take a photo or a tree and I'll get close up and have a look at moss growing on a brick wall. You know, it makes me - and, it's good for your soul, it really is good for your soul. So less focusing on - because I am on antidepressants. Less focusing on quick fix medications and more focusing on getting people out there and getting fresh air and, you know, connecting with nature more…Because it's best medicine, best medicine. (Service user, T&L2)

For some service users, other benefits related to being around "like minded" people who were experiencing similar issues and who could provide peer support. This was argued to be one of the key mechanisms for mental health benefit:

… when I do things with [name of organisation] … it's giving me something to focus on and people will talk to me and you're not judged, nobody judges anyone cos the people that go with [name of organisation], they've all got issues… So we all meet up and we chat about, not about our health but we just chat about everyday things and what you've been doing and so it kind of like helps and they do café stops in between as well so they treat us to a cup of tea or hot chocolate or a coke which I think is fantastic, it's like bringing us all together. When you're in a group and they bring you together, all the bad rubbish that goes through your head or whatever you've got wrong with you, it sort of like goes out the window cos they talk to you and give you time, they give you time, that's the most important thing, they give you time. (Service user, T&L3)

5.3.2. Perspective of providers, Link Workers and other professional stakeholders

The providers, Link Workers and other professional stakeholders who were involved in the evaluation through the survey or interviews had positive perceptions of the benefits of nature-based activities. A broad range of impacts, from directly to mental health outcomes, through to secondary impacts to employment and so on, resulting from of participation in the GSP activities delivered through the programme were highlighted by respondents from all sites:

We have watched significant changes in adults and children. Primarily an increase in confidence and self-belief and a willingness to try and have a go. We are a very passionate team and strive to challenge people to move them forward. We have achieved many successes and many people have started through the green social prescribing project and gone on to secure employment and live more fuller lives. In particular we have 4 young people who have worked for us for one year now, all had mental health issues, but were not referred through NHS services, or even recognised as having issues. We have paid for counselling and other therapy privately and each has benefitted immensely and started 'having' a life where they had none. Each of their parents has thanked us for giving back their child or for getting them out of their bedrooms. The change is incredible, they are completely different people from a year ago. Shy, quiet, 19 - 26 yrs old who struggled to speak, be involved, had no confidence, no goals, multiple issues. They know we believe in them and they have responded to that incredibly positively. We don't believe in giving up on anyone. We find ways for people to move forward, we think outside the box and get outcomes for them. (T&L7, Provider)

One green provider in T&L7 discussed how GPs had phoned and thanked them as two of their patients, who were frequent GP attendees, had not visited since starting GSP activities.

The potential of GSP to bridge a perceived gap in mental health support was highlighted by several participants in the evaluation:

I think it is a really important project. There isn't much support for people struggling with mental health other than going on tablets and going on a huge waiting list for therapy. This is a great way of getting people out of the house, reconnecting to the land and nature. (T&L5, LW)

There were positive perceptions that the GSP project had managed to reach groups with particular need:

We have been able to respond to a need in the community. Prior to this project and the associated funding, we were unable to provide supported opportunities to engage the community with our Gardening. Now, we are able to accommodate

a multitude of needs within our supported Gardening Group. By gaining this reputation, we have in turn had social prescribers refer to all of our offerings (art, cookery, lunch club). (T&L7 Provider).

Due to the groups we work with being marginalised and minoritised communities it has had an outstanding impact on those people's lives. (T&L2 Provider)

However, there were words of caution. The potential benefits are challenged by the structure of GSP:

Short-term nature of projects makes setting up a new habit unattractive, because people may be left high and dry afterwards. (T&L7 LW)

6 Understanding the value for money of the Green Social Prescribing Project

Summary

Value for money evaluation aims to make a judgement about the economy, efficiency and effectiveness of investments compared to 'business as usual'. In whole systems approaches like the GSP project a **nuanced and context sensitive approach is needed** to take account of the **heterogeneity of inputs, activities, outputs and outcomes** involved and the **multi-scalar dimensions of delivery** (i.e., national government departments and partners, Integrated Care System, nature-based providers).

GSP project level findings

The **£5.77m GSP project funding** included £4.27 million from the HM Treasury Shared Outcomes Fund and £1.5 million from national partners. This funding was spent in a variety of ways. Locally, **£3.5m was invested in seven Test and Learn sites** who chose to spend the money on numerous components of project delivery. The two most prominent areas of expenditure were **project management** and **investment in the capacity of nature-based providers**. The remaining resource was invested in **evaluation, a programme of national research and additional national support and resources** to support the scale, spread and sustainability of GSP.

Matched funding and **in-kind resources** were a key feature of the added value of the Test and Learn sites. The **Test and Learn sites leveraged £1.66 million** in matched funding (£1.48m) from public sector and philanthropic sources and in-kind resources (£0.18m) from local partners. They were also able to **secure investment from their local health system and other sources worth £1.31m to continue their projects in 2023/24** after the Shared Outcomes Fund investment had ended.

When all of the matched funding and in-kind resources at a site level are combined it amounts to an **extra £2.98m**, equating to an **additional 52 pence (£0.52) for every pound (£1) invested in the project overall and 85 pence (£0.85) for every pound (£1) directly invested at a site level** by HM Treasury Shared Outcomes Fund and national partners.

Project level outputs were assessed through **the number of people participating in nature-based activities in each Test and Learn site.** Based on 8,339 people participating in nature-based activities through the GSP project, the **cost per output (cost-efficiency) was £419 per person participating in nature-based activities**. This varied between sites from £223 to £4,201 reflecting the respective focus and activities undertaken by different projects. Whereas some sites provided grants to large numbers of nature-based providers to support the project others placed more emphasis on systems change and collaboration. This means comparison between sites of their relative cost-efficiency is not advised.

Nature-based provider level findings

Nature-based activities were **delivered through direct investment from the Test and Learn sites and income and resources leveraged from other sources**. Activities ranged in scale from very small (expenditure £4,500) to projects on a much larger scale (£81,364). The **additional funding and resource brought to the GSP project by providers has an added value of 67 pence for every pound (£1)** invested by the Test and Learn sites. Five providers brought in more resources than they received, up to an additional five pounds and twenty-seven pence (£5.27) for every pound (£) invested.

Nature-based providers supported between 12 and 183 people depending on the amount of resources they had, and the severity of mental health their project targeted. The **average cost per participant engaged in nature-based activities was £507** but costs ranged from £97 to £1,481. The **average cost per mental health or wellbeing outcome improvement was £619** with costs ranging from £225-£1,777 (partial data excluded).

Compared with other interventions for people with mental health needs such as behavioural activation (£231- £250 for 10 sessions), CBT (£1,060 for 10 sessions), early intervention for psychosis (£4,043 for the first year) and collaborative care for depression (£858 over 6 months), **nature-based activities appear to be a relatively cost-efficient way to support people across a wide spectrum of mental health needs**. It is important to recognise, however, that for many people, the most appropriate course of action to support their mental health will be to access different types of intervention in combination.

Social prescribing Link Workers

The average cost of a social prescribing Link Worker referral was relatively consistent across the Test and Learn sites, ranging from £145-£163. This means the **'full cost' of making a GSP referral** (the combined cost of a GP appointment, Link Worker referral and participation in nature-based activities) **is estimated to range from £284-£1,686** (although note that a minority of participants in the GSP project went through this referral route). This wide range reflects the broad spectrum of mental health needs that these activities cater for, with those offering universal access or catering for people with predominantly mild mental health needs tending to cost less to deliver per person than those for people with moderate and more severe needs. Looking across the green social prescribing pathway, the evidence suggests that **green social prescribing can be considered a relatively cost-efficient intervention when compared to other types of support for people with similar mental health needs**.

Valuing the benefits of GSP

The benefits of the GSP project can be valued monetarily in a number of ways. 1) They can be valued in terms of **matched and in-kind investment in projects and activities**, as outlined above. 2) They can be valued in terms of value to the health system and **savings associated with preventing or reducing the need for more acute forms of care**. As nature-based activities are relatively low cost, it would not take many episodes of acute care to be prevented (less than ten) per provider for them to save more resources than they cost to deliver.3) They can be valued in terms of **the wider economy, which is actually where most of the costs of mental ill-health fall**. This means a future public investment case for GSP should take into account the potential value of these wider benefits rather than a narrow focus on savings to the health system. 4) They can be valued in terms of **what matters to individuals**, staying true to the founding principles of social prescribing.

We used a WELLBY approach to estimate t**he value of improvements in individual life satisfaction** experienced following participation in nature-based activities. Allowing for sensitivity adjustments to prevent overclaiming, the value of WELLBYs estimated to have been created through the GSP project ranged from £7.6 million to £23.3 million, with a central estimate of £14.0 million. This means that t**he (social) return on investment of the GSP project ranged from £1.02 to £3.13 for every pound (£1) invested in the GSP project by central Government and the Test and Learn Sites, with a central conservative estimate of £1.88**.

This chapter considers the value for money of the Green Social Prescribing (GSP) Project. It begins by discussing what value for money is and setting-out some of the challenges of applying it to complex whole systems projects before presenting findings in relation to inputs, outputs and outcomes at different levels and mechanisms of project delivery.

6.1. What is value for money?

In evaluation, value for money (VFM) refers to a judgement about the optimal use of public or charitable resources associated with a particular investment and its stated aims and objectives. Typically, all social, economic, and environmental benefits associated with an investment are compared with alternative options or a 'business as usual scenario' and framed in terms of:

- **Economy:** was the project economically advantageous (i.e., spending less per output, or overall)?
- **Efficiency:** did the project deliver the intended volume of activities/outputs in relation to costs?
- **Effectiveness:** did the project achieve a high volume and/or range of outcomes in relation to costs?
- **Equity:** the extent to which services are available to and reach all people that they are intended to. This means that some people may receive differing levels of service for reasons other than differences in their levels of need.

With whole system approaches such as those undertaken through the GSP project, which involve significant levels of activity at a system level in combination with delivery of services, a traditional value for money approach is neither feasible nor applicable. The goal of whole systems approaches is not to deliver at the lowest possible cost, provide the largest number of outputs, or achieve the highest number of individual outcomes. Rather, it is to produce transformational or lasting change at a system or societal level which may lead to greater efficiency and effectiveness in the longer term. The HM Treasury Green Book, which outlines the Government's thinking about and preferred approaches to economic evaluation, recognises that transformational system changes are hardly ever brought about by individual projects or programmes. Instead, they require strategic portfolios of programmes grouped into related subjects but that do not necessarily lend themselves to traditional economic evaluation approaches.[9]

Quantitative data collection to support VFM analysis within whole systems approaches is notoriously challenging. For this evaluation, a bespoke VFM methodology was developed to capture evidence about the inputs, outputs, outcomes, and associated costs of different components of the GSP project, focussing on key mechanisms and components at a project level and along a 'typical' GSP service pathway. The analysis also relied upon qualitative insights from national partners, Test and Learn sites and nature-based providers to ensure that the findings were reflective of key contextual factors. In keeping with the rest of this evaluation the approach was informed by an up-to-date understanding of realist and whole system evaluation methodologies to account for the complex nature of the GSP project.

[9] HM Treasury (2022). The Green Book: Central Government Guidance On Appraisal And Evaluation (Appendix A7 – Transformation, Systems and Dynamic Change, p 122).

6.2. GSP project inputs, outputs and outcomes

This section considers inputs, outputs, and outcomes for the GSP project as a whole. It explores value for money on two levels: the national level, focusing on the contributions of the national partners; and the Test and Learn sites, focussing on how resources were allocated and what resulted from these. Note that the purpose is not to compare inputs, outputs, and outcomes at site level to assess whether one site provided 'better' value for money than the other. Rather, it is to highlight the variation between sites and consider the implications of this variation for the value for money of the GSP project as a whole.

6.2.1. Project level inputs

Overall, the GSP project provided £5.77 million in national level funding over two years (2021-23). This funding was made up of the following financial contributions and was in addition to in-kind partner commitments (staff time etc):

- £4.27 million from the HM Treasury Shared Outcomes Fund.
- £500,000 from NHS England.
- £500,000 from the National Academy for Social Prescribing (NASP).
- £500,000 from Sport England.

A large proportion of this resource (£3.5 million) was invested in the seven Test and Learn sites (c.£0.5m per site) to support the implementation of the project within Integrated Care Systems (led by NHS England with support from other partners). The remaining resource was invested in evaluation (led by Defra), a programme of national research (led by DHSC) and additional national support and resources (toolkits, promotion and awareness raising, events etc) to support the scale, spread and sustainability.

Table 44 provides a high-level breakdown of how the Test and Learn sites allocated their resources to different aspects of delivery. A number of caveats are required when interpreting this data, as the use of categories can simplify what is a complex picture. For example, in some sites, investment in nature-based providers included resources to undertake co-production, so these costs are not included in this column. Further, some sites made additional investments in nature-based providers under other cost categories, for example as part of co-production and delivery of training. These nuances are not captured but provide some important context to the allocation of resources.

It shows that the two largest cost categories were project management (£1.33m; 39%) and investment in nature-based providers (£1.44m; 42%). Table 44 also highlights the array of work undertaken at site level and how it varied by site. Whilst some sites (e.g., 2, 5 and 7) opted to invest at least 50% of their resource into frontline delivery by nature-based providers other sites (e.g., 1, 4 and 6) focused more investment on project management and system level work such as co-production. Project management costs varied quite widely, from £255,000 (57%) in site six to £140,000 (28%) in site five. This heterogeneity in how the Test and Learn sites allocated their GSP project funding reflects strategic priorities and need identified at a local level and means that a simplistic value for money assessment based on a small number of economy, efficiency or effectiveness measures is inadvisable. Instead, it supports the call for a more nuanced analysis of value for money that considers different types of inputs, outputs and outcomes at different levels that takes context into account.

Table 44: GSP project resource allocation at Test and Learn site level

Site		Infra-structure	Project Management	Co-production*	Nature-based providers**	Developing Green Network	Local Evaluation	Training and development	Admin and Comms	ICT	Contin-gency
		£	£	£	£	£	£	£	£	£	£
1	£	n/a	£227,725	£60,000	£96,971	n/a	£17,679	n/a	n/a	£10,882	£10,539
	%		54%	14%	23%		4%			3%	2%
2	£	£9,286	£152,314	£13,100	£250,000	£45,900	£14,400	£15,000	n/a	n/a	n/a
	%	2%	30%	3%	50%	9%	3%	3%			
3	£	£14,438	£184,438	£25,000	£245,510	n/a	n/a	n/a	n/a	n/a	£30,615
	%	3%	37%	5%	49%						6%
4	£	£35,000	£217,600	£77,500	£107,700	£16,750	£28,750	£11,500	n/a	n/a	£4,200
	%	7%	44%	16%	22%	3%	6%	2%			1%
5	£	n/a	£140,000	n/a	£360,000	n/a	n/a	n/a	n/a	n/a	n/a
	%		28%		72%						
6	£	n/a	£255,000	£70,000	£115,000	n/a	£37,500	£20,000	£2,500	n/a	n/a
	%		51%	14%	23%		8%	4%	1%		
7	£	£50,000	£157,250	£1,800	£261,750	£3,000	n/a	£15,000	£11,200	n/a	n/a
	%	10%	31%	0%	52%	1%		3%	2%		
Total	£	£108,724	£1,334,327	£247,400	£1,436,931	£65,650	£98,329	£61,500	£13,700	£10,882	£45,354
	%	3%	39%	7%	42%	2%	3%	2%	0%	0%	1%

Source: Management information collated by NHS England Social Prescribing Team from their monitoring of the GSP Memorandum of Understanding (MOU).
Note that the site level rows do not all sum to exactly £500,000 per site due to underspend or unallocated resource.
*In some sites, investment in nature-based providers included resource to undertake co-production, so these costs are not included in this column.
**Some sites made additional investments in nature-based providers under other cost categories, for example as part of co-production and delivery of training.

One of the ways in which the Test and Learn sites were able add considerable value to the investment from central government was through the leveraging of matched funding and other in-kind resources. Table 45 provides an overview of this leverage at a Test and Learn site level for 2023-24. It shows that in total, **the Test and Learn sites were able to leverage £1.66 million in matched funding (£1.48m) and in-kind resources (£0.18m)**. This equates to an additional 29 pence (£0.29) for every pound (£1) invested in the GSP project by central government. If only the funding that was directly allocated to Test and Learn sites is considered the figure is 48 pence (£0.48) for every pound (£1) invested. If additional resources are invested in GSP at site level beyond 2023-24 then this rate of return will increase. Matched funding sources included philanthropic funders such as NHS Charities Together, national lottery distributors such as Sport England, and local health and care system funding in areas such as health inequalities, mental health transformation and public health. In kind resources tended to involve staff time from health and care system partners, including staff seconded to support the delivery of the project.

A further component of the value for money of the GSP project is how the Test and Learn sites have been able to secure additional investment from the health system and other sources to continue their project for a further year (2023-24) when the Shared Outcomes funding ended. Table 45 provides an overview of these commitments at a Test and Learn site level and shows that in total, the Test and Learn sites were able to leverage **£1.31 million in continuation funding**. This equates to an additional 23 pence (£0.23) for every pound (£1) invested in the GSP project by central government or 38 pence (£0.38) for every pound (£1) directly invested at a site level.

When all of the matched funding and in-kind resources at a site level are combined and compared with the amount of money invested in the GSP project by central government, it amounts to an **extra £2.98m**, equating to an **additional 52 pence (£0.52) for every pound (£1) invested in the project in total and 85 pence (£0.85) for every pound (£1) directly invested at a site level**.

Table 45: GSP project matched funding and in-kind resources leveraged at Test and Learn site level

Site	Matched Funding	In-Kind Resources	Resources Committed for 2023-24*
1	£206,453	£104,000	£279,000
2	£234,138	£8,144	£100,000
3	£247,837	£12,500	£50,000
4	£100,000	£55,097	£90,000
5	-	-	£640,000
6	£292,000	£2,342	£104,000
7	£402,000	n/a	£50,000
Total	***£1,482,428***	***£182,083***	**£1,313,000**
		£1,664,511	
			£2,977,511

Source: Management information collated by NHS England Social Prescribing Team from their monitoring of the GSP Memorandum of Understanding (MOU).
*A number of these figures were interim at the point the analysis was undertaken.

6.2.2. *Project level outputs*

Given that the overall aim of the project was to develop and grow GSP in order to prevent and tackle mental ill-health, the primary output measure used is ***the number of people participating in nature-based activities in each Test and Learn site***. Although the Test and Learn sites delivered a wide range of other outputs - including network meetings, co-production sessions, grants, workshops, and training – these varied quite widely by site and information was not collected on a systematic basis. Similarly, the national partners also delivered a wide variety of outputs not included in this table such as community of practice webinars, a 'one year on' learning event, and a GSP tool kit. Detailed descriptions and discussion of the range of things the GSP project delivered are embedded through the other sections of the report.

Table 46 provides an overview of the key outputs achieved by the Test and Learn sites and the cost per person participating in nature-based activities (cost per output/cost-efficiency). Overall, based on 8,339 people participating in nature-based activities through the GSP project, the average cost per output was £419. However, this masks considerable variation between the test and learn sites. The number of people participating in nature-based activities varied 493 in T&L site 6 to 2,240 in T&L site 2, with the cost per output varying from £223 to £4,201. These variations reflect the respective focus and activities undertaken by different projects. Whereas T&L sites 1, 2 and 3 provided grants to large numbers of nature-based providers to support the project T&L sites 4 and 6 placed more emphasis on systems change and collaboration. In this context comparison between sites of their relative cost-efficiency is not advised.

Table 46: Outputs: overview of the number of people supported to access nature-based activity and average cost per person participating in nature-based activities at Test and Learn Site level

Site	No. people referred to nature-based activities	Cost per person participating in nature-based activities
T&L1	1,570	£318
T&L2	2,240	£223
T&L3	1,654	£302
T&L4	119	£4,201
T&L5	1,082	£462
T&L6	493	£1,014
T&L7	1,181	£423
Total	**8,339**	**£419**

Source: Management information collated by NHS England Social Prescribing Team from their monitoring of the GSP Memorandum of Understanding (MOU).

6.3. Nature-based provider inputs, outputs and outcomes

This section considers inputs, outputs and outcomes for nature-based providers who received referrals from the GSP project (i.e., via the Test and Learn sites) and/or were involved in other aspects of the project at a site level (e.g., participated in green networks). Nature-based providers are a vital aspect of GSP: they develop and provide nature-based activities, often at a hyper local level, and take referrals from social prescribing Link Workers and other parts of the health system to address a wide range of psycho-social needs (including mental health needs).

For this value for money assessment, it has been important to disentangle the costs of nature-based providers from the overall costs of the GSP to enable some comparison with other types of support for people experiencing mental ill-health: how does the cost per output/outcome of different types of nature-based activity compare with other similar forms of care? As with the previous section (6.2) the purpose is not to compare inputs, outputs and outcomes of different providers to assess whether one offers 'better' value for money than the other. Rather, it is to highlight the variation between providers and consider the implications for the value for money taking account of different factors, contexts and circumstances.

Overall, a sample of 13 nature-based providers from six Test and Learn sites provided detailed information about their inputs, outputs and outcomes linked to the GSP project. They were sampled purposively to provide good coverage of the seven Test and Learn sites and the types of nature-based activities that were being provided, including different levels of mental health need. A brief description of these providers and their work is provided in Table 47. Their work covered a broad range of nature-based activities including gardening, horticulture, physical activity, ecotherapy and animal care. Aims centred around supporting improved mental and physical health, wellbeing, isolation and loneliness, social and nature connection. The activities were targeted across a broad spectrum of need to include the full spectrum of mental ill-health (mild, moderate, and severe) and other complex and long-term physical and mental health conditions including PTSD, trauma, diabetes, dementia and chronic fatigue. A number of providers sought to balance principles of universal access with the targeting of specific groups.

Table 47: Overview of nature-based providers included in value for money analysis

Provider code	Site	Nature-based activity summary	Aims	Target conditions
GSP01	7	Community gardening project	To encourage stronger social connections and wellbeing through meaningful activity and engagement with nature.	Access is universal but is targeted for people experiencing social isolation, nature disconnectedness and associated mental health issues.
GSP02	7	Wild swimming programme for women	To improve health, mental health, social capital, and wellbeing through connection with the natural world.	Works with a broad range of mental health conditions, including anxiety, stress, and depression. Also works with complex needs including trauma, PTSD and bipolar; and long-term health conditions such as chronic pain, arthritis, diabetes, high blood pressure, perimenopause and menopause, plus autoimmune illnesses such as Fibromyalgia.
GSP03	7	Inclusive, person-centred activities that are delivered outside	To promote nature connection to reduce loneliness, increase mental health and promote community.	Works in areas with high levels of deprivation but open to all adults 18+ who have experienced or are experiencing poor mental health (loneliness, low mood etc)
GSP05	6	Accessible nature walks	To improve mental wellbeing, provide gentle exercise, combat social isolation and loneliness, and provide and model communication opportunities and skills.	Targeted at people with learning disabilities, autism, and other communication needs.
GSP07	4	Adult forest school and support group	To reduce distress, loneliness, or anxiety, through free, accessible sessions in a local green space.	Works with adults with mental health needs, including stress and anxiety.
GSP08	4	Therapeutic and social activities provided in nature	To support people to make connections with nature, others, and self to improve their mental health. Aims to reduce anxiety, depression, and social isolation.	Works with people with mild to moderate mental health needs.
GSP09	4	Community garden	To use social and therapeutic horticulture principles and encourage people to care for the environment to help improve their mental health and wellbeing.	Universal access but focus on people with mild to moderate mental health needs or experiencing social isolation.

GSP13	1	Ecotherapy set within a nature reserve	To improve mental and physical wellbeing through mindful activity in nature.	Works with people with mild to moderate mental health needs.
GSP16	5	Therapeutic and social activities provided in nature	To improve mental and physical wellbeing and enable people to feel better connected to others through sustainable connections with nature. Also aims to improve green spaces so that natures' and peoples' recovery are aligned.	Universal access but offers bespoke sessions to specific groups who have moderate-severe mental health needs.
GSP18	5	Community food growing groups	To improve mental health and wellbeing through nature and social connections.	Works with people who are struggling with mental health or social isolation.
GSP19	2	Creative events and days-out designed by artists for different green spaces	To improve mental health and nature connectedness, supporting condition management, stronger friendships and support networks, increased sense of purpose and belonging, and increased positive functioning.	Targets people within moderate to severe mental health issues, including those with specific barriers to participation such as high anxiety or prolonged periods of social isolation.
GSP20	2	Community gardening project	To use gardening, horticulture, and related skills in therapeutic and educational work with people of all ages. Aims to educate, reduce isolation and loneliness, support, mental health, and wellbeing, promote community cohesion and community pride and increase nature connectedness.	Works with people with a wide range of needs include disability, mental health, homelessness, onset dementia, trauma, and PTSD.
GSP21	2	Community farm providing opportunities for horticultural, animal care, nature crafts and physical activity	Aims to improve mental and physical health, enhance nature connectedness, enable the development of new skills and a sense of purpose, and reduce loneliness and social isolation.	Supports individuals with moderate to severe mental health needs including anxiety, depression, schizophrenia, PTSD, personality disorder, eating disorder, and substance misuse. Also works with people with autism, learning disability, dementia, chronic fatigue syndrome, fibromyalgia, physical disability, sight impairment, and cancer.

Source: GSP provider level value for money template (n=13).

6.3.1. Provider inputs

Table 48 provides an overview of the income and other in-kind resources that each of the nature-based providers used to deliver their activities. This includes direct investment from the GSP Test and Learn sites (as outlined in Table 44) and income and resources received from other sources. Overall, the nature-based activities ranged in scale from very small (GSP05 income £4,500) to projects on a much larger scale (GSP18 income £81,369). Nine of the providers brought additional funding and resource to the GSP project, ranging from £59,755 (GSP02) to £750 (GSP05). The added value (return on investment) of these resources is illustrated in the final column of table 48 which shows **for every pound (£1) invested in nature-based providers by the Test and Learn sites these organisations matched an additional 66 pence (£0.66) in external resources**. Five providers (GSP02, 03, 08, 16 and 20) actually matched more resources than they received, for example GSP02 matched an additional five pounds and twenty-seven pence (£5.27) for every pound (£) invested.

Table 48: Sources of income and resources used by nature-based providers to support the GSP project

Provider code	Site	Summary	GSP Test and Learn site invest-ment	Own financial commit-ment	Own and/or partner cost of in-kind staffing	Other sources of funding*	Total resource to deliver activity	Ratio of matched resources (per £ invested)
GSP01	7	Community gardening	£16,000	n/a	n/a	£3,000	£19,000	£0.19
GSP02	7	Wild swimming	£11,340	£25,880	£23,940	£9,935	£71,095	£5.27
GSP03	7	Activities in nature	£20,486	n/a	n/a	£29,893	£50,379	£1.46
GSP05	6	Nature walks	£3,750	n/a	£750	n/a	£4,500	£0.20
GSP07	4	Adult forest school	£2,538	£777	£4,167	n/a	£7,482	£1.95
GSP08	4	Activities in nature	£2,995	n/a	£2,412	£750	£6,157	£1.06
GSP09	4	Community garden	£11,575	n/a	n/a	n/a	£11,575	n/a
GSP13	1	Ecotherapy	£9,768	n/a	n/a	n/a	£9,768	n/a
GSP16	5	Activities in nature	£23,000	£20,000	£10,000	n/a	£53,000	£1.30
GSP18	5	Community food growing	£76,369	n/a	n/a	£5,000	£81,369	£0.07
GSP19	2	Creative activities in nature	£30,000	n/a	n/a	n/a	£30,000	n/a
GSP20	2	Community gardening	£10,000	£5,000	£5,000	£16,050	£36,050	£2.61
GSP21	2	Community farm	£27,040	n/a	n/a	n/a	£27,040	n/a
Total			**£244,861**	**£51,657**	**£46,269**	**£64,628**	**£404,877**	**£0.66**

Source: GSP provider level value for money template (n=13)
*These were mainly independent sources of philanthropic grant funding

Table 49 provides an overview of the expenditure by nature-based providers to provide activities in support of the delivery of the GSP project. Note that the total reported cost of providing the activity is not always equal to the income reported. Where the expenditure exceeded the income, this indicates activities that cost more than was budgeted (i.e., it was delivered at a 'loss' to the provider). Where the expenditure was lower than the income reported this indicates activities that were able to generate a small surplus for reinvestment in other activities (or reserves). Table 49 shows that for each project by far the largest expenditure was staffing cost (84% on average) to plan, deliver and manage the nature-based activities. This included management costs, delivery staff costs and, in some examples, specialist sessional staff.

Table 49: Expenditure of nature-based providers to support GSP project

Provider code	Site	Summary	Capital costs	Staffing costs	Set-up costs	Operative costs	Monitoring/ evaluation costs	Other costs	Total cost
GSP01	7	Community gardening	£0	£10,840	£5,658	£1,192	£0	£0	£17,690
GSP02	7	Wild swimming	£1,295	£60,032	£2,250	£7,118	£400	£0	£71,095
GSP03	7	Activities in nature	£2,077	£36,223	£966	£3,128	£0	£0	£42,394
GSP05	6	Nature walks	£0	£3,070	£1,250	£181	£0	£0	£4,501
GSP07	4	Adult forest school	£777	£4,128	£192	£777	£0	£0	£5,874
GSP08	4	Activities in nature	£0	£3,886	£0	£760	£0	£0	£4,646
GSP09	4	Community garden	£0	£7,324	£0	£2,827	£0	£0	£10,151
GSP13	1	Ecotherapy	£0	£8,658	£0	£816	£400	£0	£9,874
GSP16	5	Activities in nature	£250	£47,000	£0	£1,000	£0	£5,000	£53,250
GSP18	5	Community food growing	£5,000	£71,435	£0	£0	£0	£4,929	£81,364
GSP19	2	Creative activities in nature	£0	£21,348	£0	£7,420	£0	£1,232	£30,000
GSP20	2	Community gardening	£7,155	£25,200	£0	£2,400	£0	£0	£34,755
GSP21	2	Community farm	£406	£54,478	£0	£2,200	£0	£0	£57,084
Total			£16,960	£353,621	£10,316	£29,819	£800	£11,161	£422,677

Source: GSP provider level value for money template (n=13)

6.3.2. Provider outputs

Table 50 provides an overview of outputs achieved by each nature-based provider in support of the GSP project. As with Section 6.2 an output is defined as ***the number of people who participated in nature-based activities according to mental health need.*** This shows wide variation in the number of people who participated in different types of nature-based activities. It ranged from 183 participants in GSP01 to only 12 in GSP08. There was also a widespread in terms of mental health need. GSP01 reported that 110 participants had no mental health needs compared to 48 with the

early/pre-determinants of mental ill- health and 25 with moderate mental health needs. This reflects the nature of their project (see Table 47), which promoted universal access alongside targeting of people experiencing social isolation, nature disconnectedness and associated mental health issues. By contrast, GSP18 had a greater proportion of participants with higher levels of mental health need. Of 144 participants 94 had moderate mental health needs and 30 had severe mental health needs.

Table 50: Number of people who participated in nature-based activities as part of the GSP project, according to mental health need

Provider code	Site	Summary	No. people who participated in nature-based activities	No. people who participated in nature-based activities by mental health need			
				No mental health needs	*Early/ pre-determinants of mental ill-health*	*Moderate mental health needs*	*Severe mental health needs*
GSP01	7	Community gardening	183	110	48	25	0
GSP02	7	Wild swimming	48	6	17	21	4
GSP03	7	Activities in nature	43	1	8	24	10
GSP05	6	Nature walks	27	10	9	6	2
GSP07	4	Adult forest school	14	0	9	5	0
GSP08	4	Activities in nature	12				n/a
GSP09	4	Community garden	18	6	6	4	2
GSP13	1	Ecotherapy	28	0	9	17	2
GSP16	5	Activities in nature	82	5	10	53	14
GSP18	5	Community food growing	144	0	20	94	30
GSP19	2	Creative activities in nature	76	3	10	44	19
GSP20	2	Community gardening	115	42	31	32	10
GSP21	2	Community farm	43	0	11	28	4

Source: GSP provider level value for money template (n=13), utilising data submitted as part of GSP project monitoring requirements

Table 51 provides a high-level estimate of cost per output of each nature-based activity. This is calculated by dividing the total cost of each project by the number of people who participated in nature-based activities. Looking across the 13 nature-based providers, **the average cost per output was £507.42**. However, this masks a widespread. GSP01 has the lowest cost per output (£96.67), which probably reflects the high number of people accessing the activity who do not have mental health needs. By contrast, GSP18, which has similarly high numbers of participants, but with far more with moderate or severe mental health needs, has a higher cost per output (£565.03).

The highest cost per output was reported by GSP02 (£1,481.15) and GSP21 (£1,327.53) and both of these providers cater for a high proportion of patients with moderate and severe mental health needs and are more intensive to deliver in terms of staff time. Other factors likely to affect the cost of provision include equipment and facilities, the duration of the intervention, the skills of the staff required to deliver the activity, and number of people it is possible to support in one go.

Table 51: Cost per output of nature-based activities

Provider code	Site	Summary	No. people who participated in nature-based activities	Total cost of providing nature-based activities	Cost per output
GSP01	7	Community gardening	183	£17,690	£96.67
GSP02	7	Wild swimming	48	£71,095	£1,481.15
GSP03	7	Activities in nature	43	£42,394	£985.91
GSP05	6	Nature walks	27	£4,501	£166.70
GSP07	4	Adult forest school	14	£5,874	£419.57
GSP08	4	Activities in nature	12	£4,646	£387.17
GSP09	4	Community garden	18	£10,151	£563.94
GSP13	1	Ecotherapy	28	£9,874	£352.64
GSP16	5	Activities in nature	82	£53,250	£649.39
GSP18	5	Community food growing	144	£81,364	£565.03
GSP19	2	Creative activities in nature	76	£30,000	£394.74
GSP20	2	Community gardening	115	£34,755	£302.22
GSP21	2	Community farm	43	£57,084	£1,327.53
Total			**833**	**£422,678**	**£507.42**

Source: GSP provider level value for money template (n=13), utilising data submitted as part of GSP project monitoring requirements

6.3.3. Provider outcomes

Table 52 provides an overview of outcomes achieved by each nature-based provider in support of the GSP project. As with Section 6.2 an output is defined as ***the number of people who reported a mental health or wellbeing outcome improvement following participation in nature-based activity*** (i.e., they showed an improvement on at least one validated mental health or wellbeing measure). Note that only 11 of the 13 providers were able to provide outcome data. Those who did provide data used a range of validated measures including the ONS4 wellbeing scales (GSP01, 02, 05, 16), the Warwick Edinburgh Mental Wellbeing Scale (GSP16, 18, 19, 21) and the UCL Wellbeing Umbrella (GSP07, 09). One provider (GSP20) used their own unvalidated measure, but their data has still been included below. Four providers (GSP01, 13, 18, 19) were unable to provide a breakdown of their data according to mental health need.

The data shows the wide variation in the number and proportion of participants who reported a mental health or wellbeing outcome improvement. In two sites (GSP07 and

09) 100% of participants achieved an outcome. By comparison, in three sites the proportion of participants who achieved an outcome was below 40% (GSP01, 18, 21). Where the proportion of participants who reported an outcome improvement is low this is in part due outcome data not being collected from all participants. This means that this can only be considered a partial picture of the outcomes that were achieved.

Table 52: Number of people who reported a mental health or wellbeing outcome improvement following participation in nature-based activities as part of the GSP project, according to mental health need

Provider code	Site	Summary	No. people who achieved a mental health or wellbeing outcome improvement		No. people who reported a mental health or wellbeing outcome improvement according to mental health need			
					No mental health needs	*Early/ pre-determinants of mental ill-health*	*Moderate mental health needs*	*Severe mental health needs*
GSP01*	7	Community gardening	N	15	Breakdown not available			
			%	8%				
GSP02	7	Wild swimming	N	40	4	15	18	3
			%	83%	67%	88%	86%	75%
GSP05	6	Nature walks	N	20	7	6	5	2
			%	74%	70%	67%	83%	100%
GSP07	4	Adult forest school	N	14	n/a	9	5	n/a
			%	100%		100%	100%	
GSP09	4	Community garden	N	18	6	6	4	2
			%	100%	100%	100%	100%	100%
GSP13	1	Ecotherapy	N	24	Breakdown not available			
			%	86%				
GSP16*	5	Activities in nature	N	33	1	6	21	5
			%	40%	20%	60%	40%	36%
GSP18*	5	Community food growing	N	32	Breakdown not available			
			%	22%				
GSP19*	2	Creative activities in nature	N	33	Breakdown not available			
			%	43%				
GSP20	2	Community gardening	N	104	42	26	28	8
			%	90%	100%	84%	88%	80%
GSP21*	2	Community farm	N	4	n/a	n/a	1	3
			%	9%			4%	75%

Source: GSP provider level value for money template (n=11), utilising data submitted as part of GSP project monitoring requirements.
*Denotes where only partial data was collected (i.e., not from all participants).

Table 53 provides a high-level estimate of cost per outcome improvement of each nature-based activity. This is calculated by dividing the total cost of each project by the number of people who reported a wellbeing outcome improvement following participation in nature-based activities. The figures should be treated with some

caution due to the partiality of the data discussed above. For providers who did not collect outcome data for all participants (i.e., GSP01, 18, 16, 19, 21) the cost per outcome will almost certainly be an overestimate because a proportion of participants for whom there is no outcome data will still have reported outcome improvements. Looking across the 11 nature-base providers, the average cost per outcome improvement was £1,114.65. Once again, this masks a wide spread and is almost certainly skewed upwards due to the partiality of the data.

Table 53: Cost per wellbeing outcome improvement of nature-based activities

Provider code	Site	Summary	No. people who reported a mental health or wellbeing outcome improvement	Total cost of providing nature-based activities	Cost per outcome
GSP01*	7	Community gardening	15	£17,690	£1,179.33
GSP02	7	Wild swimming	40	£71,095	£1,777.38
GSP05	6	Nature walks	20	£4,501	£225.05
GSP07	4	Adult forest school	14	£5,874	£419.57
GSP09	4	Community garden	18	£10,151	£563.94
GSP13	1	Ecotherapy	24	£9,874	£411.42
GSP16*	5	Activities in nature	33	£53,250	£1,613.64
GSP18*	5	Community food growing	32	£81,364	£2,542.63
GSP19*	2	Creative activities in nature	33	£30,000	£909.09
GSP20	2	Community gardening	104	£34,755	£334.18
GSP21*	2	Community farm	4	£57,084	£14,271.00
Total			**337**	**£375,638**	**£1,114.65**

Source: GSP provider level value for money template (n=13), utilising data submitted as part of GSP project monitoring requirements.
*Denotes where only partial data was collected (i.e., not from all participants).

If the providers who did not collect data for all participants (i.e., GSP01, 16, 18, 19, 21) are removed from the estimate the **average cost per outcome improvement reduces to £619.32**. Considering only those nature-based providers who collected data from all participants, the cost per outcome improvement ranges from £225.05 to £1,777.38. GSP03 had the lowest cost per outcome improvement even though a significant proportion of their participants had moderate and severe mental health need. GSP02 had the highest cost per outcome improvement, probably reflecting the relatively high cost per output costs for what is relatively resource intensive intervention (wild swimming). The remaining providers were grouped quite closely together (£334.18-£563.94) and broadly reflected cost per output patterns. Broadly speaking, the cost per outcome improvement was more likely to be lower for activities with universal access and higher numbers of participants with less severe mental health needs.

6.3.4. Comparators and alternative mental health care

To fully understand the value for money of nature-based approaches to supporting people experiencing mental ill-health conditions it was necessary to identify alternative approaches to care and support that are available within the local health and care system. To do this, we first engaged with the Test and Learn sites and national partners to get a better understanding of what those alternatives are. This process revealed three important considerations:

1. There are no obvious or direct comparators to nature-based activity in most areas.
2. There is very limited knowledge of or access to information about care costs at a site level. This is not limited to nature-based providers – the same point was made about other services commissioned from the VCSE sector by the health and care system.
3. For many people with mental health conditions, nature-based activity should be considered as complementary or supplementary to other sources of support rather than an alternative.

In light of these considerations, we carried out a rapid review of existing evidence about the costs of different types of mental health services and wider support provided as part of the health and care system. This review identified several sources of evidence about costs, summarised below. Table 54 provides an overview of the national cost data for key NHS provided mental health services. Table 55 summarises the costs of a series of non-NHS mental health services. Table 56 provides some examples of the costs associated with interventions for mental health promotion and mental illness prevention.

Table 54: NHS national cost data for mental health services

Service name/type	Ave cost (mean)
Improving Access to Psychological Therapy (IAPT-per contact)	£132
Mental health specialist teams (per care contact):	
A&E mental health liaison services	£245
Criminal justice liaison services	£286
Prison health adult and elderly	£147
Forensic community, adult and elderly	£293
High dependency secure mental health services:	
Mental health or psychosis	£834
Personality disorder	£825
Specialist mental health services:	
Eating disorder (adults) – admitted (per bed day)	£546
Specialist perinatal – admitted (per bed day)	£819

Source: NHS England National Schedule of Reference Costs 2019-20. Interpreted and analysed in: Jones, K. & Burns, A. (2021) Unit Costs of Health and Social Care 2021, Personal Social Services Research Unit, University of Kent, Canterbury.

Table 55: Summary of non-NHS mental health service costs

Service name/type	Unit costs
Local authority own-provision social services day care for adults requiring mental health support (age 18-64)	£39 per client attendance £9.48 per client hour £33 per client session lasting 3.5 hours
Private and voluntary sector day care for adults requiring mental health support (age 18-64)	£38 per client attendance £9 per client hour £33 per client session lasting 3.5 hours
Behavioural activation: simple, non-specialised treatment for depression which can be delivered in a group setting or to individuals	Cost per session per person attending the group: £19-£21 Cost per 12 group sessions per person: £231-£250

Source: Summarised from: Jones, K. & Burns, A. (2021) Unit Costs of Health and Social Care 2021, Personal Social Services Research Unit, University of Kent, Canterbury.

Table 56: Example costs of interventions for mental health promotion and mental illness prevention

Service name/type	Unit costs
Early intervention for psychosis Aims to reduce relapse and readmission rates for patients who have suffered a first episode of psychosis, and to improve their chances of returning to employment, education or training, and future quality of life. Involves a multidisciplinary team of professionals.	£4,043 per patient for the first year. Often delivered in combination with other interventions (community psychiatric services and inpatient care) which amounts to £13,332 per patient per year.
Providing debt advice to protect mental health Targeted at people who do not initially require mental health support but are experiencing unmanageable debt. Focused on debt advice as a preventive action. Involved volunteer-delivered debt advice services located in a GP surgery.	Over five years, per adult population of 100,000, the total intervention cost is estimated to be £1,398,219, or £13.98 per head of population.
Promoting mental health and wellbeing in the workplace Multi-component universal mental health promotion programme delivered in a 'white collar' workplace with 500 employees. Consists of a health risk appraisal questionnaire, personalised web portal, paper-based information packs, and four off-line seminars touching on the most common wellness issues.	The incremental cost of this wellbeing programme was £46,673, or £98 per annum per employee.
Collaborative care for depression in individuals with Type II diabetes 'Collaborative care', including GP advice and care, the use of antidepressants and cognitive behavioural therapy (CBT) for some patients, delivered in a primary care setting to individuals with comorbid diabetes.	The total cost of six months of collaborative care is £858 per patient.
Addressing loneliness to protect the mental health of older people A signposting service put in place in GP surgeries, shopping centres and libraries, for people aged 65 and older who are not in paid work. Individuals have an	Cost for a population of 100,000 was £189,708 (£59,623 for the signposting service and £130,085 for group activities).

Service name/type	Unit costs
opportunity to have an assessment of needs to help identify opportunities for participation in a wide range of local social activities to reduce the risk of social isolation and loneliness.	
Tackling medically unexplained symptoms Cognitive behavioural therapy (CBT) has been found to be an effective intervention for tackling somatoform conditions and their underlying psychological causes.	£1,060 - a course of CBT may last for 10 sessions at £106 per session.

Source: Adapted from: Jones, K. & Burns, A. (2021) Unit Costs of Health and Social Care 2021, Personal Social Services Research Unit, University of Kent, Canterbury.

These examples highlight the wide variety of options available within the NHS to support mental health and for people to be referred to outside of the NHS according to different levels of need and for different purposes. They also demonstrate the extent to which intervention costs vary according to need and how these costs are captured and reported in a variety of ways (e.g., cost per contact, cost per day, cost per session, length of 'treatment'). This means direct comparison with nature-based providers is not straightforward and should be undertaken with caution. However, of the interventions and costs identified, a number do merit some comparison with the cost per output of nature-based providers, albeit with a degree of caution.

For nature-based activities targeting people with less severe mental health needs such as GSP01 (cost per output £96.67) and GSP20 (cost per output £302.22) useful comparators may be behavioural activation (£231-£250 for ten sessions) or CBT (£1,060 for ten sessions). These suggest that nature-based activities are at the more cost-efficient end of the spectrum for supporting people with mild mental health needs (i.e., they cost less per participant than other types of intervention for this group). For nature-based activities targeting people with more severe mental health needs such as GSP3 (cost per output £985.91), GSP16 (cost per output £649.39), GSP18 (cost per output (£565.03) and GSP19 (cost per output £394.74) useful comparators are early intervention for psychosis (£4,043 year one) and collaborative care for depression in individuals with Type II diabetes (£858 over six months). Similarly, these suggest that nature-based activities are at the more cost-efficient end of the spectrum for supporting people with more severe mental health needs. However, when making direct comparisons between different treatment options it is important to recognise that for many people, the most appropriate course of action will be to access different types of intervention in combination.

The data discussed in this section has provided some detailed insights into the costs, outputs and outcomes associated with different types of intervention and discussed these in the context of other treatments for people with different levels of mental health need. This has not been a full cost-effectiveness study, however, and the variation and context dependency of the findings, along with data quality limitations, highlight the need for further intensive (i.e., intervention specific) and extensive (i.e., system level) research into the value for money of GSP that was not with the scope of this evaluation.

6.4. Social prescribing Link Worker inputs and outputs

Social prescribing Link Workers are a key component in the GSP pathway: they receive referrals from GPs and other healthcare professionals and make onward referrals to nature-based providers and activities where appropriate. They also develop and sustain links to providers so that they are aware of a wide range of activities available to people in their area. However, with a few isolated exceptions, the Test and Learn sites did not invest GSP project resources in additional Link Worker capacity. Instead, they relied upon the existing social prescribing Link Worker

infrastructure in their area to receive and make referrals. These included NHS funded Link Workers in Primary Care Networks (PCNs), social prescribing Link Workers commissioned locally by the NHS and local authorities, and people employed in the public and VCSE sector in similar 'connector' roles.

Although Link Workers sit outside of the formal boundaries of the GSP project in terms of financial investment, it was important to gain an understanding of these costs given their centrality to the GSP model. Currently, there is very little published evidence about the cost of making a referral to a community organisation through a social prescribing link work or similar role. One study (Dayson & Bashir, 2014) of a social prescribing service commissioned by the NHS Clinical Commissioning Group from a VCSE umbrella body to target people with long-term health conditions estimated the average cost per person per year for those referred to the scheme was £188 (uprated to 2021/22 prices). When the costs of voluntary and community sector provision were included the average cost per person per year increased to £545. Another study (Dayson & Bennett, 2016) of a social prescribing service commissioned by a local authority social care department from a housing association estimated the cost per social prescribing 'intervention' to be £349 (uprated to 2021/22 prices). In this example an intervention was anyone referred to the social prescribing service who went on to engage with other voluntary or community sector services. Both of the social prescribing services in these examples were commissioned through the Better Care Fund for health and social care integration.

To capture site level information about the costs of social prescribing Link Worker referrals, three Test and Learn sites identified three social prescribing Link Worker host organisations to share information about the inputs and outputs associated with their service. Link Worker host organisations were asked to provide a figure for the number of referrals made to nature-based activities but were unable to do so due to data availability.

In site one a local VCSE organisation received funding from two primary care networks to host four full time equivalent (FTE) Link Workers at a total cost of £170,373 (£42,593 per role). They received 1,047 referrals (pro rata) in 2022-23 making the cost per referral £163. In site six a social care department in a local authority (upper tier authority) used the Better Care Fund to commission three district councils (lower tier authorities) to host 2.6 FTE Link Workers at a total cost of £101,000 (£38,846 per role). They received 697 referrals in 2021-22 making the cost per referral £145.

In site two a local authority social care communities team commissioned 11 local VCSE organisations to deliver a universal community-level social prescribing offer across the city. This area took a 'proportionate universalism' approach, meaning that core funding for the service was topped-up with a needs-based component linked to the Indices of Multiple Deprivation (IMD). In the most deprived area of the city funding of £4.24 per head of population was provided compared to £0.31 per head of population in the least deprived community. This area did not track referrals on a consistent basis, meaning cost per referral could not be calculated.

Although these data presented in this section are partial in terms of coverage, they do present a relatively consistent picture. The average cost of a social prescribing link work receiving a referral from the health system ranged from £145-£163 in the two Test and Learn site examples, which is similar to one of the other studies referenced (£188). However, other research suggests that the cost per referral increases when only 'successful' onward referrals to VCSE providers are included, and again when the costs incurred by VCSEs are considered.

The data presented in this section can be combined with data from Section 6.3 to tentatively estimate the 'full cost' of making GSP referral. That is, the cost of nature-based providers combined with the cost of Link Worker referrals. The cost of a GP appointment can also be included in this estimate (see table 56). Table 57 shows that, based on a GP appointment costing £42,[10] the cost of a Link Worker referral ranging from £145-£163, and the cost of participating in nature-based activities ranging from £96.67- £1,481.15, **the overall cost of a green social prescription is estimated to be between £284-£1,686**. This is obviously a very wide range reflecting the broad spectrum of mental health needs that these activities cater for. Nature-based activities offering universal access or catering for people with predominantly mild mental health needs tend to cost less to deliver per person than those for people with moderate and more severe needs. Overall, this general picture suggests that **green social prescribing can be considered a relatively cost-efficient intervention** when compared to other types of support for people with similar mental health needs.

Table 57: Estimate of the full cost of a GSP referral across the pathway

Component of GSP pathway	Lower cost estimate	Upper cost estimate
GP appointment		£42
Social prescribing Link Worker referral	£145	£163
Nature-base activity	£96.67	£1,481.15
Total	£283.67	£1,686

6.5. Valuing the benefits of green social prescribing

The final stage of a traditional value for money analysis involves valuing the benefits identified in monetary terms to produce a cost benefit analysis and establish an overall figure or range for return on investment. For this evaluation a full cost benefit analysis has not been attempted due to the complexity of the GSP projects and the limitations and partiality of the data that was available. However, high level consideration of the value of some of the benefits identified is presented below.

6.5.1. The value of matched and in-kind investment

Previous sections have already highlighted the added value of the project in terms of matched or leveraged investment by the national partners (£1.5m), Test and Learn sites (£2.87m) and nature-based providers (£0.11m – data from only 13 providers). It is estimated that all of the matched funding and in-kind resources at a site level equated to an additional 50 pence (£0.50) for every pound (£1) invested in the project overall and 82 pence (£0.82) for every pound (£1) directly invested at a site level.

6.5.2. Value to the health system

Another way of valuing the benefits of the GSP is to consider the benefits to the health system in terms of costs avoided and demand reduced from preventing the onset of mental ill-health, tackling symptoms sooner or stopping them from getting worse. The costs of mental services can be very high, particularly when needs are more severe and require more intensive treatment. For example, as Table 56 shows the cost of community psychiatric services and inpatient care amounts to £13,332 per patient per year before further targeted support is introduced (for example, multi-disciplinary

[10] Average cost of a 9-minute GP appointment. From Jones, K et al. (2023) Unit Costs of Health and Social Care 2022 Manual, Personal Social Services Research Unit, University of Kent, Canterbury.

collaborative care for these patients can add an extra £4,043 per patient for the first year alone).

Although it has not been possible to measure the impact of the GSP project on mental health service utilisation, it is possible to use the data presented to explore some hypothetical scenarios. For example, nature-based provider GSP18 reported working with 30 people with severe mental health needs who we might assume could at some point be at risk of needing inpatient mental health care. Given that delivery of GSP18's activity cost £81,000 to deliver, it would only need to prevent one year of community psychiatric services and inpatient care for six people to save more resources than it uses. Similarly, GSP19 supported 19 people with severe mental health needs and only cost £30,000 to deliver. This means that if it prevented three people from needing acute care it would save more resources than it uses. However, further intensive cost-effectiveness research is needed to establish this link.

6.5.3. Value to the economy

Although there is a tendency to focus on the impact of mental ill-health to the health system most people with mental health conditions do not actually come into contact with services in any one-year period and most of the economic costs of mental health conditions are due to productivity losses (economic inactivity) and the need for informal care (McDaid et al., 2022). When considering the public investment case for GSP, it is therefore necessary to take into account the potential value of these wider benefits rather than a narrow focus on savings to the health system.

6.5.4. Value to individuals

A final way of valuing the benefits of GSP is to consider the benefits to individuals. After all, a 'what matters to you' conversation is one of the founding principles of social prescribing in the NHS. As outlined in the methodology section, the value of the GSP project for individuals accessing nature-based activities is assessed using a WELLBY approach. WELLBY is short for 'Wellbeing-adjusted Life Year' and is a methodology to measure and value improvements in wellbeing (HMT, 2021). It is used to refer to the total amount of well-being experienced by an individual over one year. One WELLBY is defined as a change in *life satisfaction of one point on a scale of 0-10, per person per year (ONS4 measure)*. WELLBYs equate wellbeing to personal income (i.e., as income increases so does wellbeing) and estimate the increase in income required to achieve an equivalent increase in wellbeing.

WELLBYs are an appropriate measure of value where it is considered that the concept of wellbeing fully captures all the outcomes created by a project or programme. HM Treasury guidance indicates that WELLBYs can be particularly relevant when the direct aim of the policy is to improve the wellbeing of a certain group, such as through mental health services. As the aim of the GSP project was to tackle and prevent mental ill-health, the WELLBY was deemed to be an appropriate valuation approach, particularly given the absence of data on health service utilisation (refer to Chapter 3: Methodology for more information about the approach taken).

Table 58 provides a range of estimates for the number and value of WELLBYs created by the GSP project. The number of individuals accessing nature-based activities through the GSP project is assumed to remain constant at 8,339 as this figure has been verified by NHS England through their project management data and is used consistently throughout the report. Table 58 shows that the value of WELLBYs estimated to have been created through the GSP project ranged from £7.6 million to £86.4 million, with a central estimate of £33.9 million. This means that the (social) return on investment ranged from £1.31 to £14.97 for every pound (£1) invested by central Government in the GSP project, with a central estimate of £5.88. If the £1.66

million leveraged by the Test and Learn sites is included the social return on investment ranged from £1.02 to £11.62 for every pound invested, with a central estimate of £4.56.

Due the wide range of value and return on investment covered by these overall estimates further sensitivity analysis is required to narrow these parameters. HM Treasury recommends for changes in life satisfaction greater than 0.5 points it may be important to consider the impact of diminishing marginal utility of income on valuations, which is not reflected in the WELLBY approach. In layman's terms, this means that the monetary gain associated with improvements in life satisfaction will reduce markedly for larger changes, notably changes greater than 0.5, meaning there is a risk of overestimating the number and value of WELLBYs if this is not adjusted for.

Given this HMT guidance, we recommend that the central and upper range estimates for change in life satisfaction (1.7 and 2.6) should not be included in WELLBY estimates for the GSP project. Although this may oversimplify the effects of large changes in life satisfaction it serves to mitigate the possibility for overclaiming about the size of the value that has been created. A revised sensitivity estimate for the number and value of WELLBYs that takes this into account is provided in Table 59. Given the steps taken to prevent overclaiming this is likely to be an underestimate.

Table 58: Estimated number and value of WELLBYs created through the GSP project

Stage	**Estimate**		
	Lower	***Central***	***Upper***
Key variables:			
Change in life satisfaction	0.7	1.7	2.6
Total number of WELLBYs	5,837	14,176	21,681
Total value of a WELLBY	£10,827	£14,076	£17,324
Time discount	0.12	0.17	0.23
WELLBY estimates:			
Number	700	2,410	4,987
Value	£7,578,900	£33,923,169	£86,394,788
ROI (cent. gov. invest. only)	£1.31	£5.88	£14.97
ROI (all resource inputs)	£1.02	£4.56	£11.62

Table 59: Sensitivity estimate of number and value of WELLBYs created through the GSP project, adjusting for marginal utility

Stage	Estimate		
	Lower	***Central***	***Upper***
Key variables:			
Total number of WELLBYs	5,837		
Total value of a WELLBY	£10,827	£14,076	£17,324
Time discount	0.12	0.17	0.23
WELLBY estimates:			
Number	700		
Value	£7,578,900	£13,967,424	£23,257,643
ROI (cent. gov. invest. only)	£1.31	£2.42	£4.03
ROI (all resource inputs)	£1.02	£1.88	£3.13

Table 59 shows that the value of WELLBYs estimated to have been created through the GSP project, adjusted to account for marginal utility, ranged from £7.6 million to £23.3 million, with a central estimate of £14.0 million. This means that the (social) return on investment of the GSP project ranged from £1.31 to £4.03 for every pound (£1) invested in the GSP project by central Government, with a central estimate of £2.42. Because a full social-cost benefit analysis of the GSP project in Green Book terms should include all resource inputs, including those leveraged by the Test and Learn sites), as well as government expenditure, **the overall (social) return on investment of the GSP project ranged from £1.02 to £3.13 for every pound invested, with a conservative central estimate of £1.88**.

7

Reflections on the Green Social Prescribing National Partnership

Summary

The **main benefits and outcomes of the GSP project**, according to partners, were associated with bilateral and collective experiences of working together which partners felt would last beyond the project. In terms of GSP itself, partners felt that the project had helped to position GSP in national policies / policy documents and some strategies, there was extensive new evidence from the project and the evaluation about GSP and how to overcome some of the barriers experienced in localities. The project had also reached people with mental health difficulties and boosted the recognition and perception of GSP in the sites and more widely.

Partners had **experienced a range of challenges** in managing and delivering the project, many of which extend from significant issues clarifying and agreeing the aims of the project across the partnership and with localities. These had implications for project delivery and associated evaluation and evidence strands. The reasons for these challenges were linked to the COVID-19 pandemic; the limited time available to the partners in which to 'form, storm, norm' due to sudden approval of the project by HMT and associated requirements to progress rapidly to delivery; some significant levels of staff turnover; and the limited ability of NHSE to engage extensively in the partnership in the early stages.

Key **challenges for the test and learn sites**, according to partners, were associated with delivering 'systems change' during the pandemic, during a wider NHS reorganisation in short timeframes. The project was extremely ambitious given these circumstances. The reset of the aims and focus that was negotiated during the project with localities caused some delay and confusion and some tensions but these were not longstanding. Partners were aware of the challenges of delivery during a cost-of-living crisis and of the high levels of mental health needs that link workers and providers had to deal with which may have affected take up of GSP.

Looking ahead, partners felt that there were a number of **opportunities and enablers for scaling and spreading GSP**, but it had not been possible within the timeframes available. Key opportunities and enablers included: the continued national partnership, sharing tools and resources emerging from the project, new evidence for example the NIHR research, a new NASP project on shared funding mechanisms and improvements to NHS digital systems which might support efforts to track individuals accessing green provision. Meanwhile, wider opportunities / potential enablers included the high level of ministerial interest in social prescribing; recognition for social prescribing in key policies; and the potential for reframing GSP in relation to different policy agendas.

There are a **range of challenges that need to be addressed to enable wider scaling up of GSP** nationally. Partners reflected that sustainable funding models and a lack of clinical style evidence of the impact of GSP were key challenges that the project had not been able to address. They also identified other challenges including: the precarious nature of link worker funding; and unequal access to quality green and blue spaces across England, particularly for communities that need it the most, although new policies around access to green / blue spaces within 15 minutes might mitigate this.

Partners were **clear on the potential benefits of GSP** including mental health and wellbeing, physical health, work readiness and continuity, personal resilience and self-management, reduced carer burden. Through promoting self-management and resilience GSP was expected to contribute to the personalisation agenda and associated health transformations. Greater provision of opportunities and investment in green infrastructure was also associated with the levelling up policy agenda, health inequalities and community empowerment. Meanwhile there were a range of outcomes for nature associated with greater recognition and valuing of nature such as pro-environmental behaviour change on the part of the public, service commissioners and other institutions.

Key learning for HMT and others undertaking similar large-scale systems change projects are:

- Guidance and good practice / learning for future projects would be helpful but getting the balance right and having enough of the right kinds of groups to facilitate good decisions and mutual understanding was important.
- Central co-funding (rather than a single department in the lead) was perceived to be helpful to enable more effective cooperation and shared ownership of the project.
- Time to clarify aims is needed for cross-government projects, rather than pressure to deliver and spend allocated budgets. Otherwise, this created risks for delivery and success.
- Recognition of the scale and nature of 'systems change' work and the need for two-way communication between localities and central government is important.
- More time for Departments to familiarise themselves with each other's data environment when thinking about monitoring and evaluation.

Early adoption and implementation of an appropriate framework for evaluation that measures what is important and relevant to the ambitions of the project is vital.

This chapter presents critical reflections and key learning about the Green Social Prescribing National Partners and Partnership. As discussed in the introduction, the GSP project was funded through HM Treasury's Shared Outcomes Fund which aimed to support pilot projects to test innovative ways of working across the public sector. The GSP Project was one the first round of projects delivered through Shared Outcomes Funding between 2020-21 and 2022-23 and as such there is interest in ensuring that the learning from this new way of working is shared to inform the development of future similar cross-government collaborative approaches.

Partners in the GSP Project included: Department for Environment, Food and Rural Affairs (Defra), Department of Health and Social Care (DHSC), Natural England, NHS England, NHS Improvement, Public Health England (and later the Office for Health Improvement and Disparities – OHID), Sport England, Department for Levelling Up, Housing & Communities (DLUHC) and the National Academy for Social Prescribing (NASP). As outlined in the methodology, throughout the evaluation the partners participated in a series of qualitative interviews and a programme of workshops designed to facilitate learning and reflect critically on project progress on an ongoing basis. It is the findings from those interviews and workshops that this chapter is based.

7.1. Early reflections on the setting-up of the GSP project

The interim evaluation report provided a series of early reflections on the setting-up of the GSP project. Overall, there was agreement that relationships across the partnership were positive despite its complexity. There was a strong sense of collaboration and shared commitment to making the project a success. Early achievements identified by the partners included clarity of roles between partners, a strong governance model that supported effective project implementation, and shared learning between partners about the GSP project and their own departmental or organisational priorities and ways of working (note that the specific roles and governance structures are outlined earlier in the report at 3.3).

Some of the challenges identified by partners included the scale of project governance and delivery structures for a project that was relatively small and short-term (although they were working well, they demanded more time and commitment than expected and allowed for in workplans etc). It was argued that this sometimes had a detrimental effect on effective and efficient decision making. Linked to this, were concerns that the pace of delivery, and staff turnover, had hindered the development of the relationships needed to implement the project. Some respondents felt they did not have the time or resources to contribute what was needed – whether that is attending meetings, commenting on papers, or engaging staff in their own departments.

Looking beyond the governance of the project, a number of other challenges were also identified by partners. These include its complexity and wanting 'too much' from the project given its scale and short timeframe. The tension between the 'test and learn' ethos of the project and the pressure to demonstrate impact on a range of mental health, environmental and systems changes outcomes. This led to a lack of consensus on the purpose of and priorities for evidence (evaluation and research) and different ideas about who GSP is for, in particular the extent to which it should be targeted at people with mental health needs, rather than the general public (health and wellbeing promotion). Partners recognised that the timescales for delivery of the test and learn site element of the project – two years – was very short given the scale of the task (i.e., to embed GSP and demonstrate effectiveness in a complex system that is, itself undergoing significant change) and there was concern that the scale of the task was not fully understood across the partnership.

A final challenge related to who should pay for GSP, particularly once the GSP project had ended. There were differences of opinion amongst the partners about which partners should pay for which parts of the GSP process (i.e., Link Workers, nature-based providers) and at what spatial level (i.e., national level, regional level (i.e., NHS ICBS), local level (i.e., local authorities) or neighbourhood level (i.e., GPs, PCNs etc). What partners did agree on was the need to ensure, somehow, that the cost burden of GSP did not fall on small nature-based providers in the local voluntary and community sector, and there was recognition that their work did require additional and sustainable financial investment from somewhere.

Partners offered a number of explanations about why the GSP project had experienced these challenges early on. There was recognition that collaboration and partnership working is never easy, and it often takes time to develop the relationships and understanding necessary to develop effective partnerships. Some of the factors proposed to explain these challenges included turnover in leadership and other, notably that a number of senior leaders had moved on and left newly appointed operational staff to pick up the baton, perhaps leading to differences in interpretation and a shift in priorities. It was also suggested that the project suffered from a lack of 'norming and storming' as, following staffing changes, people new in roles were not afforded the time to engage other partners and agree a shared vision and common purpose for the project. Linked to this was the absence of an overarching project theory

of change for the project. Although this was implicit within the original business plan, it was never developed or made explicit, meaning there was no shared understanding of what the project was doing, what each activity would lead to, or the overall aim or vision.

There is more detail on some of these issues in the findings below in Section 7.3 which focuses more on understanding partners' reflections at the end of the project on the challenges of managing the project.

7.2. Partner views of the main benefits of the project

In the interviews and workshops with national partners undertaken towards the end of the GSP project they were able to reflect on the main benefits and what had been achieved. Broadly speaking, these benefits and achievements were described at two levels – national and local – but it should be recognised that this distinction is quite blurry and change at these two levels was often interconnected and mutually reinforcing.

At a national level, partners distinguished between the benefits associated with this new model of cross-government partnership working and the benefits for GSP and social prescribing more generally as a priority policy area. In terms of cross-government working, a number of partners reflected that, as a result of the GSP project, they now had a better understanding of how to 'do' collaborative working. This type of work is not normally incentivised by national government, which tends to operate in silos.

> *Really, we're not as good at cross government working as we should be… This Shared Outcomes Fund with relatively small sums of money has sort of given us a remit to work together and without that funding it could drop off. (Partner interview 4, wave 2)*

Participants pointed to a willingness to continue working together on GSP once the project ended as evidence for the benefits of this way of working. There were also examples of bilateral spin-offs emerging from the relationships formed through the project, for example between the sport, physical activity and environment sectors around the use of green spaces for physical activity and how physical activity can promote nature connection and support the protection of the natural environment.

> *Well, I think it one of the strengths of the whole project is at the national partners of have pulled together and worked together and… have remained together and are continuing to explore and consider options for the way forward. (Partner interview 4, wave 2)*

> *There's an appetite certainly from (other named national partner) to continue a dialogue or relationship with us. I'm not entirely sure where that will go, but I think even having the appetite and their energy is as a result of this work. (Partner interview 8, wave 2)*

> *We've agreed to continue to meet as a cross government working group of social prescribing with national objectives in mind… The Advisory Board is committed to meeting as well, which was really great because we weren't sure whether they would feel they could give that time outside of a delivery project. (Partner interview 9, wave 2)*

In terms of benefits for the GSP policy agenda, partners pointed to examples how GSP was now explicitly mentioned in a number of government strategies. Reflecting Ministerial interest and support for GSP it has been included the 10 Year Mental Health

and Wellbeing Plan and the Environmental Improvement Plan and is referenced as a case study in the NHS England Statutory Guidance to Integrated Care Systems, the Levelling Up White Paper, and the Fourth Annual Loneliness Report. GSP is also expected to be included in the forthcoming Major Conditions Strategy which will signal the government's intention to improve care and outcomes for those living with multiple conditions and an increasing complexity of need. This positive reflection on GSP coverage on policy papers contrasts with the views of some of the sites who criticised central government for not having provided a detailed policy or given localities a 'mandate' to commission and embed green social prescribing (see 4.2).

Partners also pointed to the importance of the evidence and learning that has emerged (and will continue to emerge) from the project, which has improved their understanding of the barriers to implementation and helped understand what does and does not work when trying to scale and spread GSP. It was hoped that the ongoing investment by NIHR in clinical trials of nature-based activities would give GSP additional credibility, leverage, positioning and evidence in the longer term.

In terms of local benefits, partners were able to identify a range of achievements at a test and learn site level in support of the GSP project goals. These included how the sites had been able to show 'proof of concept' by demonstrating the range of different processes and systems that can be developed for connecting people to nature via the health system.

> *I would say proof of concept is crucial, creating the infrastructure to mainstream them into the health landscape is another because some of this stuff often gets seen as an add-on or a nice to have but showing that you've got the infrastructure to support people using your community assets tailored towards your need and the infrastructure you have, I think that will be an enduring feature of the pilot. (Partner interview 2, wave 2)*

It was suggested that this was made possible by focussing on the development of relationships across health, the VCSE sector and the natural environment sector have been developed, overcoming some of the barriers to collaboration that existed previously.

> *I think they have all achieved really well, they've covered the core objectives in the original bid, one of which was about increasing the number of people who benefit, referrals across the board, they have done that and they've set up some of the infrastructure and the pathways. I think the key thing is relationships, the fact that they've been bringing people together, that's the bit that the programme has afforded really, that's been critical, bringing the green providers and the health services together I think has been helpful. (Partner interview 6, wave 2)*

Importantly, partners felt that people with mental health needs had been reached and accessed support through the GSP project, and that there was evidence to suggest that they have benefited. Linked to this, partners felt that the project had demonstrated how GSP can be targeted to reach parts of the community that some NHS services are unable to with potential spill over benefits for addressing health inequalities. These visible benefits had led to greater recognition of the value of GSP amongst key stakeholders, including some cynics and people at a senior level within the health system.

Continued investment in GSP in most test and learn sites was identified as a key marker of the perceived success of the project. A number of partners recounted that, in their experience, it was highly unusual for projects such as this to receive such extensive continuation funding from external sources.

So, I think they've done incredibly well to engage their local partners in the way that they have and in some areas, that's translated into investment. In (T&L site 2) their integrated care system is continuing to invest in it, they've invested during the period of time for the pilot and they're investing now this financial year, they are keen to look at the longer-term sustainability. (Partner interview 6, wave 2)

7.3. Partners' views about the challenges managing and delivering the project at a national level

In the interviews and workshops with national partners undertaken towards the end of the GSP project, the partners reflected on the challenges they had experienced in managing and delivering the project. These reflections corresponded to many of the issues raised in the early stage of the project. In this section we consider the challenges experienced and their origins as well as the consequences they had for the relationship with projects, the evaluation and other national research.

7.3.1. Unclear / mixed aims

Partners reflected that at the start, during and even towards the end of the project there were still differences in what partners thought the project was about, and for, and that this had not been fully resolved. For example while most partners thought it was clear in the minds of the initial bid writers that the focus was to be on delivery of systems to prevent and tackle mental ill health amongst people with identified mental health needs, this was not clear in the project documentation that circulated amongst partners and / or with sites – which made more ambiguous references to "responding to mental health issues", responding to COVID-19, and tackling health inequalities.

Even the title of the project 'Preventing and tackling mental ill health' implied a dual focus on prevention *and* response and given social prescribing has been located more often in generalist and public health spaces, it would not be surprising if most people had interpreted it as a continuation of this universalist role (rather than a primary or secondary prevention service). It is even now not clear to all whether the project was always intended to be focused on people who had identified with mental ill health or became focused during project delivery. Meanwhile there was also a lack of clarity about whether the emphasis of the project should be about how to embed green social prescribing in existing local systems i.e., a long-term systems change project (as would be needed if indeed it was about this) or a more nimble 'test and learn' project (as it was badged) looking at setting up 'green provision' in localities and measuring outcomes for users. For a while at least in the minds of different partners and the sponsor it was all these things.

Although we did have our aims established at the beginning in the original business case, I think it did evolve a bit over time. I think DHSC over time increasingly stressed the importance of the mental health specifically as opposed to the general health, it was always about mental health but that became increasingly important to them I would say. As you know there was a bit of a shift towards wanting impact information as opposed to it being more about systemic change… Obviously if everyone was completely aligned and had exactly the same priorities you wouldn't need a cross government programme with lots of different organisations involved so what would you expect really [but] I think the partnerships worked really well together. (Partner interview 3, wave 2)

And even at this late stage some partners feel that still the partnership is not yet on the same page on all aspects of the project or future for GSP.

I personally think despite the work on the theory of change and other things, I still think there are different views about what partners understand and want to get

out of green social prescribing and think who it's for and who the target audiences are and so on. The focus on mental health, and so I think we need to make a continuous effort really to carry on discussing some of those things, hopefully in a productive way. I know other people, a lot of other people would probably think that's just risks going round in circles, but I still think there are some quite fundamentally different views about what we're trying to do. (Partner interview 4, wave 2)

7.3.2. Reasons for the lack of clarity and implications

A range of reasons for the lack of clarity were offered including:

- Changing of staff and changing expectations of one of the more active partners including a diverse range of partners.
- Online working in the context of COVID-19.
- The inability of some partners to engage during the early stages of COVID-19.
- The fast pace of set up meaning there was limited scope for 'forming, storming and norming'.
- The lack of detailed programme documentation alongside loss to the project of the senior team that had been the visionaries for the project.
- A lack of continuity of staffing.

COVID-19

The project brought together a range of national partners including government departments (DHSC, Defra, DLUHC) and delivery agencies (NHS England, Sport England, Natural England) to oversee and deliver the project. In normal times this would have been ambitious given the project brought together such a wide range of national partners to try to tackle such an ambitious 'shared agenda' but the project was established in the extremely challenging context of COVID-19. For example, the project delivery team had, like so many other projects, to be formed in the context of new 'online' methods of engaging.

When you think about the context, the organisation of the NHS and COVID, and that first year we were really constrained. I didn't meet a lot of my colleagues until that one year on event, so that was 13, 14 months on. It's really weird not to have met your colleagues face-to-face. (Partner interview 6, wave 2)

Limited time for forming, storming and norming

The approval for the project came suddenly and unexpectedly and there had been considerable urgency to get going with the project – building governance, issuing calls for projects, commissioning the evaluation etc, and this afforded very little time for these new partners who were new to working together to form a shared understanding of the project aims, strategy, operational definitions across the new partnership and to overcome differences in understandings due to language differences, and mutual understanding of the different operating contexts for health, nature, sport and localities policy delivery. It was also noted that there was considerable urgency to spend money as soon as possible or to lose it – the funding allocated by HMT was time limited and work had to start quickly.

Because of the COVID context, it got going 'all of a sudden' and staff weren't in place, we weren't really ready. I'd say for the first six months we were trying to catch up with ourselves…. You know how normally you would get stuff ready… 'these are our key aims, these are the roles and the responsibilities of all the

different organisations and their key focuses, this is the support that's available for the test and learn sites' and 'these are our top lines on what the programme is set up to do, what success looks like etc'. (Partner interview 3, wave 2)

Staff continuity

Meanwhile some partners mentioned the staff continuity issue at all levels but particularly impactful were the changes at senior leadership level. According to one partner, the visionaries who had put in the original bid for the programme had left the programme and stepped up to new roles to contribute to addressing the pandemic, and additionally that there was a lot of staff turnover. The consequence of this according to some partners was that the new partners were not able to draw on the deeper thinking that they assumed must have been undertaken as part of the development of the bid, and the detail that sat behind the vision and due to high levels of staff turnover and lack of detailed documentation on the programme (aims, focus, emphasis, data collection and evaluation) there was then considerable scope for misunderstanding, miscommunication and re-interpretation of relatively high level documentation.

We had a champion in [our SRO] but her role changed quite early on in the programme and given her portfolio she supported it well but couldn't always attend meetings, certainly not towards the end…and other [senior] people that had instigated it and spent six months writing that bid, had to step out of it for various reasons. We did clock quite early on there was a continuity issue. [Others did] a fantastic job of trying to hold it and steer it but that was 'without the elders' in terms of the experience of people around that had originally visioned it. (Partner interview 5, wave 2)

Engagement of NHS

A final related challenge mentioned by partners was that, during the early stages of the project, NHS England staff were fully occupied with responding to the pandemic and as a result NHS England (who would subsequently become the lead for the delivery workstream, as described elsewhere in the report) could not engage to the level they needed to until later in the project. There was a sense from some that the 'health' perspective was therefore not fully embedded in the emerging communications about the project with sites and others which then further confused matters.

It took a very long time before we recruited the delivery lead, and because of how busy they were we didn't really have much input from NHS England and DHSC side. Then other things got a bit out of synch… it got a bit like things happened when they happened rather than maybe how you would set out in a programme plan. (Partner Interview 3, wave 2)

Whilst attempts were made to develop a theory of change for the programme someway into the first year of delivery, partners felt that by then it was too late to agree and retrofit a theory of change onto the project given how many actors (partners, localities, evaluation, evidence strands) had by then been initiated and given the number of areas of divergence in views of partners on different aspects of the project.

I knew… that we were on sticky ground because we didn't have an overarching programme theory of change, and…we went to a lot of effort to… make that happen… [but] we couldn't get stuff in quickly enough. I think we got to a point, because we were so far down the line, we had to say we're developing a theory of change for the future but it's too late to do it retrospectively. (Partner interview 6, wave 2)

The implications of this for localities, the evaluation and other evidence work are described in the rest of this section.

7.3.3. Impact of this on localities

A number of partners also noted that some of the confusion at national levels affected sites themselves due to the ambiguity of the material shared with sites at the start of the project which projects responded to in their bids. Many of the sites had focused on more universal prevention – more typically the kind of work undertaken by social prescribing programmes, rather than focusing on people with identified mental health needs.

> *The lead for the whole programme wanted to refocus on mental ill health, very much around that mental health prevention agenda. But I think a lot of the social prescribing is more of a universal offer and it's supporting people to stay well and signposting to right types of activities, support. (Partner interview 2, wave 2)*

It was some months after the selection and commencement of projects that there was this concerted effort to redirect projects was undertaken and the fact that projects were already focused on a broader set of ambitions may have made the task of clarifying and resetting the focus at national levels.

> *I think there was a period of time where… we were getting that message from senior managers and the Board, [to ensure the mental health focus was clear in the sites]. So we did have quite bumpy conversations early on. A couple of sites said 'oh it's about mental health, we were going to x, y and z', [they were] all still very committed around the health inequalities, it's just that I think a lot of the sites, or some of the sites, hadn't necessarily realised that it wasn't about improving mental health for all, [that] it was about a targeted approach to people who had identified mental health need. (Partner interview 6, wave 2)*

7.3.4. Impact of this on the evaluation

The evaluation as defined in the Invitation to Tender (ITT) was all encompassing and the ambiguity around the aims and focus of the project outlined above were present in the ITT. The scope was broad and this, combined with the confusion about the aims, emphasis and focus of the project, caused significant challenges for the evaluators from the start which partners acknowledged.

Delay in procurement of the evaluation

The sites and delivery programme manager were all in place at the start of delivery in April 2021 but due to procurement delays the evaluation team was not in place until June. They naturally required time to establish themselves which meant that the test and learn sites had to issue grant agreements to green providers without knowing what the evaluation requirements, outcome measures etc would be. This situation caused significant problems for the evaluation which are discussed further in this section.

Learning about systems change v demonstrating what works?

Several partners felt the evaluation had to contend with implications of the wider uncertainty about the overall aims of the project and relatedly what counts as 'success'. For some partners (and projects) the funding was directed towards demonstrating how to build and embed green social at scale within a locality and the evidence needs were largely around crystallising what works in terms of 'systems change' in an area, and the secondary concerns were for analysis, where possible on outcomes of GSP for people, communities, and the health system. However, for others whilst establishing green social prescribing systems and learning about how to do that was important, the

greater emphasis for them was on demonstrating that green social prescribing for mental health works for people, communities, the health system and therefore the data on that was key. There were some who felt that the case had already been made for green social prescribing and that what was needed is evidence about how to do it at scale, whilst for others the case still had to be made.

> *I think capacity and getting the infrastructure down was one of the focal points for a lot of people and that might be deemed success, but [others] were saying the focal point of this should be about [reducing] mental ill health, and that would be how we will know if it's worked etc. So, I think it was mostly to do with the kind of metrics and things that we were looking at for success. Obviously, we all know about the impact tensions in the programme overall. (Partner interview 2, wave 2)*

Challenges associated with data collection on mental health outcomes

Data collection on outcomes became increasingly important and the above difference in emphasis was not resolved. The outcome domains that were specified in the ITT were people, communities, health and care system, and other systems and in the 'people' outcome area, the ITT referenced 'wellbeing' and 'mental health'. And, as noted above during the early months of the project efforts were made to refocus the project – away from broader preventative endeavours and towards working more exclusively with people with identified mental health needs to prevent and tackle their mental ill health. However, sites were not able to deliver the data requirements on health or mental health given the relatively complex journey across local partners that people accessing GSP would make and given the state of existing data systems in the health service and given the fact that the focus of the project had not been clarified until well after the evaluators were appointed and contracts with green providers had been agreed.

A further issue was that the data environment was largely in the domain of DHSC and NHS – given the focus on mental health, and the location of the project within health systems. However, the commissioning of the evaluation was led by Defra, and assumptions were made regarding the kinds of data about individual level data needed to track outcomes that could be reasonably expected from sites.[11]

> *With any kind of delivery project policy or delivery project, I would expect policy and delivery partners to collect some monitoring data about individuals. They haven't. And therefore, the responsibility for that has fallen entirely on the evaluation team, and the evaluation team doesn't really have the remit to require or mandate anyone to provide data. Now, I don't know whether if NHS England colleagues had 'required' that data from sites, it would have been delivered either, but we haven't found the best way of requesting data from the test and learn sites. (Partner interview 4, wave 2)*

There was also an assumption from some partners unfamiliar with health services data environment that it would be relatively straightforward for sites to generate the data required.

> *[We found that] you can't track people through from going into social prescribing into green activity to getting the outcomes out the other end and that seemed to be surprising at that point. We had all thought there would be data and it would*

[11] NHSE did ensure monitoring of a range of other aspects of delivery including numbers of overall referrals in each site from different sources, how many providers had been commissioned, and narrative information about the sites' perceptions about barriers and opportunities posed by systems working. The evaluation team got the highlight report readouts and saw the quarterly reports.

be individual outcome data that could be aggregated. (Partner interview 6, wave 2)

In reality establishing a (digital) data infrastructure across myriad agencies to enable tracking individuals and capturing information about delivery and outcomes, whilst simultaneously establishing green social prescribing relationships and referral systems across health, social care and green providers, and commissioning a substantial range of specific interventions proved too much for sites who were generally unable to provide the required data to meet the expectations of the national partners (including HM Treasury). And so, the challenges experienced was not a surprise to other partners familiar with health services, and they reflected that had there been time for a considered analysis of the evidence requirements ahead of the projects' establishment, this major challenge could have been identified (but not necessarily resolved) very quickly.

Social prescribing [itself] is quite new and the infrastructure in terms of digital and data aren't yet mature - so there wasn't a natural systemised collection route for the data the evaluators then needed [for this 'green' specific work, within the social prescribing system]. If we had been involved at the start, we would have said in a heartbeat hang on, you're going to try and collect data for which there is no system to collect it, we would have said don't even put that, don't even try to do that because it's not achievable. (Partner interview 5, wave 2)

As noted above the responsibility for supporting sites to develop their monitoring and data collection systems fell to the evaluators. And there was appreciation from partners for the work the evaluators have done to try to collect this data.

I think there's been real value added by helping the local systems to set up their data collection approaches. That wasn't an aim of the programme, but I guess it became one by stealth in a way. It's a bit of a shift because originally, we thought we'll have all this data we can use to show the success of the programme, I don't think they'd anticipated that 'sorting out the data' would be part of the programme in that sense. So that's just been a bit of a change. (Partner interview 3, wave 2)

Plausibility of impact measurement

Over and above the data challenges outlined above, other partners went further on the issue of measurement to challenge the idea that you could or should try to assess the preventative and / or recovery-oriented outcomes of green social prescribing even if the range of linked agencies were operating effectively and data systems to support measurement were in place and yet ultimately they felt that this became 'the' measure of the project's success.

They want to know actually are these individuals now off the medication [because of the green prescribing], you know, or has there been a 10 to 15% reduction in their GP visits or nurse visits? For me [we want to achieve] long-term outcomes, but through this investment and work we are only going to achieve [progress towards] and indicators [of future] outcomes. It's a really important point. (Partner interview 8, wave 2)

There are so many vagaries [such as] 'are they self-referring, are they through a GP, are they through something else?' 'What did the Link Worker do, how did they get to choose [what they did]', 'were they self-directed or not directed to a particular intervention', 'how did each intervention run?', 'what was each intervention?'. It's all too vague for rigorous impact evaluation". (Partner interview 2, wave 2)

7.3.5. Impact on other research commissioned for the project

The scope and requirements for other national research anticipated in the bid was also very uncertain in the early stages of the project. It was mentioned in the ITT and its contribution to the project was to be evaluated. And yet at that time there was no clear definition of what it was. Staff appointed to roles to deliver the research subsequently identified areas where further research would be helpful to support the stated longer term aims of the project which are to 'roll out' green social prescribing nationally following the completion of the green social prescribing project. A gap that they perceived was in assessing the mental health outcomes of green social prescribing for mental health – which health colleagues clearly thought would not be possible through the project and its evaluation. They also identified clinician and public perceptions of green social prescribing as a key area that would benefit from a national dataset. The details of the national research are outlined in 3.3, the discussion below is to draw out partners' reflections on the rationale for these studies.

For the former, DHSC identified £2m funding to commission a series of feasibility studies and small-scale trials of green provision including for example swimming in nature and angling for PTSD, which was managed by the National Institute for Health Research (NIHR). It was always understood that whilst these trials might fill the 'outcomes measurement' gap that they had identified in the project, this would not be within the timeframes of the project because a) trials themselves take a long time to set up and b) looking at outcomes that need to be measured over a relatively long time necessarily requires a longer time frame. Notwithstanding the known disconnect between timescales for the project (which would finish in March 2023) and the timescales for the research (which might extend well into the mid-2020s), this research was an effort to provide the kind of evidence that some partners felt was important – albeit 'narrow evidence' on highly specified interventions rather than evidence for the whole green social prescribing journey.

> *When I heard about the proposals for evaluation, I was conscious that at the end of it we wouldn't have quantitative impact evidence on the effectiveness of the programme. So, we proposed to try and supplement it with some more targeted research that would give you quantitative impact evidence. I know Treasury [wanted that kind of evidence]. And we knew that through this, we'd get some narrow, very focused but narrow evidence on the potential of individual projects. (Partner Interview 2, wave 2)*

For the clinicians and public perceptions research, GSP project funding was used to commission two pieces of research delivered during the lifetime of the project and according to some partners provided a good understanding of the extent to which clinician and public perceptions represented an enabler or barrier to scaling and spreading green social prescribing nationally. Additionally, two 'supply side' research pieces were commissioned by Defra to understand green providers capacity and the scale and extent of green provision.

7.4. Partners' views on the challenges within the test and learn sites and how that has affected results in the sites and for the project overall

7.4.1. Challenges within the test and learn sites

Partners recognised the challenges projects have faced, and their reflections on these challenges are likely to have been mediated through both NHS England's feedback to the various governance fora based on ongoing delivery support NHSE provided to sites and through their review of the interim evaluation report.

Delivering 'systems change' during the pandemic, during a wider NHS reorganisation in short timeframes

The challenging context (COVID-19) outlined at the start of this chapter affected delivery in the sites as much as it affected national partners. But projects had not only to deal with these issues but also the projects were in the view of partners implementing 'systems change' and laying the foundations for long-term, sustainable green social prescribing systems rather than simply setting up and testing green projects. The scale of the ambition was not, some partners felt fully appreciated by all and the fact that they were doing this in very short timeframes, and in the context of an NHS transformation and reorganisation programme which would bring about the establishment of new Integrated Care systems[12] was also highlighted.

Partners therefore generally reflected that it was remarkable that projects had achieved as much as they had in the timeframes and part of the reason for requesting further funding for an extension to the project was in recognition of these constraints and the extra time needed to complete the work. The quote below reflects similar testimony from across the national partners.

> *I would say the contextual challenges of trying to deliver this in COVID and lockdowns was very significant. [We said] at the outset that two years was way too short and normally programmes like this would be three years, so to deliver it in a two-year timeframe in the context of COVID and massive reorganisation with the development of ICSs was a really, to be honest it's amazing they pulled anything off… (Partner Interview 5, wave 2)*

The effect of the reset

As noted above the original communication to sites about the project was ambiguous. Reference to prevention and 'health and wellbeing', as well as apparently equal focus on mental health, responding to COVID-19 and health inequalities meant that sites interpreted the opportunity broadly. Many anticipated setting up social prescribing systems that would support people's wellbeing, accessible through a range of access routes but as noted above, in the early months of the project national partners endeavoured to reset the focus on people with identified mental health needs, and to try to pin down a shared focus on a defined access route via link workers. This created tensions between the local and national partners for some time and created delay and confusion which was highlighted in the interim report.

> *It was problematic that that hadn't been clear for everyone from the very beginning I would say, but we got over that and managed to maintain and build our relationships, because that was the worry. (Partner interview 6, wave 2)*

Some localities did indeed find the reset very challenging and their reflections on this are described in 3.1, 4.2 and 4.3.

Cost of living and high levels of need

A further challenge that partners recognised was that projects had to contend with increasingly high levels of need amongst patients accessing health services and in

[12] These major transformations have meant that the new organisations and decision-making bodies and relationships between agencies were all changing as the project sought to set up a new system for the longer-term delivery of green social prescribing. Partners reflected that it must have been extremely difficult for projects to secure any 'airtime' with senior executives that would be needed as part of establishing new, long-term green social prescribing systems in the locality and equally challenging at the operational levels as new bodies and organisations and inter-agency relationships were established to deliver and support the ICS vision.

particular link workers and green social prescribing services. They believed that Link Workers have had to cope with far higher levels of need than they would have expected to have to deal with and as a result they have had to work more intensively with patients to 'stabilise' and support them, rather than prioritising referrals to green social prescribing. This is thought to have resulted in a reduction in the number of referrals to green providers. Meanwhile for those delivering green services, partners recognised that they had not had time or support to adjust to working with patients with more complex and / or severe mental health needs which was the result of the 'reset' outlined above.

> *We had an issue with link workers not prioritising green because they were so focused on people's financial situation that they forgot about green…so that slowed the referrals and the providers were saying they didn't have enough referrals pulling through. I would also say that the workforce was a factor just because the level of complexity of people's need at the moment on any kind of mental health pathway is so high that we're way beyond what social prescribing was set up to do. [Link workers and green providers] have been trying to manage really quite complex needs, quite unpredictable needs… without really having the training and support and confidence to do that... (Partner interview 5, wave 2).*

> *What we heard a lot of was provider concerns about their ability to support those with more enduring severe mental health conditions. They had traditionally played more of a role at the preventative end or newly diagnosed lower-level mental health conditions, but not the more severe, enduring mental health conditions. Perhaps there's more that needs to be done, systematically, to support providers to move more into that space… (Partner interview 8, wave 2)*

Further details of sites' experiences in respect of these challenges can be found in 4.8.

7.5. Partners' reflections on seeking funding to extend the project and the implications of the decision.

7.5.1. The proposal for an extension to the project

A bid for an extension to the project was submitted in late 2022 acknowledging an imbalance between the level of ambition of the project, the timeframes for delivery and the project related and external factors that projects had had to contend with. HM Treasury did not agree to extend funding or timeframes for the project.

Whilst there was some acknowledgement from partners that there had been issues around the clarity of aims and objectives and there was no theory of change for the programme, there was also a strong sense from all partners that HMT had not really understood the project's scale and level of ambition nor the focus of the work and therefore what would be a reasonable assessment of the value of the programme. Nor partners' felt, had HMT understood the challenges experienced, and the anticipated benefits of completing the project.

> *I think some of the feedback about the fact that we weren't very clear in our bid about what evaluation data we're expecting to get and how we would use that to form the next stage, I think it goes back to some of those early things [the lack of an agreed theory of change] that we weren't very clear about. (Partner interview 6, wave 2)*

> *The only other thing I'd say is this requires systems leadership, it is systems change, it needs so many different agencies to come together to make sure it works well. We often talk about the NHS but the NHS is many, many teams, it's huge and then you've got the green sector, the local authority, it's so complex and*

any of that takes time. I think you'd need to work with systems on this for over three to five years to start to secure it. I think that was the fundamental misunderstanding, it was seen as a test and learn programme and not seen as what should have been a three-to-five-year change programme. (Partner Interview 5, wave 2)

Relatedly, partners reported that the focus of HM Treasury feedback seemed to be around the need for better evaluation of the impact of green social prescribing on mental health, as opposed to the success of the project in implementing systems change and partners felt strongly that this represented a shift of the goalpost resulting in an assessment of performance that was poorly aligned with what the project and its evaluation were set up to achieve.

We all feel that it's a bit unfair because it was never set up to be an impact evaluation and it was funded on the basis that it wasn't an impact evaluation, so to then say 'why is it not an impact evaluation' feels a bit unfair. If you're going to look at a whole big system like green social prescribing which has got so many different strands to it and different types of intervention you can't possibly get [impact findings] like that because it's just not, that's not what it's designed to do. So I think they just didn't really get that. They want to see 'if we invest £1 million we get £2 million back' and that's not quite what this is. (Partner interview 3, wave 2)

If it had been carved in stone from Treasury 'we won't give you money to extend unless you have an RCT level evidence base' then we would have set one up or designed it in that way, but if they've… signed off on a realist evaluation way back at the start and they understand the timing and they understand this, and then you're in this kind of grey zone, that's when it gets weird…That's when it gets most frustrating, when you're operating in a kind of grey area. (Partner interview 2, wave 2)

One partner believed that if there had been ongoing engagement with HMT around the project ambition, and emerging challenges and learning, things might have been different.

I'm not sure DEFRA had 'feed-in' meetings. We didn't as a partnership. Actually if they [HM Treasury] had been a kind of critical friend through the process then actually they would have been able to say your theory of change, you're not showing us your theory of change, you're not showing the impact... but we didn't liaise with Treasury until we were going for the next bit of funding. If someone was liaising with Treasury you needed somebody in there that understood integrated care systems and how they were being set up and understood the mental health pathway within the NHS - so the scope and extent of all the change that you were trying to make. (Partner interview 5, wave 2)

7.5.2. The implications of the decision not to extend the project

Partners spoke about the two main implications of the decision not to extend the funding and duration of the project. Firstly, there was a sense of uncertainty from some about the future of green social prescribing in the projects – whilst there was confidence that they would not collapse, the future was uncertain due to the lack of continued, longer-term funding.

Well obviously there will be some scaling back of delivery in the sites because they won't have that funding any more. I do feel reassured speaking to NHS England and hearing about what is happening in the individual sites that I don't think, I think actually quite a lot will continue but it won't be at the pace that we

would have wanted and some stuff will end or will have to be scaled back but I don't think that the system that's been built up will collapse at all, I think it will continue but just maybe a bit slower. (Partner Interview 2, wave 2)

A second implication was that one of the national partners mentioned was that they hadn't been able to 'codify' how to scale green social prescribing in an area, or pinned down 'what works', nor had they secured policy directives on the need for localities to develop it, and therefore they felt that the wider future of GSP was uncertain.

I think it's only been two years so I feel they've gone a long way in those two years, probably in some respects a bit further than I would have hoped for, so I'm really pleased about that. I think the problem is we haven't been able to systematise it over that period of time, so it is still, as far as I can see, down to people who 'get it', people who've been involved, people who want to refer and champion it. (Partner interview 6, wave 2)

This sentiment was also noted by some localities who criticised central government for not having produced a 'detailed mandate' or policy on GSP.

7.6. Partner's views on key activities and enablers for future scaling of GSP nationally

Looking ahead partners felt that there were a number of opportunities and enablers for scaling and spreading GSP, but it had not been possible within the timeframes and resourcing to build a plausible theory of change for a programme to scale and spread GSP nationally beyond the early ideas set out in the interim report (Haywood et al, 2023).

National Partners were invited in the second wave of interviews to reflect on the key opportunities, enablers and specific activities or tools that could or would support wider, national scale roll out of green social prescribing, building on the workshops that had been held earlier in the year. A range of themes emerged from the analysis representing these different opportunities, enablers and activities including:

- *Specific plans, resources, and activities:* such as continued national partnership, sharing tools and resources emerging from the project, new evidence for example the NIHR research, a new NASP project on shared funding mechanisms and a tweak to NHS digital systems to include a new code for referrals to green provision which will support efforts to track individuals accessing green provision.
- *Wider opportunities / potential enablers:* such as high level of ministerial interest in social prescribing; Social Prescribing mentioned in policy documentation; and the potential for reframing GSP.

7.6.1. Specific plans, resources and activities

Specific plans, resources and activities mentioned by partners included continued national partnership, the sharing of tools and resources from the project, new evidence, the integration of new codes to enable tracking of referrals within digital systems and a new project around shared investment.

Continued national partnership

Partners were very strongly in favour of working together going forwards. They anticipated that the national partnership would continue, and it was noted that it would be helpful to 'stay close' to the action in sites that continued beyond the project and to use the relationships to inform policy and strategy. A number of partners commented

that they would work together to put in a bid in future. There was a clear interest in working together to be 'task oriented' rather than a 'talking shop'.

> *There's huge commitment, I mean they're still doing the steering groups even though the delivery programme has stopped. And there was a bid discussion, exploration meeting yesterday, a second bid, so there's a lot of commitment. (Partner interview 5, wave 2)*

Sharing tools and resources emerging from the project

A toolkit for GSP and an advocacy pack have been produced by the national partners for sharing with localities that are interested in developing GSP infrastructure in their areas. The toolkit distils some of the experience and learning from the eight sites involved in the GSP project. It is intended to be a 'how to' guide and includes tools and materials developed in and by the sites. The advocacy pack sets out 'key messages' for different stakeholders linked to available evidence which might help sites interested in setting up GSP to 'frame their proposition' with different stakeholders. These resources are expected to be published on the Green Hub, a collaborative space on the National Association for Social Prescribing website.

New evidence

The NIHR clinical research is a significant piece of work described elsewhere, and partners believed that if it shows that accessing nature helps people this will support the wider ambition. Moreover, partners felt that the very fact that DHSC had commissioned these long-term studies would benefit the cause of GSP because it shows how invested they are as an organisation in it.

> *I think as well as the value of what that will produce, it's also the signal that it gives about where DHSE are with this, I think that's really valuable in its own right. (Partner interview 3, wave 2)*

National Academy of Social Prescribing pilot on shared investment

In recognition of the lack of sustainable funding for social prescribing and the short term / catalytic nature of any central government funding, NASP has been exploring options for a social prescribing shared investment project to try to address this. The shared investment framing responds to partners' recognition that – as Figure 17 shows, – the benefits from green social prescribing cover a diverse range of policy agendas.

> *We kind of know more or less how to do green social prescribing, organisations understand it. But it's just having the money to commit to this, I think that's a big barrier that's always talked about. It's always going to have to come from NHS clinical commissioners and voluntary sector and private finance ideally. So trying to sort out the funding approach because that's the thing that always come up again and again. (Partner interview 3, wave 2)*

Integration of Social Prescribing into NHS digital systems

The learning from the GSP project has informed the agreement of a new SNOMED code to be used in NHS digital patient records which will record when a referral for Green Social prescribing has been made. In the longer-term some partners thought this along with other digital initiatives and other data sharing initiatives could open up the possibility of tracking patients and their outcomes across the system.

> *The new SMOMED code will be able to flag that someone's been prescribed to a nature-based activity which didn't exist before, so that will enable better data. There's still lots of gaps like did people then actually take it up and what happened*

to them, how did it work, but at least [with the new code] you would have accurate data on who is being prescribed. (Partner interview 3, wave 2)

7.6.2. Wider opportunities / potential enablers:

A range of wider such enablers / opportunities were also offered such as high level of ministerial interest in social prescribing; Social Prescribing mentioned in policy documentation; and the potential for reframing GSP as 'social infrastructure'.

Ministerial interest in Social Prescribing

Some partners reported that there is significant Ministerial support for social prescribing and according to partners 'green' is a key part of that.

Our ministers are super supportive of social prescribing… and we're in the space where we're looking at where next for social prescribing and I think green social prescribing will be part of that, whether it's that particular project or whatever it might be, it's very much part of the menu of options. (Partner interview 2, wave 2)

Social Prescribing mentioned in policy documentation

Partners also mentioned that social prescribing (and sometimes green social prescribing) was now referenced in a wide range of documents which provides a good basis for future work. They mentioned for example the NHS Long Term Plan, the Environmental Improvement Plan, the Levelling Up Parks Fund, the Loneliness Strategy and it was hoped that it would be mentioned in DHSE's Major Conditions Strategy when that is released later in 2023 or early 2024.

We've got green social prescribing case studies across policy now and I'm really pleased about that, and it's referred to in the update on the mental health strategy that is now going into major condition strategy. (Partner interview 6, wave 2)

Partners also felt that there were strong links between GSP and other policy areas such as climate change and biodiversity, and the transition to Integrated Care Systems and the enhanced role of VCS which would be helpful.

Access to green spaces has also been recognised in the Environmental improvement Plan with a target of enabling people to access green spaces within 15 minutes (walking distance).

Ideas about reframing GSP

Finally, there were some discussions in the workshops and in interviews about reframing Green provision as a form of social infrastructure to be invested in 'as a key pillar of the social system' rather than defining it as a specific intervention that targets a specific outcome. The national level Theory of Change work has highlighted the many different agendas and stakeholders that could benefit from scaling up of Green Social prescribing (see 7.8) and this reframing connects well to the pilot for shared investment being considered by NASP (outlined above). However, due to the long-term and variety of potential services and benefits arising from investment in green (as part of investment in wider social infrastructure), there are likely to be significant challenges for measuring return on investment.

By investing in community assets, you improve the communities themselves, so in terms of big society or creating the infrastructure, the connectivity among communities, greater social cohesion. I think this is where Treasury should be focused because it is about the wider community, the wider neighbourhoods and the opportunities to use these non-medical models to drive some of that

transformational change which will have the by-product of improving people's health and wellbeing. (Partner interview 2, wave 2)

7.7. Partners' views on the remaining challenges for scaling GSP nationally

Partners reflected critically on the key challenges for scaling and spreading GSP nationally moving forward, including some barriers that they recognised has not been fully overcome by the project and where further work would be needed. In many ways these reflect the learning and challenges expressed in the programme theories presented in Chapter 4 and partners reflected that many of these challenges will take more time than the two-year timeframe of the GSP project to overcome.

Perhaps the most commonly identified challenge discussed by the national partners was funding. This had a number of components but centred around how to ensure that nature-based activity providers, mostly small local VCSE organisations, could have access to funding that was consistent, sustainable and distributed equitably to resource the additional demand and requirements that come with being embedded within GSP and the wider health system. It was widely agreed that the GSP project had not 'cracked' this problem and that it ought to be a focus of future collaborative work.

It's about the resource being there and available to those who need the support and then flowing to those who can provide the support, it's finding a mechanism that works and sustains that flow. (Partner interview 6, wave 2)

I mean I think the biggy, until we've nailed it, is the sustainable funding models because until we nail that, we just go for the same cycle of short-term grants. (Partner interview 8, wave 2)

There was general agreement that some of this funding ought to be provided via NHS ICBs through formal commissioning routes but that this was only part of the solution. Other sources of funding including local authorities and national and local philanthropic funding will also continue to be important but, it was argued, needed to be put on a more strategic footing. One idea that had gained significant traction and was being actively developed by the national partners (led by NASP), was 'shared investment funds'. These are locally managed and distributed funding pots that pool resources from a range of public and philanthropic stakeholders in support of strategic priorities.

(The health system nationally is) not putting into the community end of it, that's coming through discretionary budgets that the Integrated Care Systems as a whole have that pulls funding from local authorities, what would have been local authority grants, CCG grants, and again they're probably not at the point where they've started to be able to start to map all of that out and pull that together and that's probably where it'll have to come when we talk about shared investment approaches, but it's just a bit too early I think at the moment. (Partner interview 5, wave 2)

One of the things said to be holding back mainstream NHS commissioning of GSP activities was the evidence base and specifically an evidence base that would enable NICE to recommend GSP or certain nature-based activities as a formal treatment option available via the NHS. For example, the evidence base about the cost and effectiveness of GSP relative to other treatments remains underdeveloped. It was argued that this means that some clinicians remain unconvinced about the health benefits of SP and see it as a 'nice to have' option rather than a consistent option within a range of non-clinical options (along with physical activity and arts & culture) that people can choose to support self-management of their health & wellbeing. Whilst the work undertaken by the project nationally and in the test and learn sites had helped

to challenge these perceptions it was argued that far reaching and lasting change in clinical practice would take more time.

> *It's not dictated, I think there's a question mark about whether it should be or whether local areas should be allowed to pick their priorities. I don't think it's recommended in NICE guidance for example, so there's stuff like that where there's still more work to do in terms of strengthening the extent to which this is seen as a kind of, it's not a nice to have add-on, it is a core part of how you manage health. (Partner interview 2, wave 2)*

> *Have we demonstrated reduced demand on the health and social care system? I think that's probably one that the evidence needs to be brought out more strongly on. I think it's the challenges of people who are making hard decisions about what to invest in and where. It's not a case of us in the project needing that (type of evidence). We know that the audiences that we're talking to, those are the questions they're going to ask and it's important to be able to respond to those. (Partner interview 6, wave 2)*

As discussed earlier in this chapter, partners were realistic about the extent to which it was feasible to and even appropriate to undertake a robust impact assessment of GSP akin to some clinical health service interventions, especially without appropriate national data systems in place to facilitate tracking of individuals across multiple service areas within and outside of the NHS.

A final funding risk perceived by some partners related to the policy and funding environment for the NHS England social prescribing model itself. 2023/24 is the final year of the five-year framework agreement and GP contract through which funding for PCN link workers is provided. NHS England is engaging with the GPs, patients, ICSs, government, and key stakeholders on the substantive content of the future contract. There is currently uncertainty around the level of funding that will be secured for social prescribing or the terms and conditions for implementation.

An important challenge identified by the partners was the quality, usability, and accessibility of local green and blue spaces. In many areas of the country the 'best quality' green spaces, such as national parks and nature reserves, are adjacent to more affluent areas and further away from more (particularly urban) deprived areas. Although many people in deprived urban areas do have access to green and blue spaces in their communities these are often poor quality, inaccessible for people with mobility difficulties, and associated with crime and antisocial behaviour. It was argued that if GSP and nature-based activities are to be offered equitably and universally, and be capable of addressing health inequalities, wider investment was needed (something that was beyond the direct scope of the GSP project).

> *There's a big piece on the (natural) asset…absolutely about health and wellbeing, but also how we can secure biodiversity gains and you know, ensuring good quality green spaces accessible to as many people as possible. And how do we bring those agendas together? So…it's a big piece about how we align strategic health planning with environment planning or planning for that environment. (Partner interview 8, wave 2)*

> *A key challenge going forward is to sort out how to address space locally and to make that available and to activate it so people have confidence to use it. (Partner interview 6, wave 2)*

It is worth noting that in January 2023, the Government committed in the Environmental Improvement Plan to work across government to ensure that everyone lives within 15 minutes of a green or blue space, and to reduce barriers to access.

Delivery of this commitment will help to mitigate this challenge by making access to green and blue space more equitable across the country.

The experiences of localities around access to quality green spaces is discussed in more detail in 4.3.

7.8. Partners' views on the potential benefits of scaling and spreading GSP nationally

When thinking about the potential benefits of scaling and spreading GSP nationally, partners were able to identify a series of primary and secondary benefits, outcomes and relevant policy areas that could be used as levers and linkages to ensure GSP was embedded in as many policy fields as possible. For some of these benefits and outcomes the evidence base is well developed and has been enhanced by the GSP project through its focus on research, learning and evaluation. For others, the evidence base is less well developed, or is one stage removed from the evaluation (i.e., the evidence exists, but is not specific to GSP) or experiential in nature. Nevertheless, for each of the outcomes identified there is a sound empirical or theoretical basis for their inclusion.

The primary benefits and individual-level outcome areas identified, and the relevant policy agenda, included:

- **Improvements in individual mental health:** as discussed elsewhere in this report, 'preventing and tackling' mental ill-health was the primary outcome of focus for the GSP project. Although there have been some differences in how this has been understood, and no clear definition, there was general agreement that mental health should remain a priority outcome for GSP moving forward. This reflects the strong and improving evidence base about the mental health benefits of spending time in nature (see Chapter 2) and the inclusion of GSP in key strategies such as the forthcoming Major Conditions Strategy and the 10 Year Mental Health and Wellbeing Plan.
- **Improvements in individual wellbeing:** partners were keen to differentiate between wellbeing and mental ill-health/mental health conditions when identifying outcomes associated with GSP. Whereas mental health was viewed in predominantly clinical terms (albeit with different levels of severity and complexity), wellbeing was seen to relate more broadly to quality of life and the wider determinants of health. There was recognition that the evidence that GSP (and wider social prescribing) can contribute positively to individual wellbeing was already well-established.
- **Improvements in individual physical health:** partners recognised the potential to expand the target group for GSP to include a wider range of long-term physical health conditions. In the NHS social prescribing policy is positioned within the personalised care agenda which is focussed on the effective management of long-term conditions, many of which are associated with mental ill-health. The inclusion of GSP and social prescribing in the Major Conditions Strategy is expected to further embed this link and demonstrates the recognition of nature for health and wellbeing.

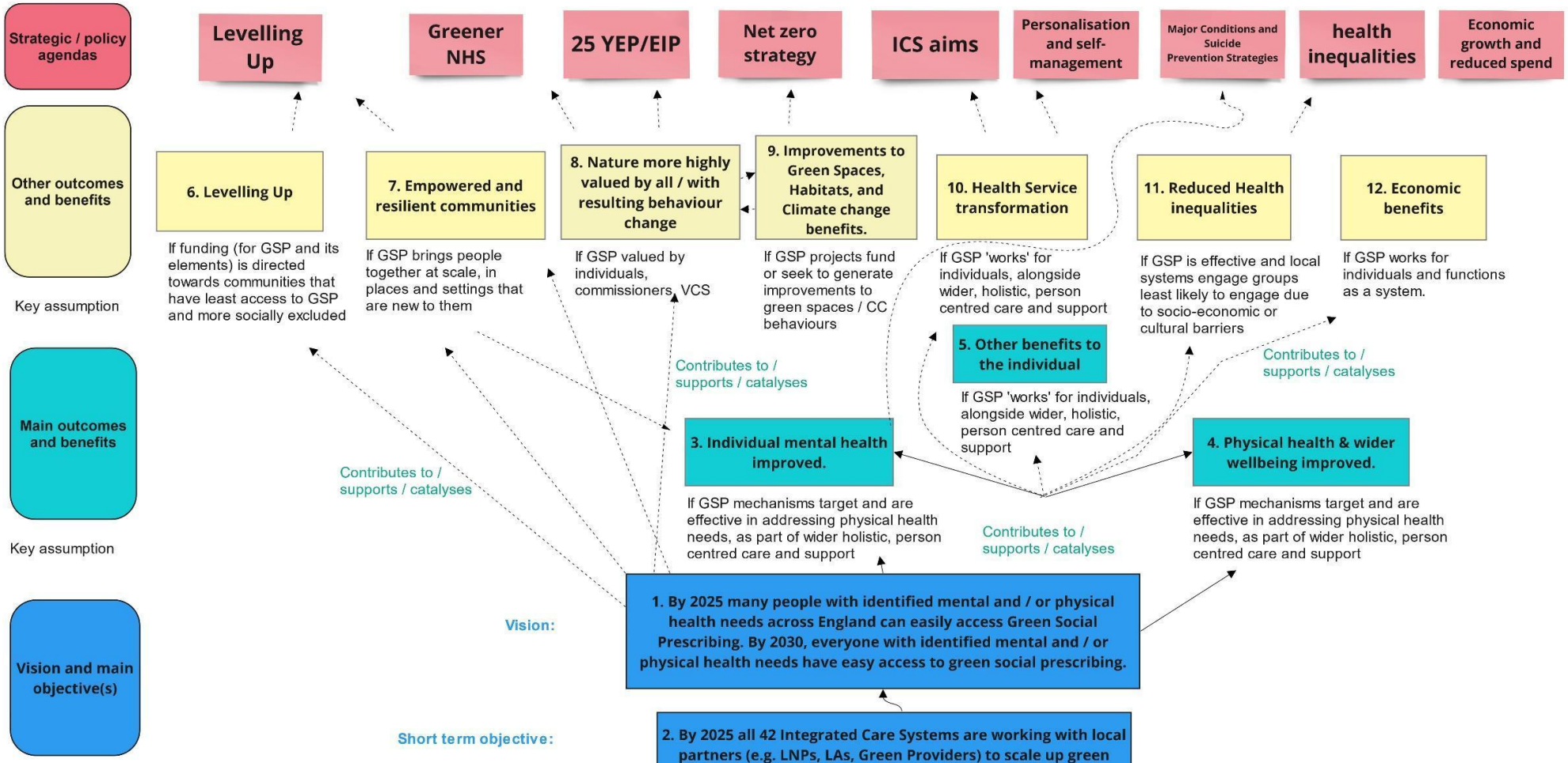
Partners identified a number of other individual-level outcomes and benefits associated with the social and economic determinants of health, including improvements in work readiness (likely to be of interest to the Department of Work and Pensions), resilience to mental and physical ill-health, reduced carer burden, and greater capacity for self-management of conditions.

Partners also suggested a series of secondary benefits and broader policy areas to which GSP could feasibly contribute if it was to be scaled-up and rolled out nationally. For example, the community and equity foci of GSP means it is well positioned to support the goals of 'place' level or 'placemaking' policies such a 'Levelling Up' and the ambition to reduce health inequalities, as well as cross-government interest in the idea of empowered and resilient communities. Nature-related outcomes and policies were also identified as important by all partners (i.e., not limited to those with a nature focus such as Defra or Natural England). These included individual-level outcomes such as nature connection and valuing natural more highly on a personal level and more systemic outcomes such as pro-environmental behaviour change in support of habitat protection, land management and climate change. The inclusion of GSP in the cross-government Environment Improvement Plan was seen as a key marker of the importance of people-facing outcomes within the nature and environment policy agenda.

Partners also identified the potential benefits of GSP in relation various national level system change goals, particularly in the arena of health and social care transformation and agendas such as the 'greener' NHS, personalised care, prevention, and resource efficiency (i.e., diverting demand away from primary care where appropriate). At a macro level the potential wider economic benefits of GSP in relation economic growth, employment and employability, and more appropriate use of acute care were also noted as important considerations. Meanwhile the project itself requires high quality green spaces and this was seen as making a valuable contribution to the 'system' drivers for green spaces.

As can be seen in Figure 17 these benefits are not expected to arise without certain assumptions being met. Importantly many of the benefits are expected to result not just from accessing nature through green social prescribing but through the wider access to support and services that result from working with a link worker around a broad set of needs.

Figure 17: Primary and secondary outcomes associated with rolling out GSP nationally



7.9. Partners' views on the learning for HM Treasury and other large scale cross government projects

HM Treasury initiated this innovative fund to enable a range of partners to come together across multiple departments to address key challenges or objectives that require extensive joint working, in order to achieve 'shared outcomes'. This approach to joint working is innovative in that it provides funding to a partnership of national stakeholders to work together, which compares to more traditional forms of joint working in which departments themselves initiate or fund a project and seek to involve other contingent departments.

Given this novel approach, Partners were asked explicitly to reflect on what they thought was the key learning was from this project for HM Treasury, other cross departmental joint working. There is wider learning that can be implied from the discussion of the range of challenges and issues covered in this chapter and from the wider report and we anticipate those reading this report will draw their own learning from this wider source of material. What we focus on in this section of the report is what Partners themselves identified as the key learning – including both what worked for them and what did not.

7.9.1. Governance

There were generally positive and complementary views about the project's governance amongst partners. Over time Defra established a wide range of committees to underpin decision making for the programme which have allowed partners to engage and make decisions across the different project domains and to work together effectively, despite the challenges outlined above.

> *When you consider how many different actors are involved in the programme [I think] it is really well organised. There's a kind of one team approach to things. I think [the governance has brought] lots of disparate groups together with lots of different perspectives, different objectives. (Partner interview 2, wave 2)*

But there were also some who felt that there were too many elements to the governance which made decision making hard, and potentially fragmented. The number of meetings and sub-committees made it hard for partners to engage resulting in partners feeling disconnected.

> *I think we've struggled with the level of governance that's been attached to it… it's taking up a lot of my team's time. You've got various subgroups and it just felt like I think there was a bit of [uncertainty] I picked up a lot of "what can we decide, make decisions on?" [and] It felt quite... hierarchical …it feels like the bureaucracy of decision making. Kind of got to go through a number of loops and loops, you know, up to board steering group. (Partner interview 2, wave 2)*

One partner was also uncertain about whether the groups had been sufficiently consultative.

> *There's too much talking by national partners and not enough input from the others. I mean, to me, part of the purpose of those meetings is to make use of the expertise in those groups, and I don't think we've done that sufficiently. (Partner interview 4, wave 2)*

A number of partners commented that it would have been valuable to have received some guidance from HM Treasury on governance and management, and to have shared some learning with other projects.

I think it would have been quite helpful if treasury had given a bit more guidance upfront and if there'd be a bit more shared learning between the different shared outcomes and programmes. There's a little bit now but it came along very late in the day and there was nothing really at the beginning so it was very much left to people to make it up on their own which I think is a bit of a wasted opportunity because I think we could have learnt quite a lot by seeing how other organisations did it. I think something maybe that would be good. (Partner interview 3, wave 2)

7.9.2. Funding

A key reflection from partners was that the funding for cross government working had been essential to enabling the partners to work together effectively. The funding for oversight and delivery has unlocked ways of working, relationships and collaboration that would not have been possible under more typical 'joint working' arrangements between departments.

It's a great benefit because it's a way to facilitate work across departments in a way that's often a bit awkward. sometimes when Departments [work] together trying to [sort out funding from across departmental budgets can] be really awkward and having that shared income can really help that and stimulate [joint working]. (Partner interview 2, wave 2)

I think the funding, having the central fund, was really valuable because it made the partnership bit all on an equal footing, whereas if it's one government department's funding the other ones to do something it's a bit more of a contractual relationship, whereas this was very much we were all a team delivering this thing that's treasury funded. (Partner interview 3, wave 2)

7.9.3. Time and encouragement to clarify and document aims and objectives

Many of the partners spoke about how valuable it would have been to have had the time to spend clarifying (and then documenting) the project aims, strategy, theory of change and success criteria so all the partners, with their different mental models of the project, their different perspectives could have fully achieved a shared sense of the project. The project started suddenly according to partners and in the context of COVID-19 which offered limited scope for this. They also felt it had been unfortunate (as discussed previously) that those who had drafted the bid and secured the funding moved on to the detriment of the project.

It's the same curse that small organisations that provide green social prescribing have when they're applying for a pot of funding and have to jump through various hoops or meet certain requirements or meet certain deadlines, I feel like we all have that – just at a different level. So at the start the bid was filled in, it had more focus on some areas and less on others and you wonder, I don't think anybody would really like the industry it would involve, but an extra stage of really fleshing out all the details of the bid…it's what we did in the end, but making sure that all the different parts of the programme are as fleshed out as each other and you really know what you're going to do, a logic model for want of a better word. (Partner interview 2, wave 2)

I think you need to accept that time built in to get things going on a programme, you can't cut that. It kind of sounds like 'can't you just get going, we want to spend the money this financial year' and we wouldn't have wanted to turn that money down when it was offered, but that's not the best way of running a programme. (Partner interview 3, wave 2)

7.9.4. Recognition of the scale of ambition

Shared outcomes Fund projects, like the Green Social Prescribing project were trying to achieve significant changes involving disparate agencies and addressing numerous challenges in small time frames. Partners felt that there was insufficient recognition on the part of HM Treasury that this was 'systems change'.

> *I think recognition of the scale, when you think of what we're trying to deliver and what we're trying to do and when you compound it with the pandemic, it's a considerable change management process for all parties and stakeholders on the ground and I think that is often the stuff that's quite often left to the last consideration but actually it's integral to every success or every way forward because the nuts and bolts of the things that you can control and manage evolve whereas the time, particularly for those test and learn sites on the ground, to get things set up, to win the hearts and minds locally and do all the things they needed to do, that in itself would take you probably two years in a normal environment let alone when you're trying to do it all by Teams. (Partner interview 2, wave 2)*

Partners felt strongly that two years for this kind of programme was insufficient, and that in addition to the time required for clarification of the detail of the bid, additional time is needed for clarification and set up in sites ahead of 'delivery'.

> *I would say two years isn't actually very long to get a programme like this started embedded and delivering significant outcomes and we are aware of some of the challenges in the setup at particular pilot sites and kind of getting things integrated and working properly and they ought to take slightly different approaches and timelines to be able to actually get referrals happening and or sign posting happening and those kind of things say. (Partner interview 8, wave 2)*

> *(What) I definitely would apply in any big projects in the future is before you even press go...so when that two year starts, you'd almost say we're going to build in four months to establish the structures, mechanisms, whatever it is you need to deliver. And then that two-year delivery clock starts after that. So, if in future years, if you had a year's project, you might call it 14 or 18 months, if it's two years, you'd add on four months at the beginning. (Partner interview 9, wave 2)*

Linked to this, in the context of systems change, partners recognised the need for two-way communication between localities and central government which is challenging to undertake in tight 'top down' project delivery constraints.

7.9.5. Approach to evaluation

For interagency projects like this, HMT should encourage agencies to spend more time familiarising themselves with each other's data environment when thinking about monitoring and evaluation. This might help with clarifying what is deliverable and what the gaps are likely to be – adequate time to resolve these issues prior to commencement is also advised.

As is clear however, for several of the partners the project was about large-scale systems change in the eight sites. Reorienting a range of local agencies into a system capable of supporting people with mental health issues to access green provision and a range of other services. This was in the context of wider system change associated with the establishment of Integrated care systems and the challenges that come with that.

Not all of the partners recognised the challenge from the start and a number of key stakeholders believed that attempting to robustly evaluate the impact of a wide range of services and support on different types of individuals across the range of settings would be feasible. However, it is also clear from discussions with other partners that they felt that a wholly different framing and approach would have been helpful and more appropriate given the focus of the project on systems change rather than demonstrating outcomes.

> *What was the problem we were trying to solve here? I think it was 'how do you spread and scale green social prescribing across a system? The integrated care system. So there should be a better understanding about how you evaluate systems change and that should have gone through into evaluation.... Treasury just wanted to know 'does 'green' support people who've got mental health needs and prevent them having, needing further support?'. So there was a kind of implicit, inherent cause and effect type thinking and rationale behind the scenes, so 'value for money', 'reducing pressure on services' and what they didn't take into account was all of that context, the systems, the multi-layers and the fact that there's no way you get that, you can't do a 'cause and effect' study in such a complex environment in a multi-sector system. (Partner interview 5, wave 2)*

There was some awareness of the availability of national guidance on more complexity sensitive approaches to evaluation that might be appropriate for this kind of project, such as the Supplementary Guide to the Magenta book on evaluating complexity.[13]

[13] Magenta Book Supplementary Guidance

8 Conclusions and recommendations

This final chapter presents some overall conclusions from the evaluation and considers the implications of these for the GSP project and the test and learn sites. We then provide recommendations for future policy and practice associated with Green Social Prescribing (GSP). The implications are framed in relation to key stakeholders in GSP: the regional health and social care systems through which GSP will need to be scaled and spread; local social prescribing Link Worker systems and teams; nature-based providers in the VCSE sector; and the national partners.

8.1. Conclusions

8.1.1. Key learning about how to scale up and embed GSP

Key learning from the evaluation was arranged through a series of if-then statements, representing programme theory – that is: how GSP can successfully become embedded in localities to tackle and prevent mental ill health within localities. These are summarised below.

1. **If we have new commissioning and procurement arrangements and agreements, then we will ensure that nature-based providers are embedded within the delivery and wider social prescribing landscape.**

   Precarious, short term and piecemeal funding is common for VCSE organisations, leading to frequent staff turnover and focus change, most acute in smaller providers. GSP advocacy, at a range of different levels (local, regional), together with the creation of co-design opportunities to address funding challenges, and strategies to redistribute available funds, can support the development of new networks, more joined up commissioning processes and the potential for green providers to work together to coproduce funding bids. Creating and updating listings of “trusted providers” – including the levels of mental health need which organisations can support – may also facilitate more equitable access to GSP investment. Resources to support such new networks is required, as well as recognition of the role self-referral plays for organisations, so that these provided service are also recognised.

2. **If political and strategic power and influence is directed to support GSP, then there will be shifts in policy and budgeting.**

   At the beginning of the project, there was a lack of awareness and recognition about GSP at strategic levels, leading to lack of leadership and investment. At the operational level, link up between parts of the GSP system – particularly between (small) VCSE organisations and statutory sector – was often poor. Cross governmental commitment nationally provided critical leadership support and funding for GSP. Locally, the GSP project manager role was pivotal in providing leadership, direction and influencing the culture locally. A wide range of strategic partners – including from the VCSE sector - was involved in steering/management groups. Networking, relationship building, partnership work and advocacy was key with some sites recognising this through funding posts for this role. This led to greater connection and understanding between parts of the system, allowing priorities to become aligned and for power imbalances between sectors to be lessened. Localities ensured GSP and learning from the pilots were embedded in key strategy documents and were able to leverage other funding to support GSP. However, two-years is a short timetable to achieve systems change, with some tension between activities to support relationship building, coproduction, and systems change and the desire to provide data about participant mental health impact. Other system pressures reduced the ability of some stakeholders to engage. Further, translating enthusiasm into resource commitment remains a challenge.

3. **If we grow or harness nature-based assets, then there will be a range of appropriate, diverse, geographically spread opportunities for service users.**

   Initially, there was generally good coverage of, and delivery capacity among, nature-based providers although connectivity to receive social prescribing referrals was sometimes insufficient. Fragmentation and variability across the system was compounded by a lack of communication, and most acute for smaller VCSEs. Providers need access to funding and investment to support their activities and for practical support such as transport, and equipment – even small amounts can help to legitimise organisations and their activities. Co-design work can help create a collective vision and refine referral pathways. Development and maintenance of “trusted provider” information can build trust within the system and ensure participant need is appropriately met. Support for nature-based providers to work together to develop collective funding bids is critical.

4. **If efforts were made to remove perceptual and structural barriers and create aligned structures, then there would be coherence and clarity of roles and responsibilities across the system.**

   GSP involves a complex set of activities and structures with, crucially, multiple interdependencies for the system to ‘work’. The lack of alignment of ambitions, systems and processes poses challenges to its efficient delivery – addressing this was a key component of all pilots. Collaborations between relevant partners were built, and efforts made to clarify roles and responsibilities. Steps were taken to agree shared ambitions, ways of working and indicators of success. However, the time frame was insufficient to embed greater alignment. Perverse incentives (such as rapid cycles of ongoing change) that prevent alignment were not addressed and there was not the power to address some of the most important systemic misalignments (such as funding) amongst the GSP stakeholders.

5. **If we gather and share routine data in the GSP system, then this will build confidence in the efficacy of GSP to support people with mental ill health.**

   There was an initial perception that some wider system partners did not consider the evidence for GSP to be sufficiently compelling or rigorous – although there is also a lack of consistency and agreement around what 'compelling and rigorous' evidence means. Given the complexity of GSP, data collection poses multiple challenges. Linking data across the system is often difficult or not possible. Sites and the evaluation team provided training, guidance documentation, templates and backfill payments to support data collection. However, some measures are not liked by some, and the resources associated with data collection, collation and reporting are challenging, especially for some (smaller) VSCE organisations. Some organisations did not bid for funds due to the perception that data collection requirements were too onerous. Secure, ongoing, and robust financial support for data collection and collation was missing in most cases. In this context, the process of getting any technical solution funded and implemented, as well as gaining agreement of key outcomes, was seen as a success in terms of collaboration. In addition, there is a growing programme of national-level research in this field, including process evaluation, surveys, secondary research, and trial funding.

6. **If we enhance processes to support information flow and feedback loops within the system between the network of providers, Link Workers, referrers and funders, then we'll have better connected, efficient and effective pathways.**

   Initially, networks of providers, Link Workers, referrers, and funders were fractured and dispersed, with reliance on key individuals. Participants drop-out or disengage across social prescribing pathways if they are not appropriately supported. Within-sector, local networks are often strong, but interaction across these networks less so. The GSP programme legitimised collaborative activity from senior individuals within the health and VCSE sector. Spending time understanding existing local networks and individual champions is important to take the next step in developing links between these and to develop referral feedback loops (between community and health services and back again). Understanding and communicating what levels of need can be supported by which activities is important, where possible, and this aids in targeting groups too. 'Active' link working, where people are accompanied to the first session, benefited in strengthening links.

7. **If we want mutual accountability and shared problem-solving to enhance service users' experiences, then we need to build trust and respect so that people understand and are aware of how different actors in the system may operate.**

   Initially, there was a lack of mutual awareness and understanding between GSP partners, particularly between the NHS (especially Mental Health and Young People's services) and VCSE sectors. Key statutory partners lacked recognition of the ways VCSE work, and what they were already doing. VCSE partners delivering nature-based activities lacked capacity, knowledge, or skills to work with social prescribing (SP) referrals. There were therefore few referrals through formal SP referral routes and a lack of partnership working and coordination. The GSP project invested in partnership, collaboration and knowledge sharing opportunities including meetings, taster sessions, social media, delivering workshops and training, and outreach to nature-based providers. There was codesign work to understand the needs of stakeholders and barriers to participation. Networks of nature-based providers were supported or initiated.

Trusted provider schemes of providers were developed to support appropriate referrals. Innovative funding schemes (such as green health budgets) were also explored. Challenges to these activities' success included; limited capacity to attend meetings for some stakeholders; short term project means a trade-off between meaningful involvement and co-production and directive action to get things done; increased understanding was not always positive – could lead to entrenchment of views; some uncertainty about the appropriate scale of networks; trusted provider schemes/ directories require ongoing updates; Link Worker capacity is stretched, with many of those referred having complex or acute needs. Improved understanding between, and linking up, different parts of the system has been successful – this is critical but may not be sufficient to ensure mutual accountability and shared problem solving, especially in a limited time period.

8. **If we build referrers' capability, opportunity and motivation to refer to GSP, then we have improved access to appropriate green opportunities.**

At the start of the project, many sites reported a lack of clarity around referral routes, their structure and what was available to whom. Link Worker provision is fragmented with multiple different Link Worker employers across VCSE, primary care, secondary care, social care, and private sectors – with little coordination or data sharing. Link Workers often did not understand the specifics of GSP. Self-referral was the most common route to nature-based activities across all sites, and often this was a surprise to project teams who had assumed that SP referral was the more usual route. Sites provided training packages for referrers to increase awareness, as well as taster sessions, and activities to increase awareness of different referral pathways – including for mental health services. Nature-based providers offered peer support, buddying and befriending, providing a specific support role alongside the delivery of the activity, and sites undertook work to understand specific needs or barriers to participants (e.g., providing transport). However, Link Worker capacity remains stretched, and support for alternative modes of referral – including self-referral and community to community referral may be important.

9. **If we want equitable access to appropriate green opportunities, then decision making must be made through an inequalities and instructional lens.**

Many of those receiving a SP referral have complex and/or acute needs. Some providers lack culturally appropriate and relevant offers for different communities, and the additional resource required to engage ethnic minority groups fully and meaningfully can be challenging. Variations in deprivation across localities including within urban areas, those associated with rurality and isolation, refugee communities in specific areas, and people in ethnic minority communities without ready access to green spaces. Sites worked to harness existing local and national networks with strategic partners to explore routes to tackling inequalities and target activity, undertook public communication and advocacy to promote the benefits of green activities to a wide audience and deployed GSP training instructors from diverse local communities. Promotion of accessibility and inclusion can showcase best practice. There were dedicated groups focused on tackling inequalities and serving ethnic minority communities. Co-design workshops at the start, involving people with relevant lived experience (such as of mental health issues) alongside place partners, helped to prioritise criteria for funding in some cases. Sufficient time and resources allocated to meaningfully explore inequalities in access and provision are required to support meaningful engagement of people most likely to experience health inequalities.

10. **If there was a desire for the green social prescribing system to be person-centred, then the user voice was important to illuminate the changes across the pathway.**

    The involvement of people with lived experience of mental ill health or service use was an ambition for all pilot sites. Securing the effective engagement of community members, lay members, members of the public, and people with lived experience of mental health across a system undergoing transformation has been recognised as a critical enabler of success. Involvement strategies, at both the national and local level, appeared to be underdeveloped, although in some cases there were large efforts towards co-production and involvement, and the inclusion of a person with lived experience on the National Project Board was novel. However, few managed to maintain meaningful involvement – a small number involved people with lived experience of relevant issues in the design, delivery, and governance of the programmes, and one included such people in the review and quality assurance process. There was little resource to support involvement, and it is unclear the extent to which people actually influenced decision making. Involvement has the potential to enhance decision making, improve transparency, and ensure services meet the needs of the community.

11. **If we want referrals to be fulfilled, then service users must have a positive experience across the GSP pathway.**

    There were issues with service users disengaging with GSP across the different points of the SP pathway. Barriers to engagement include poverty, a lack of access to transport or kit, or deterioration in mental health status, and may disproportionally affect marginalise groups. Drop off can occur at different time points across the pathway. Sites worked to understand the level of participant need and potential barriers, providing tailored support, support (such as buddy schemes) to reach the first session as well as a consistent contact for users across the SP pathway. Practical barriers (e.g., with transport, providing kit/equipment) were addressed. In addition, training for nature-based providers to support mental health referrals, and development of directories can help ensure referral matches level of need to appropriate provider. Resources are required to keep these updated and relevant.

8.1.2. Outcomes for people accessing GSP

The GSP project primarily **supported those with moderate mental ill health,** supported a **wider range of age groups** than typically seen in social prescribing, including those under 18, as well as **higher proportions of those from ethnic minority populations** and more **people from socio-economically deprived areas** than social prescribing generally (exact numbers varied by site). This may also reflect the fact that formal Link Worker referral routes were a relatively small proportion of the ways in which participants reached nature-based activities, with self-referral and community routes being common.

People experienced improved mental wellbeing when accessing nature-based activities indicating that GSP is having a positive impact. However, due to the diversity of activities and number of interactions, it is unclear which activities are having the greatest impact on mental wellbeing.

- **Across the sites, there was a statistically significant improvement in mental wellbeing for all four ONS4 wellbeing domains after accessing GSP**. In addition, people may experience further improvement given that many were continuing to attend nature-based activities. Across the sample, the improvements

in the average (mean) scores were *life satisfaction* - 4.7 to 6.8; *worthwhile* - 5.1 to 6.8; *happiness* - 5.3 to 7.5; *anxiety* - 4.8 to 3.4.

- These changes mean there was an overall **improvement across the sample from people typically having 'medium' wellbeing (a score of 4-5) before accessing GSP to having 'high' well-being (a score of 6-8) afterwards**. Likewise, there was a **shift from being classed as 'medium' to 'low' anxiety**.
- **The Hospital Anxiety and Depression Scale** (HADS) (data from one site) also showed a statistically significant improvement in both anxiety and depression symptoms. Depression symptoms reduced from 8.1 to 5.6 and anxiety decreased from 11.1 to 8.5. The baseline scores were not particularly high **indicating that GSP was supporting people primarily with pre-determinant and moderate mental health issues**.
- T&L2 and T&L6 utilised the nature connectedness outcome measure. **T&L2 showed an improvement in nature-connectedness**, whilst T&L6 showed no improvement. However, there were a number of data errors, making interpretation difficult.
- T&L6 collected physical activity data and showed a **statistically significant improvement in people increasing their physical activity following a nature-based activity** (from 84.2% in the seven days before the activity to 94.7% post activity).

Please note that **these data have number of limitations**, including: uncertainty about how representative they are of GSP participants as a whole, including as a proportion of all GSP participants; several sources of bias, including survivor bias (i.e. people who completed a whole course of nature-based activities), optimism bias and measurement error (i.e. data collected inaccurately); heterogeneity and multiplicity of intervention (i.e., type of nature-based activity, other types of support accessed); absence of a control group leading to uncertainty around attribution; and a lack of outcome data from two sites. However, despite these challenges, the data indicates that **GSP is having a positive impact on people's mental wellbeing and supports the evidence of the wider literature.**

8.1.3. Value for money

Overall, the GSP project, and GSP in general, appears to offer good value for money. However, for complex projects such as this value for money has a number of components and should be considered from a number of perspectives.

- **Project level matched funding and in-kind resources:** The Test and Learn sites leveraged £1.66 million in matched funding (£1.48m) from public sector and philanthropic sources and in-kind resources (£0.18m) from local partners. They were also able to secure investment from their local health system and other sources worth £1.2m to continue their projects in 2023/24 after the Shared Outcomes Fund investment had ended.

  When all of the matched funding and in-kind resources at a site level are combined and compared with the amount of money invested in the GSP project by central government, it amounts to an extra £2.87m, equating to an additional 50 pence (£0.50) for every pound (£1) invested in the project overall and 82 pence (£0.82) for every pound (£1) directly invested at a site level.

- **Project level cost-efficiency**: Based on 8,339 people participating in nature-based activities through the GSP project, the cost per output (cost-efficiency) was £419 per person participating in nature-based activities. This varied between sites from £223 to £4,201 reflecting the respective focus and activities undertaken by

different projects. However, comparison between sites of their relative cost-efficiency is not advised.

- **Nature-based providers:** The average cost per participant engaged in nature-based activities was £507 but costs ranged from £97 to £1,481. The average cost per mental health or wellbeing outcome improvement was £619 with costs ranging from £225 to £1,777.

  Compared with other interventions for people with mental health needs, nature-based activities appear to be a relatively cost-efficient way to support people across a wide spectrum of mental health needs. However, it should be noted that for many people, the most appropriate course of action to support their mental health will be to access different types of intervention in combination.

- **Social prescribing Link Workers:** The 'full cost' of making GSP referral (the combined cost of a GP appointment, Link Worker referral and participation in nature-based activities) is estimated to range from £284 to £1,686. This wide range reflects the broad spectrum of mental health needs that these activities cater for. Overall, green social prescribing can be considered a relatively cost-efficient intervention when compared to other types of support for people with similar mental health needs.
- **Valuing the benefits of GSP:** We used a WELLBY approach to estimate the value of improvements in individual life satisfaction experienced following participation in nature-based activities. Allowing for sensitivity adjustments, the value of WELLBYs estimated to have been created through the GSP project ranged from £7.6 million to £23.3 million, with a central estimate of £14.0 million. This means that the (social) return on investment of the GSP project ranged from £1.02 to £3.13 for every pound (£1) invested in the GSP project, with a central conservative estimate of £1.88.

8.1.4. Key learning from the GSP national partnership

Partners identified the **main benefits and outcomes of the GSP project**, as those associated with bilateral and collective experiences of working together that would last beyond the project. The project helped to position GSP in national policies and strategies, there was extensive new evidence from the project and the evaluation about GSP and how to overcome some of the barriers experienced in localities. The project had also reached people with mental health difficulties and boosted the recognition and perception of GSP in the sites and more widely.

Partners had **experienced a range of challenges** in managing and delivering the project many of which extend from significant issues clarifying and agreeing the aims of the project across the partnership and with localities. These had implications for project delivery and associated evaluation and evidence strands. These challenges were linked to the COVID-19 pandemic; the limited time available to the partners in which to 'form, storm, norm' due to sudden approval of the project by HMT and associated requirements to progress rapidly to delivery; some significant levels of staff turnover; causing limited ability of some partners to engage extensively in the partnership in the early stages.

Key **challenges for the Test and Learn sites** were associated with delivering 'systems change' during the pandemic, during a wider NHS reorganisation in short timeframes. The project was extremely ambitious given these circumstances. The reset of the aims and focus that was negotiated during the project with localities caused some delay and confusion and some tensions, but these were not longstanding. Partners were aware of the challenges of delivery during a cost-of-living crisis and of

the high levels of mental health needs that link workers and providers had to deal with which may have affected take up of SP.

Looking ahead, partners felt that there were a number of **opportunities and enablers for scaling and spreading GSP**, but it had not been possible within the timeframes available. Key opportunities and enablers included: the continued national partnership, sharing tools and resources emerging from the project, new evidence (for example the NIHR research), a new NASP project on shared funding mechanisms and improvements to NHS digital systems which might support efforts to track individuals accessing green provision. Meanwhile, wider opportunities / potential enablers included the high level of ministerial interest in social prescribing; recognition for social prescribing in key policies; and the potential for reframing GSP in relation to different policy agendas.

There are a **range of challenges that need to be addressed to enable wider scaling up of GSP** nationally. Partners reflected that sustainable funding models and a lack of clinical style evidence of the impact of GSP were key challenges that the project had not been able to address. They also identified other challenges including: the precarious nature of Link Worker funding; and unequal access to quality green and blue spaces across England, particularly for communities that need it the most, although new policies around access to green / blue spaces within 15 minutes might mitigate this.

Partners were **clear on the potential benefits of GSP** including mental health and wellbeing, physical health, work readiness and continuity, personal resilience and self-management, reduced carer burden. Through promoting self-management and resilience GSP was expected to contribute to the personalisation agenda and associated health transformations. Greater provision of opportunities and investment in green infrastructure was also associated with the levelling up policy agenda, health inequalities and community empowerment. Meanwhile there were a range of outcomes for nature associated with greater recognition and valuing of nature such as pro-environmental behaviour change on the part of the public, service commissioners and other institutions.

8.2. Implications for the test and learn GSP project

This section summarises the implications of the key learning points about scaling up and embedding GSP for the Test and Learn sites.

8.2.1. New commissioning and procurement arrangements

- To communicate the difficulties and impacts of short-term funding cycles, it is important to embed those active in delivering GSP across system-wide networks.
- There are specific challenges faced by smaller organisations compared to larger ones, so providing additional support to allow those to engage in GSP is important. This may include partnering with larger VSCE, providing resources to make time for generating partnerships and bids.

8.2.2. Political and strategic power and influence to support GSP

- To get strategic, political buy-in requires motivated people driving the agenda, as well as evidence for the value of GSP.
- Leadership with explicit accountability and investment is required to drive the GSP agenda and activities.

- Influencing systems change, networking and relationship-building and strategic thinking takes time, and sites need to be given time to build and embed what has been achieved.
- Getting GSP embedded in policy is necessary but not sufficient to scale up and embed GSP – a commitment from relevant stakeholders about how to support and fund it is required.
- VCSE partners, including smaller organisations, need to be part of strategic decision making.

8.2.3. Harnessing nature based assets

- The validation that nature-based providers achieved through receiving funding allows staffing resources and dedicated time to be allocated to social prescribing activities that would otherwise not be possible. This allows for greater input and creates a virtuous circle of involvement.
- Increased levels of matching participant need to green provision enables a greater proportion of cohorts to be allocated appropriate activities or redirected to other parts of the system, increasing flow through the GSP system.
- An increase in the number of appropriate, successful, and large funding applications from the VCSE increases provision and therefore throughput, and also contributes to the virtuous cycle of involvement noted above.
- Buy-in from senior strategic partners further validates involvement, raises awareness across a wider set of stakeholders, and further enables pathways to provide appropriate support at the right time for the right groups of people.

8.2.4. Alignment of organisations

- Resources are needed to ensure that the progress made in alignment of aims, structures and processes through the GSP project is not lost and is instead capitalised on.
- Funders and managers locally and nationally should recognise that sufficient time is required in a project to build alignment between different actors in the GSP system.
- Those with power to change some of the underlying factors preventing GSP alignment – such as funding and investment structures and cycles - need to be more involved.

8.2.5. Creating compelling evidence

- Given that GSP is sited across multiple organisations, understanding the reasons for incomplete or patchy data collection and linkage in localities is important.
- Objectives and processes for data collection should be co-produced between funders and locality partners to represent the aims, outputs, and outcomes that they are interested in, while ensuring that these reflect what is possible given the constraints – which may be locality specific.

8.2.6. Improving networks to support connectivity

- Spending time understanding existing local networks and individual champions is important to take the next step in developing links between these. Particular efforts may be needed to ensure that some parts of the system are engaged and mechanisms for involvement appropriate – such as smaller VSCE organisations, mental health and young people's services.

- Understanding that GSP and aligned aims are not always the same as the aims of existing networks or organisations and so finding common ground around purpose and processes, and working to develop shared vision is important.

8.2.7. Mutual understanding and awareness of different parts of the system and how they operate

- Improved understanding between, and linking up, different parts of the system has been successful – this is critical but may not be sufficient to scale up and embed GSP, especially in a limited time period.
- Time and resources are required to understand issues facing stakeholders, develop relationships, build trust and respect, and ensure aims and priorities are agreed.
- There are trade-offs between extensive engagement / coproduction work and delivery of green activities, and the value of former needs to be recognised to ensure activities are appropriate and acceptable to local need.
- Mutual sharing of risks and benefits needed.
- Trusted provider schemes / directories need to be sustainable.

8.2.8. Referrals to GSP (extent and appropriateness)

- Sites would value development of a single referral form gathering necessary participant information, clear guidance on who is expected to provide support for participants, and what level this support needs to be, and basic requirements in terms of evaluation and participant safety.
- Further training on safeguarding and mental health support may be useful for future delivery.
- Link Worker capacity and engagement in GSP must be addressed in order to improve referrals to GSP.

8.2.9. Inequalities in access to nature

- Meaningful user engagement with people most likely to be subject to health inequalities should be standard practice for national and regional initiatives.
- Full and careful consideration should be given to sensitive involvement of groups most likely to be subject to health inequalities within specific geographies.
- Decision makers must consider creative and non-standard ways to include the voices and views of people most likely to be subject to health inequalities, such as peer research and engaging community gatekeepers in good time.

8.2.10. Engagement of users in GSP processes

- Future GSP systems building, at all levels, should include relevant communities as standard.
- Involvement should be sufficiently broad and deep to represent the different experiences and needs of different communities.
- Consideration should be given to power hierarchies and dynamics and whether these prevent meaningful contributions.

8.2.11. Level of retention/drop-out of users in the GSP system at different points in the pathway

- Key to the success of approaches which appeared to positively impact on participant retention were providing patient centred care to understand participant needs, supporting participants to attend initial sessions, providing consistent contact along the pathway, referral to other provision either within the same organisation or close by, working with external organisations (such as food banks) and addressing the underlying barriers preventing engagement with GSP.

8.3. Recommendations for spread and scale of GSP

Based on our findings, we have developed recommendations related to our programme theory to support scaling up and embedding GSP. These are outlined below, and summarised in the table together with indication about who needs to take action, and the level of difficulty.

8.3.1. New commissioning and procurement arrangements

Context

- Nature-based providers were funded piecemeal and unsustainably resulting in sector fragility and competition.
- Smaller or micro-providers often unheard and facing greatest challenges.

Who needs to take action

Recommendations in this section relate to national and local government, those in the health sector and GSP providers. These actions have been classed as of moderate difficulty since they require coordination between sectors, and mobilisation of resources.

Recommendations

New collaboratives should be supported to generate joint funding bids, particularly those that include dedicated co-design work amongst partners, and these activities should be facilitated and supported by GSP teams. These are likely to help smaller organisations into GSP supply and to reflect local needs and capabilities.

Many nature-based organisations receive many participants through self-referrals. Advocacy for, and promotion of the benefits, may make more aware of GSP and increase the numbers accessing through this route, which may take pressure off the referral systems and increase impact.

Ongoing support for growth of nature-based provider networks interested in sharing knowledge and pursuing funds is important, particularly if continued in the absence of project-specific funding.

8.3.2. Political and strategic power and influence to support GSP

Context

- Lack of awareness and recognition of GSP resulting in lack of strategic leadership and investment.
- Lack of link up between parts of the GSP system – particularly between (small) VCSE organisations and statutory sector.

Who needs to take action

Recommendations in this section relate the action by national and local government, and the health sector. Policy recommendations have been rated as moderately difficult, while those relating to funding are considered high.

Recommendations

Cross-government support and promotion for GSP has been successful in raising the profile, purpose, and impact of GSP. However, systems change takes time and, to build on this and ensure progress, continued support is required.

All GSP partners should continue to work to ensure that GSP is recognised in key relevant local and national strategies and policies.

Resourced staff, both those with responsibility to drive programmes of work in localities and specific key roles developing the system and building relationships, are required to continue to develop and expand GSP.

Future funding for improving the spread and scale of GSP across localities should explicitly incorporate recognition and valuing of improved processes, networks and connectivity related to systems change to embed GSP, as well as the impact on individual outcomes.

8.3.3. Harnessing nature-based assets

Context

- Connectivity, link up and ability to receive social prescribing referrals from nature-based assets is sometimes not sufficient.
- Pre-existing networks are often beneficial but linking this complex landscape together takes time.

Who needs to take action

Recommendations in this section relate the action by local government, health actors, GSP providers and communities. Actions related to support for GSP are considered of moderate difficulty and those related to funding, high.

Recommendations

Those across the GSP system should work together to understand what types of support and activities are available for different participant needs, and to ensure that referrers are keep aware of where and what these are. This should include developing a collective vision and action for provider availability and deployment, and for that vision to be clearly articulated across all elements of the system.

Where they have limited or no experience, training and support should be provided for nature-based organisations to work with different cohorts of people, while recognising that not all activities may be suitable for all.

To increase or retain capacity there needs to be dedicated and accessible funding and investment in the organisations that provide them.

8.3.4. Alignment of organisations

Context

- GSP is an inherently complex system, this relates to the interdependencies between the actors involved, the variation in practice within and between areas, and the dynamism of the system.
- Strategic, systemic, and procedural alignment can be important when working towards a common goal.
- There is evidence of a lack of strategic, systematic, and procedural alignment in relation to GSP.

Who needs to take action

Recommendations in this section relate the action by national and local government, health actors and GSP providers. Given the complex context, outlined above, actions are considered to be of high levels of difficulty.

Recommendations

Alignment of strategy, systems and procedures is a fundamentally important factor and should be considered in the scale up and out of GSP. This may be challenging given the range of organisations, sectors and *modus operandi* involved in GSP. Differences in aims and culture between these partners need to be understood to work towards building understanding, trust, and alignment around GSP, which will take time and resources. Linked to PT2, this requires commitment and resourcing to achieve.

Some mechanisms can be thought of as “perverse incentives” – those that generate unintended or undesirable outcomes. For example, short term funding cycles, and those which prioritise novelty, are less likely to support valued activities in an ongoing way, which may not be conducive to developing and embedding GSP projects, may lead to skilled staff being lost, can sever reliable links between provider and referrer for specific client need etc. This may also lessen the incentives for providers to work together with SP systems. GSP advocates, and those working towards scaling up GSP need to identify and address such perverse incentives to ensure that working towards system alignment is seen as a rational option.

8.3.5. Creating compelling evidence

Context

- Current evidence is considered to be limited, not compelling, or not sufficiently rigorous by some wider system partners.
- Generating robust evidence is a key priority for sites as it links to sustainability and grant capture.

Who needs to take action

Recommendations in this section relate the action by national and local government, health sector actors and GSP providers. Actions relate to cross sector agreement, investment in data systems and co-production so are considered to be of moderate to high difficulty.

Recommendations

Funders and commissioners should critically review what data is needed and for what purpose in relation to GSP and ensure that requests for data are proportionate and relevant to the work being commissioned. Where possible, evaluation frameworks should be co-produced and reviewed regularly to ensure that they are practical, useful and appropriate.

It would be useful to have greater clarity from commissioners and funders around specific requirements for data collection and evidence. There are different understandings about what constitutes "compelling" for different audiences and purposes, and speculation about what other GSP system partners may be looking for. Whatever these requirements, sufficient relevant training (and data templates) should be provided to organisations expected to conform.

Resourcing a locality role around data collection and collation is key to sustainability of evidence generation.

A single dataset for higher level domains would be a useful outcome, although it is recognised that coherence across sectors, systems and localities is difficult to negotiate.

8.3.6. Improving networks to support connectivity

Context

Within-sector, hyper-local and local networks were often strong, but communication and interaction across these networks were less so. There are often 'fractures' within systems and networks are driven by key individuals.

Participants drop-off or disengage across social prescribing pathways if they are not appropriately supported or the collation of organisations is not properly networked.

Who needs to take action

Recommendations in this section relate the action by national and local government, health sector actors and GSP providers. Actions relate to cross sector networks and resources and are considered to be of moderate difficulty.

Recommendations

Resourcing for networks is required, both those that link up nature-based providers, and those that link across sectors, to ensure they have longevity. Such a commitment also confers legitimacy for GSP.

There is a need to expand the existing model of networks, to ensure that relevant potential GSP partners, currently outside GSP, are engaged and that GSP has a presence in existing forums, this may require pooling of resources.

There is a need to develop and build strategic links to further increase the resilience of nature-based provider networks. In some localities various groups and networks already exist, outside of the GSP project so considering how to work with these – potentially developing a 'web of webs' – may be necessary to connect to wider activities and strategies.

8.3.7. Mutual understanding and awareness of different parts of the system and how they operate

Context

- Lack of mutual awareness and understanding between GSP partners, particularly between the NHS and VCSE sectors, and lack of understanding about how VCSE works.
- VCSE partners lacked capacity, knowledge, or skills to work with SP referrals, and so few referrals came through formal SP routes.
- Lack of partnership working and coordination.

Who needs to take action

Recommendations in this section relate the action by national and local government, health sector actors, GSP providers and local communities. Actions relate to cross sector networks and resources and are considered to be of low to moderate difficulty.

Recommendations

Investment in GSP advocacy, developing partnerships, fostering collaboration, and generating knowledge sharing opportunities is required. This may include identifying and/or funding posts with a responsibility for these activities, as well as providing resources or undertaking outreach to ensure that people are engaged and can participate, especially from VSCE organisations or NHS/Link Worker staff whose time is pressured.

Ensuring there are diverse partnership in decision making fora may require creative solutions to ensure that appropriate representation for all key partners is possible. Cocreating solutions may support this.

Initial codesign work can ensure that GSP partner and community needs and priorities are incorporated – time to do this well is required and this should be recognised by funders and managers.

GSP partners need to be flexible and be responsive to innovation if mutual accountability and shared problems solving is to develop.

8.3.8. Referrals to GSP (extent and appropriateness)

Context

- Lack of clarity around referral routes, their structure and what was available to whom.
- Link Worker provision was fragmented with multiple different Link Worker employers across VCSE, primary care, secondary care, social care and private sectors with little coordination or data sharing.
- Link Workers often did not understand the specifics of GSP as distinct from social prescribing more broadly.
- Self-referral was a common route, and often this was a surprise to project teams who had assumed that referral via a GP or Link Worker was the more usual route.

Who needs to take action

Recommendations in this section relate the action by local government, health sector actors, GSP providers and local communities. Actions are considered to be of moderate difficulty.

Recommendations

Initially local mapping of available activities and who they can support as well as referral structures is needed to understand where links exist and where they need to be developed. Clear, co-developed, locality-wide guidance for all relevant stakeholders would be helpful to bridge information and understanding between referrers and nature-based providers.

Localities also need to allocate enough time and resource to meaningfully explore inequalities in access and provision and to work with community groups, communities, referrers, and providers to address these inequalities.

Improve training and access to support for those involved in providing GSP in response to local needs. This may include key areas such as dealing with complex mental health needs and assessing risk.

Ensure that activities targeting communities reflect the diversity of those communities both in planning and delivery.

Localities should consider how other access routes – including self-referral and community to community referral – can be supported to ensure there is knowledge of, and access to available appropriate offers. This may include practical support such as buddying and provision of equipment like boots and outdoor gear.

8.3.9. Inequalities in access to nature

Context

- Complexity and severity of need for those referred.
- Some providers lack culturally appropriate and relevant offers for different communities, and the additional resource required to fully and meaningfully engage ethnic minority groups proved challenging.
- Geographical complexities such as urban/rural mix include particular variations in deprivation associated with rurality and isolation, refugee communities housed in specific areas, and people in ethnic minority communities without ready access to green spaces.

Who needs to take action

Recommendations in this section relate the action by local government, health sector actors, GSP providers and local communities. Actions are considered to be of moderate difficulty.

Recommendations

Involve people most likely to be subject to health inequalities at every stage of the process, including question setting and commissioning services.

Locality GSP partners need to allocate enough time and resource to meaningfully explore inequalities in access and provision.

Improve training and access to support for those involved in the provision of GSP in key areas such as dealing with complex mental health needs and assessing risk.

Ensure that activities targeting communities reflect the diversity of those communities both in planning and delivery.

8.3.10. Engagement of users in GSP processes

Context

- The involvement of users was an ambition for all local pilot sites but did not appear to be so at a national level.
- Securing the 'effective engagement' of community members, lay members, members of the public, people with lived experience of mental health across a system undergoing transformation has been recognised as a critical enabler of success.
- Involvement can enhance decision making, improve transparency, and ensure services meet the needs of the community.

Who needs to take action

Recommendations in this section relate the action by national and local government, health sector actors, GSP providers and local communities. Actions are mostly considered to be of low difficulty, but addressing power imbalances may be high.

Recommendations

All GSP partners should follow established principles of user involvement and all strategies and activities need to be sufficiently resourced.

Partners should consider how to ensure that individuals and communities are sufficiently empowered to contribute meaningfully and can see how their input has impacted decision making.

Ensure involvement is sufficiently broad and deep to represent communities in which GSP is operating.

8.3.11. Level of retention/drop-out of users in the GSP system at different points in the pathway

Context

- There were issues with service users disengaging with GSP across the different points of the SP pathway.
- Service users face barriers to engagement with social prescribing, and those in vulnerable populations are often disproportionately affected.
- Service users face many barriers to participation in GSP such as poverty, a lack of access to transport or kit or deterioration in mental health.
- Drop off can occur at different time points across the pathway.

Who needs to take action

Recommendations in this section relate the action by national and local government, health sector actors, GSP providers and local communities. Actions are mostly considered to be of high difficulty given the current broader socio-economic context –

such as the cost-of-living crisis - and of structural barriers such as the difficulties in tracking people through the GSP system.

Recommendation

Providing patient centred care is central to understanding participant needs, and the social prescribing model aims to do this, although there are system and workload pressure that may make this difficult. Localities need to support the capacity of referrers to ensure that quality time can be given to understanding and supporting these needs.

The cost-of-living crisis has a disproportionate and uneven impact upon service users. Individual needs assessments allow tailored and specific support for people with higher or more complex needs and these need to be prioritised.

Creative approaches are needed to support service users through the GSP system, and there must be resources to allow these approaches to be used strategically.

Greater understanding of the disproportionate challenges faced by service users would allow the strategic allocation of resources to better support them through the GSP system.

Table 60: Summary of recommendations

Programme theory name	Context	Key actions	Key actors						Level of difficulty
			National government	Local government	Health actors LWs etc.	GSP providers	Communities	Other	
PT1. New commissioning arrangements	• Nature-based providers were funded piecemeal and unsustainably resulting in sector fragility and competition. • Smaller or micro-providers often unheard and facing greatest challenges.	• Ongoing support for growth of networks interested in pursuing funds is important, particularly if continued in the absence of project-specific funding. • Embedding those active in GSP across system-wide networks is important to communicate challenges and impacts of short-term funding cycles.	X	X	X	X			M
PT2. Political and strategic power and influence to support GSP	• Lack of awareness and recognition of GSP resulting in lack of strategic leadership and investment. • Lack of link up between parts of the GSP system – particularly between (small) VCSE organisations and statutory sector.	• On going, cross-government support and promotion for GSP recognising that systems change takes time. • Ensuring that GSP is recognised in key strategies and policies. • Resourced staff with responsibility to drive programme of work, and for specific key roles developing the system and building relationships. • Valuing of process as well as individual outcomes.	X	X	X				M - policy H - funding

Programme theory name	Context	Key actions	Key actors						Level of difficulty
			National government	Local government	Health actors LWs etc.	GSP providers	Communities	Other	
PT3. Harnessing Nature Based Assets	• Connectivity, link up and ability to receive social prescribing referrals from nature-based assets is sometimes not sufficient. • Pre-existing networks are often beneficial but linking this complex landscape together takes time.	• Transparency and appropriate support should be given for organisations supporting cohorts of people with whom they may have limited or no experience. • To increase or retain capacity there needs to be dedicated and accessible funding and investment in the organisations that provide them.		X	X	X	X		M – support H - funding
PT4. Alignment of organisations	• GSP is an inherently complex system, this relates to the interdependencies between the actors involved, the variation in practice within and between areas, and the dynamism of the system. • Strategic, systemic, and procedural alignment can be important when working towards a common goal. • There is evidence of a lack of strategic, systematic and	• A plural systems level approach needs to be used, this needs sufficient resources and time to achieve, and those with the power to address key factors must be involved. • Perverse incentives, such as rapid ongoing cycles of change, that make working towards alignment a rational option should be addressed.	X	X	X	X			High

Programme theory name	Context	Key actions	Key actors						Level of difficulty
			National government	Local government	Health actors LWs etc.	GSP providers	Communities	Other	
	procedural alignment in relation to GSP.								
PT5. creating compelling evidence	• Current evidence considered to be limited, not compelling, or not sufficiently rigorous by wider system partners. • Generating robust evidence is a key priority for sites as it links to sustainability and grant capture.	• More clarity from commissioners around specific requirements for data collection and evidence. Whatever these requirements, sufficient relevant training (and data templates) should be delivered to organisations expected to conform. • Resourcing a role, or part of a role, around data collection and collation is key to sustainability of evidence generation. • Facilitating realistic and nuanced data collection, collation and reporting standards that recognise these myriad challenges would be beneficial.	X	X	X	X			M/H
PT6. Improving networks to support connectivity	• Within-sector, hyper-local and local networks were often strong, but communication and interaction across these networks were less so.	• Resourcing networks should have longevity and outlast the GSP programme, as well as being a tangible commitment.	X	X	X	X			M

Programme theory name	Context	Key actions	Key actors						Level of difficulty
			National government	Local government	Health actors LWs etc.	GSP providers	Communities	Other	
	There are often 'fractures' within systems and networks are driven by key individuals. • Participants drop-off or disengage across social prescribing pathways if they are not appropriately supported or the collation of organisations is not properly networked.	• A need to expand the existing model of networks through pooling resources and increasing buy-in from external partners. • Need to develop and build strategic links to further increase the resilience of provider networks, potentially a 'web of webs' necessary to connect to wider strategies.							
PT7.Mutual understanding and awareness of different parts of the system and how they operate	• Lack of mutual awareness and understanding between GSP partners, particularly between the NHS and VCSE sectors, and lack of understanding about how VCSE works. • VCSE partners lacked capacity, knowledge, or skills to work with SP referrals, and so few referrals through formal SP routes. • Lack of partnership working and coordination.	• Investment in partnerships, collaboration and knowledge sharing opportunities. • Diverse partnership in decision making fora may require creative solutions to ensure that appropriate representation for all key partners is possible. • Initial codesign work can ensure that partner and community needs and priorities and incorporated – time to do this well is required. • Partners need to be flexible and be responsive to innovation if	X	X	X	X	X		

Programme theory name	Context	Key actions	Key actors						Level of difficulty
			National government	Local government	Health actors LWs etc.	GSP providers	Communities	Other	
		mutual accountability and shared problems solving is to develop.							
PT8. Referrals to GSP (extent and appropriateness)	• Lack of clarity around referral routes, their structure and what was available to whom. • Link Worker provision was fragmented with multiple different Link Worker employers across VCSE, primary care, secondary care, social care and private sectors with little coordination or data sharing. • Link Workers often did not understand the specifics of GSP as distinct from social prescribing more broadly. • Self-referral was a common route, and often this was a surprise to project teams who had assumed that referral via a GP or Link Worker was the more usual route.	• Clear locality-wide guidance to bridge information and understanding between referrers and nature-based providers would be helpful. • Allocate enough time and resource to meaningfully explore inequalities in access and provision. • Improve training and access to support for those involved in provisioning GSP in key areas such as dealing with complex mental health needs and assessing risk. • Ensure that activities targeting communities reflect the diversity of those communities both in planning and delivery.	X	X	X	X	X		M - support, funding

Programme theory name	Context	Key actions	Key actors						Level of difficulty
			National government	Local government	Health actors LWs etc.	GSP providers	Communities	Other	
PT9. Inequalities in access to nature.	• Complexity and severity of need for those referred. • Some providers lack culturally appropriate and relevant offers for different communities, and the additional resource required to fully and meaningfully engage ethnic minority groups proved challenging. • Geographical complexities such as urban/rural mix include particular variations in deprivation associated with rurality and isolation, refugee communities housed in specific areas, and people in ethnic minority communities without ready access to green spaces.	• Involve people most likely to be subject to health inequalities at every stage of the process, including question setting and commissioning services. • Allocate enough time and resource to meaningfully explore inequalities in access and provision. • Improve training and access to support for those involved in provisioning GSP in key areas such as dealing with complex mental health needs and assessing risk. • ensure that activities targeting communities reflect the diversity of those communities both in planning and delivery.	X	X	X	X	X		M
PT10. Engagement of	• The involvement of users was an ambition for all local pilot sites but did not	• Follow established principles of user involvement.	X	X	X	X	X		Elements are low, others such as

Programme theory name	Context	Key actions	Key actors						Level of difficulty
			National government	Local government	Health actors LWs etc.	GSP providers	Communities	Other	
users in GSP processes	appear to be so at a national level. • Securing the 'effective engagement' of community members, lay members, members of the public, people with lived experience of mental health across a system undergoing transformation has been recognised as a critical enabler of success. • Involvement can enhance decision making, improve transparency, and ensure services meet the needs of the community.	• Sufficiently resource strategies and activities. • Sufficiently empower individuals to contribute. • Ensure involvement is sufficiently broad and deep.							addressing power imbalances high
PT11. Level of retention/drop-out of users in the GSP system at different points in the pathway	• There were issues with service users disengaging with GSP across the different points of the SP pathway. • Service users face barriers to engagement with social prescribing, and those in vulnerable populations are	• Providing patient centred care is central to understanding participant needs. • The cost-of-living crisis has a disproportionate and uneven impact upon service users. Individual needs assessments allow tailored and specific	X	X	X	X	X		H

Programme theory name	Context	Key actions	Key actors						Level of difficulty
			National government	Local government	Health actors LWs etc.	GSP providers	Communities	Other	
	often disproportionately affected. • Service users face many barriers to participation in GSP such as poverty, a lack of access to transport or kit or deterioration in mental health status and drop off can occur at different time points across the pathway.	support for people with higher or more complex needs. • Creative approaches are needed to support service users through the GSP system, and there must be resources to allow these approaches to be used strategically. • Greater understanding of the disproportionate challenges faced by service users would allow the strategic allocation of resources to better support them through the GSP system.							

8.4. Issues to consider in policy and delivery

Below are some specific recommendations / advice regarding design and delivery of future large scale, cross government programmes that are intended to deliver 'systems change' in conjunction with 'outcomes' locally. These mainly draw on the evaluation findings about the national partnership (Chapter 7) but also draw on local perspectives and programme theories (Chapter 4).

- **Clarify aims and objectives and develop a clear strategy for achieving them.**

  Aims and objectives should be agreed with all stakeholders (e.g., representatives of Departments and funders such as Treasury). This may take time to clarify and agree as departments need time to understand mutual operating environments and the implications of these.

  There is value in clarifying both what is expected to be achieved during the lifetime of the project (and how) but also what are the consequences of this for any future work in this space (i.e., the legacy, what this project will enable in the future). As part of the process of establishing aims and objectives, it is helpful to consider and to be clear about the problem (or the parts of the problem) that the project aims to address.

  Involving those who have been involved in or who have led work to develop proposals / bids for funding for a project will be helpful to the continuity and clarity of purpose and strategy.

  Translating the results of these activities into a 'theory of change' will support the delivery of the work and underpin any evaluation.

- **Establish proportionate governance and communication systems building on best practice.**

  Large scale projects often have many domains of activity, many areas for decision making and oversight and may require a range of fora in which partners can contribute and effective means of communicating progress, results, issues, and decisions.

  Projects should aim to establish models of governance that provide a balance between opportunities to contribute to decision making across the programme and avoiding fragmentation.

  A similar balance needs to be struck between communicating everything to all partners from all groups and sub-groups and not providing enough access to information.

  It would be helpful if HM Treasury could establish what 'best practice' in governance and communication looks like across similar projects and provide advice or guidance to help projects get this right.

- **Aim to secure central funding to underpin the delivery of the project.**

  Funding from sponsors such as HMT for multi-government department / national partner projects might enable more effective joint working and cooperation across a wide range of agencies as there is collective ownership over the resource rather than one or two agencies with more 'ownership'.

- **Ensure that the design and delivery arrangements for a project are in line with the scale and time frames for the ambition.**

  It may be helpful to test in advance (in theory) the plausibility of the proposed action for addressing the problem and achieving specific aims and objectives. The Defra Theory of change toolkit provides an approach to this through a form of collaborative, participatory 'ex-ante' evaluation https://randd.defra.gov.uk/ProjectDetails?ProjectId=20910

  When considering delivery, ensure that there is agreement regarding how much freedom and flexibility there is for local decision-making regarding aspects of delivery and / or aims / focus. Ensure this is communicated and understood by all.

  Finally, ensure timeframes and resource allocations are appropriate. Build in time for mutual understanding and agreeing aims and objectives and for setting up and clarifying / agreeing local governance and delivery systems.

- **Commission evaluation and other evidence projects at an early stage and build in a scoping phase' to help clarify what is plausible and appropriate.**

  It may help with commissioning an evaluation of large-scale systems change projects not to specify the evaluation aims and methods so much that there is little scope to evolve and 'co-design'. Building in a scoping phase prior to the commencement of a project can enable evaluators to work closely with the partners and other stakeholders to ensure the constraints and opportunities are fully understood prior to the development of evaluation aims and objectives. It also means that evaluators can specify feasible methods based on a good understanding of the data landscape, evaluation burden / stakeholder capacity and the feasibility of different designs given the characteristics of the programme. The Evaluation 'Design Triangle' is a helpful orientation to the need to balance different requirements in impact evaluation, for example (see page 11 in particular and detailed guidance therein from https://www.bond.org.uk/resources/impact-evaulation/)

  It will be helpful to acknowledge the full range of designs that are available to use for evaluation including those set out in the Magenta Book 2020 (HMT, 2020a) and the Magenta Book Supplementary Guide: Handling Complexity in Policy Evaluation (HMT, 2020b). Systems change projects, especially those at scale, require the application of an adaptive evaluation approach, often combining multiple methods.

- **Ensure appropriate learning support is available and that learning operates in multiple directions.**

  Establishing a dedicated learning function can be very helpful for these kinds of projects. Sites benefit from learning from each other in innovation settings. Partners benefit from taking part in learning events with each other but also with localities. Localities benefit from partners actively listening and responding to learning from engagement.

  An entity with responsibility for mapping, understanding, and planning to meet stakeholders learning needs can be helpful for ensuring that the project meets its aims through supporting adaptive management across multiple levels. Closely linking this with cross project communications and governance functions though retaining a clear distinction between these elements is likely to be helpful.

- **Ensure that approaches and methods for evaluation are then signed off with funders (other beneficiaries and stakeholders) and continue to engage with funders on progress and issues arising.**

  Evaluation designs should meet the funders requirements (e.g., HMT) as well as those involved / stakeholders. Continued engagement will enable progress and issues arising to be communicated and any changes to the project or evaluation needed can be discussed and implemented where necessary.

References

9

ANNERSTEDT, M. & WÄHRBORG, P. 2011. Nature-assisted therapy: systematic review of controlled and observational studies. *Scand J Public Health,* 39**,** 371-388.

ATTWOOD, M., PEDLER, M., PRITCHARD, S. & WILKINSON, D. 2003. *Leading Change: A guide to whole systems working,* Bristol, Policy Press.

BAGNALL, A., RADLEY, D., JONES, R., GATELY, P., NOBLES, J., VAN DIJK, M., BLACKSHAW, J., MONTEL, S. & SAHOTA, P. 2019. Whole systems approaches to obesity and other complex public health challenges: a systematic review. *BMC Public Health,* 19**,** 8.

BAXTER, S., JOHNSON, M., CHAMBERS, D., SUTTON, A., GOYDER, E. & BOOTH, A. 2018. Understanding new models of integrated care in developed countries: a systematic review. *NIHR Journals Library; Health Services and Delivery Research*.

BERESFORD, P. 2020. 'PPI Or User Involvement: Taking stock from a participant perspective in the twenty first century'. *Res Involv Engagem,* 6**,** 36.

BERTOTTI, M., WALI HAQUE, H., LOMBARDO, C., POTTER, S. & HARDEN, A. 2019. A Systematic Map of the UK literature on navigation roles in primary care: social prescribing Link Workers in context. London: Greater London Authority.

BRAGG, R. & ATKINS, G. 2016. A review of nature-based interventions for mental health care. *Natural England Commissioned Reports.* Natural England.

CECAN 2019. Complexity evaluation framework: Commissioned by the Department for Environment, Food and Rural Affairs (Defra). London: Defra.

CHATTERJEE, H.J., CAMIC, P.M., LOCKYER, B. & THOMSON, L.J., 2018. Non-clinical community interventions: a systematised review of social prescribing schemes. *Arts & Health*, *10*(2), pp.97-123.

CRYLE, P., DICKIE, I. & GIANFERRA, E. 2017. Scoping and Developing UK Urban Natural Capital Accounts. *Report for Defra: Economics for the Environment Consultancy Ltd (eftec).*

DAYSON, C. & BASHIR, N. 2014. *The social and economic impact of the Rotherham Social Prescribing Pilot: Main Evaluation Report*, Sheffield Hallam University, Centre for Regional Economic Research.

DAYSON, C. & BENNETT, E. 2016. *Evaluation of Doncaster Social Prescribing Service: understanding outcomes and impact*. Sheffield: Sheffield Hallam University.

DAYSON, C., FRASER, A. & LOWE, T. 2019. A Comparative Analysis of Social Impact Bond and Conventional Financing Approaches to Health Service Commissioning in England: The Case of Social Prescribing. *J Comp Policy Anal Res Pract,* 22**,** 153-169.

DAYSON, C., PAINTER, J. & BENNETT, E. (2020), "Social prescribing for patients of secondary mental health services: emotional, psychological and social well-being outcomes", *Journal of Public Mental Health*, 19, 4, 271-279.

DE ANDRADE, M. & ANGELOVA, N. 2020. Evaluating and evidencing asset-based approaches and co-production in health inequalities: measuring the unmeasurable? *Crit Pub Health,* 30**,** 232-244.

FIELD, A. 2013. *Discovering Statistics Using IBM SPSS Statistics (4th ed.),* London, SAGE Publications Ltd.

FOLEY, N., POWELL, A., CLARK, H., BRIONE, P., KENNEDY, S., POWELL, T., ROBERTS, N., HARKER, R., FRANCIS-DEVINE, F. & FOSTER, D. 2022. Informal carers. House of Commons Library Briefing Paper no. 7756. London: House of Commons Library.

FOSTER, A., O'CATHAIN, A. & HARRIS, J. 2020. How do third sector organisations or charities providing health and well-being services in England implement patient-reported outcome measures (PROMs)? A qualitative interview study. *BMJ Open,* 10**,** e039116.

FOSTER, A., O'CATHAIN, A., HARRIS, J., WESTON, G., ANDREWS, L. & ANDREEVA, O. 2022. Using co-production to implement patient reported outcome measures in third sector organisations: a mixed methods study. *J Patient Rep Outcomes,* 6**,** 78.

FULLAM, J., HUNT, H., LOVELL, R., HUSK, K., BYNG, R., RICHARDS, D., BLOOMFIELD, D., WARBER, S., TARRANT, M., LLOYD, J., ORR, N., BURNS, L., GARSIDE, R. 2021. A handbook for Nature on Prescription to promote mental health. Version 1. University of Exeter.

GARSIDE, R., ORR, N., SHORT, R., LOVELL, B., HUSK, K., MCEACHAN, R., RASHID, R. & DICKIE, I. 2020. Therapeutic Nature: Nature-based social prescribing for diagnosed mental health conditions in the UK. London: Defra.

GARSIDE, R., PEARSON, M., HUNT, H., MOXHAM, T. & ANDERSON, R. 2010. Identifying the key elements and interactions of a whole system approach to obesity prevention. Available: https://www.nice.org.uk/guidance/ph42/documents/review-1-identifying-the-key-elements-and-interactions-of-a-whole-system-approach-to-obesity-prevention2.

GODERIS, G., COLMAN, E., IRUSTA, L., VAN HECKE, A., PÉTRÉ, B., DEVROEY, D., VAN DEUN, E., FAES, K., CHARLIER, N., VERHAEGHE, N., REMMEN, R., ANTHIERENS, S., SERMEUS, W. & MACQ, J. 2020. Evaluating Large-Scale Integrated Care Projects: The Development of a Protocol for a Mixed Methods Realist Evaluation Study in Belgium. *Int J Integr Care,* 20**,** 12.

GOODWIN, N. 2016. Understanding Integrated Care. *Int J Integr Care,* 16**,** 6.

GRADINGER, F., ELSTON, J., ASTHANA, S., MARTIN, S. & BYNG, R. 2019. Reflections on the researcher-in-residence model co-producing knowledge for action in an integrated care organisation: a mixed methods case study using an impact survey and field notes *Evid Policy,* 15**,** 197-215.

GREENHALGH, T., HINTON, L., FINLAY, T., MACFARLANE, A., FAHY, N., CLYDE, B. & CHANT, A. 2019. Frameworks for supporting patient and public involvement in research: Systematic review and co-design pilot. *Health Expect,* 22**,** 785-801.

HAYES, D., JARVIS-BEESLEY, P., MITCHELL, D., POLLEY, M., HUSK, K. & [ON BEHALF OF THE NASP ACADEMIC PARTNERS COLLABORATIVE] 2023. The impact of social prescribing on children and young people's mental health and wellbeing. London: National Academy for Social Prescribing.

HAYWOOD, A., DAYSON, C., GARSIDE, R., FOSTER, A., LOVELL, R., HUSK, K., HOLDING, E., THOMPSON, J., SHEARN, K., HUNT, H. A., DOBSON, J., HARRIS, C., JACQUES, R., NORTHALL, P., BAUMANN, M. & WILSON, I. 2023. National Evaluation of the Preventing and Tackling Mental Ill Health through Green Social Prescribing Project: Interim Report - September 2021 to September 2022. London: Department for Environment, Food and Rural Affairs.

HAZELDINE, E., GOWAN, G., WIGGLESWORTH, R., POLLARD, J., ASTHANA, S. & HUSK, K. 2021. Link worker perspectives of early implementation of social prescribing: A 'Researcher-in-Residence' study. *Health Soc Care Community,* 29**,** 1844-1851.

HICKEY, G. & CHAMBERS, M. 2019. Patient and public involvement and engagement: Mind the gap. *Health Expect,* 22**,** 607-608.

HM TREASURY (HMT) 2018. The Green Book: Central Government Guidance on Appraisal and Evaluation.

HM TREASURY (HMT) 2020a. The Magenta Book: Central Government Guidance for Evaluation.

HM TREASURY (HMT) 2020b. The Magenta Book: Supplementary Guide: Handling Complexity in Policy Evaluation.

HM TREASURY (HMT) 2021. Wellbeing Guidance for Appraisal: Supplementary Green Book Guidance

HOLDING, E., THOMPSON, J., FOSTER, A. & HAYWOOD, A. 2020. Connecting communities: A qualitative investigation of the challenges in delivering a national social prescribing service to reduce loneliness. *Health Soc Care Community,* 28**,** 1535-1543.

HUSK, K., BLOCKLEY, K., LOVELL, R., BETHEL, A., BLOOMFIELD, D., WARBER, S., PEARSON, M., LANG, I., BYNG, R. & GARSIDE, R. 2016a. What approaches to social prescribing work, for whom, and in what circumstances? A protocol for a realist review. *Syst Rev,* 5**,** 93.

HUSK, K., BLOCKLEY, K., LOVELL, R., BETHEL, A., LANG, I., BYNG, R. & GARSIDE, R. 2020. What approaches to social prescribing work, for whom, and in what circumstances? A realist review. *Health Soc Care Community,* 28**,** 309-324.

HUSK, K., ELSTON, J., GRADINGER, F., CALLAGHAN, L. & ASTHANA, S. 2019. Social prescribing: where is the evidence? *Br J Gen Pract,* 69**,** 6-7.

HUSK, K., LOVELL, R., COOPER, C., STAHL-TIMMINS, W. & GARSIDE, R. 2016b. Participation in environmental enhancement and conservation activities for health and well-being in adults: a review of quantitative and qualitative evidence. *Cochrane Database Syst Rev,* 2016**,** CD010351.

JANI, A., LIYANAGE, H., OKUSI, C., SHERLOCK, J. & DE LUSIGNAN, S. 2020. Social prescribing observatory: A learning health system approach for using data to improve practice. London: Royal College of General Practitioners/University of Oxford.

JONES, K & BURNS, A. (2021) *Unit Costs of Health and Social Care 2021*, Personal Social Services Research Unit, University of Kent, Canterbury

KAPKE, T. & GERDES, A. 2016. Latino Family Participation in Youth Mental Health Services: Treatment Retention, Engagement, and Response. *Clin Child Fam Psychol Rev,* 19**,** 329-351.

KAVANAGH, S., SHIELL, A., HAWE, P. & GARVEY, K. 2022. Resources, relationships, and systems thinking should inform the way community health promotion is funded. *Crit Pub Health,* 32**,** 273-282.

KILGARRIFF-FOSTER., & O'CATHAIN, A. 2015. Exploring the components of social prescribing. *J. Public Ment. Health*, 14, 127-134

KING, C. & GILLARD, S. 2019. Bringing together coproduction and community participatory research approaches: Using first person reflective narrative to explore coproduction and community involvement in mental health research. *Health Expect,* 22**,** 701-708.

LEWIS, S., BAMBRA, C., BARNES, A., COLLINS, M., EGAN, M., HALLIDAY, E., ORTON, L., PONSFORD, R., POWELL, K., SALWAY, S., TOWNSEND, A., WHITEHEAD, M. & POPAY, J. 2019. Reframing "participation" and "inclusion" in public health policy and practice to address health inequalities: Evidence from a major resident-led neighbourhood improvement initiative. *Health Soc Care Community,* 27**,** 199-206.

MARMOT, M., ALLEN, J., BOYCE, T., GOLDBLATT, P. & MORRISON, J. 2020. Health equity in England: The Marmot Review 10 years on. London: Institute of Health Equity.

MCCARRON, T., NOSEWORTHY, T., MOFFAT, K., WILKINSON, G., ZELINSKY, S., WHITE, D., HASSAY, D., LORENZETTI, D. & MARLETT, N. 2019. Understanding the motivations of patients: A co-designed project to understand the factors behind patient engagement. *Health Expect,* 22**,** 709-720.

MCDAID, D., PARK, A., DAVIDSON, G., JOHN, A., KNIFTON, L., MCDAID, S., MORTON, A., THORPE, L. & WILSON, N. 2022. The economic case for investing in the prevention of mental health conditions in the UK. Mental Health Foundation.

MCHUGH, R., WHITTON, S., PECKHAM, A., WELGE, J. & OTTO, M. 2013. Patient preference for psychological vs pharmacologic treatment of psychiatric disorders: a meta-analytic review. *J Clin Psychiatry,* 74**,** 595-602.

MHCLG 2019. The English Indices of Deprivation 2019. Ministry of Housing, Communities & Local Government

MIDDLETON, L., REA, H., PLEDGER, M. & CUMMING, J. 2019. A Realist Evaluation of Local Networks Designed to Achieve More Integrated Care. *Int J Integr Care,* 19**,** 4.

MOFFATT, S., STEER, M., S, PENN, L. & O'BRIEN, N. 2017. Link Worker social prescribing to improve health and well-being for people with long-term conditions: qualitative study of service user perceptions. *BMJ Open,* 7**,** e015203.

MORAN-ELLIS, J., ALEXANDER, V., CRONIN, A., DICKINSON, M., FIELDING, J., SLENEY, J. & THOMAS, H. 2006. Triangulation and integration: processes, claims and implications. *Qual Res,* 6**,** 45-59.

NGUYEN, P., RAHIMI-ARDABILI, H., FENG, X. & ASTELL-BURT, T. 2022. Nature prescriptions: a scoping review with a nested meta-analysis. medRxiv.

NOYES, J., MCLAUGHLIN, L., MORGAN, K., ROBERTS, A., STEPHENS, M., BOURNE, J., HOULSTON, M., HOULSTON, J., THOMAS, S., GETHIN RHYS, R., MOSS, B., DUNCALF, S., LEE, D., CURTIS, R., MADDEN, S. & WALTON, P. 2019. Designing a co-productive study to overcome known methodological challenges in organ donation research with bereaved family members. *Health Expect,* 22**,** 824-835.

NURJONO, M., SHRESTHA, P., LEE, A., LIM, X., SHIRAZ, F., TAN, S., WONG, S., FOO, K., WEE, T., TOH, S., YOONG, J. & VRIJHOEF, H. 2018. Realist evaluation of a complex integrated care programme: protocol for a mixed methods study. *BMJ Open,* 8**,** e017111.

OFFICE FOR NATIONAL STATISTICS (ONS) 2021. Personal well-being in the UK, quarterly: April 2011 to June 2021.

OHLY, H., GENTRY, S., WIGGLESWORTH, R., BETHEL, A., LOVELL, R. & GARSIDE, R. 2016. Erratum to: A systematic review of the health and well-being impacts of school gardening: synthesis of quantitative and qualitative evidence. *BMC Public Health,* 16**,** 1051.

PAWSON, R. & TILLEY, N. 1997. *Realistic Evaluation,* London, Sage Publications.

PESCHENY, J., RANDHAWA, G. & PAPPAS, Y. 2018. Patient uptake and adherence to social prescribing: a qualitative study. *BJGP Open,* 2**,** bjgpopen18X101598.

POLLEY, M., SEERS, H., JOHNSON, H. & LISTER, C. 2020a. Enabling the potential of social prescribing: A summary of the issues affecting longer-term VCSE funding including views from before and during the COVID-19 pandemic. London: The Conversation Volunteers.

POLLEY, M., WHITESIDE, J., ELNASCHIE, S. & FIXSEN, A. 2020b. What does successful social prescribing look like? Mapping meaningful outcomes. Westminster: University of Westminster.

QUICK, K. & FELDMAN, M. 2011. Distinguishing Participation and Inclusion. *J Plan Educ Res,* 31**,** 272-290.

ROBINSON, T., ROBERTSON, N., CURTIS, F., DARKO, N. & JONES, C. 2022. Examining Psychosocial and Economic Barriers to Green Space Access for Racialised Individuals and Families: A Narrative Literature Review of the Evidence to Date. *Int J Environ Res Public Health,* 20**,** 745.

SHEARN, K., ALLMARK, P., PIERCY, H. & HIRST, J. 2017. Building Realist Program Theory for Large Complex and Messy Interventions. *Int J Qual Methods,* 16**,** 1-11.

SIMPSON, S., FURLONG, M. & GIEBEL, C. 2021. Exploring the enablers and barriers to social prescribing for people living with long-term neurological conditions: a focus group investigation. *BMC Health Serv Res,* 21**,** 1230.

STANSFIELD, J., SOUTH, J. & MAPPLETHORPE, T. 2020. What are the elements of a whole system approach to community-centred public health? A qualitative study with public health leaders in England's local authority areas. *BMJ Open,* 10**,** e036044.

STERN, A. 2014. The Hospital Anxiety and Depression Scale. *Occup Med,* 64**,** 393-394.

TASHAKKORI, A. & TEDDLIE, C. 2010. *Sage handbook of mixed methods in social & behavioral research,* Thousand Oaks, Sage.

THOMPSON, J., HOLDING, E., HAYWOOD, A. & FOSTER, A. 2023. Service Users' Perspectives of a National Social Prescribing Programme to Address Loneliness and Social Isolation: A Qualitative Study. *Health Soc Care Community*.

TIERNEY, S., WONG, G., ROBERTS, N., BOYLAN, A., PARK, S., ABRAMS, R., REEVE, J., WILLIAMS, V. & MAHTANI, K. 2020. Supporting social prescribing in primary care by linking people to local assets: a realist review. *BMC Med,* 18**,** 49.

TOBIAS, M. 2017. Social rank: a risk factor whose time has come? *Lancet,* 389**,** 1172-1174.

VAN KAMPEN, S., LEE, W., FORNASIERO, M. & HUSK, K. 2017. The proportion of the population of England that self-identifies as lesbian, gay or bisexual: producing modelled estimates based on national social surveys. *BMC Res Notes,* 10**,** 594.

WESTLAKE, D., ELSTON, J., GUDE, A., GRADINGER, F., HUSK, K. & ASTHANA, S. 2022. Impact of COVID-19 on social prescribing across an Integrated Care System: A Researcher in Residence study. *Health Soc Care Community,* 30**,** e4086-e4094.

WILDMAN, J., MOFFATT, S., STEER, M., LAING, K., PENN, L. & O'BRIEN, N. 2019. Service-users' perspectives of link worker social prescribing: a qualitative follow-up study. *BMC Public Health,* 19**,** 98.

WOOD, E., OHLSEN, S., FENTON, S., CONNELL, J. & WEICH, S. 2021. Social prescribing for people with complex needs: a realist evaluation. *BMC Fam Pract,* 22**,** 53.