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



An Assessment of Value for Money 2021/22-2023/24

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Green Social Prescribing represents excellent value for money. Using the HM Treasury WELLBY methodology, the evaluation found that...



The social return on investment of the South Yorkshire Green Social Prescribing Project, based on wellbeing benefits for people accessing nature-based activities, was £6.66 for every £1 invested across three years.



The social return on investment from funding for natured-based voluntary, community and social enterprise (VCSE) providers, was £11.49 for each £1 invested.

In addition, the National GSP Evaluation found that the average cost per participant engaged in nature-based activities across the project nationally 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, Green Social Prescribing is a relatively costefficient way to support people across a wide spectrum of mental health needs.



1. Introduction

NHS South Yorkshire was one of seven Integrated Care Boards (ICBS) selected in 2021 to become a 'test and learn' site for the 'Tackling and Preventing Mental III-Health Through Green Social Prescribing Project (GSP Project) between 2021/22 and 2022/23. This report provides an assessment of the value for money of the project in South Yorkshire throughout this period. It utilises a 'WELLBY' methodology developed for the National GSP Evaluation¹ and draws on South Yorkshire level quantitative monitoring data collected by nature-based providers throughout the project.

2. Overview of the 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 HM Treasury's (HMT) 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:

 Determine the number of individuals who accessed a nature-based activity via the GSP project from monitoring data.

- 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.
- 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.
- 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 Table 1.

¹ For a full outline of the methodology see the final evaluation report (Chapter 6, pp182-202): Haywood, A., Dayson, C., Garside, R., Foster, A., Lovell, B., Husk, K., ... Wilson, I. (2024). National evaluation of the preventing and tackling mental ill health through green social prescribing project: Final report - March 2021 to June 2023. London: Department for Environment, Food and Rural Affairs.

Table 1: Overview of data and values for WELLBY calculation

Stage	Values			Data Source	
	Lower	Central	Upper		
No of individuals accessing GSP	1,788			Project Monitoring Data	
2. Change in life satisfaction*	1.1	1.3	1.5	Project Monitoring Data	
3a. Total number of WELLBYs	1,967	2,324	2,682		
3b. Total value of a WELLBY**	£10,827	£14,076	£17,324	HMT 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.

3. Assessment of WELLBYs

Table 2 provides an overview of the input costs of delivering the South Yorkshire GSP programme. This shows that the total investment into the project across three years (2021/23-2023/24) was £835,000. Of this £484,000 was invested in nature-based providers (i.e. activities to support the delivery of GSP) and £352,000 was for wider programme delivery (i.e. management, administration and evaluation).

Table 3 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 1,788 as this figure has been

verified by ICB. The value of WELLBYs estimated to have been created through the South Yorkshire GSP project ranged from £2.6 million to £10.7 million, with a central estimate of £5.6 million.

This means that the (social) return on investment ranged from £3.06 to £12.81 for every pound (£1) invested in the GSP project, with a central estimate of £6.66. If only the £484,000 invested in nature-based providers is included (i.e. programme management and other activities) are included the social return on investment ranged from £5.28 to £22.11 for every pound invested, with a central estimate of £11.49. Overall, this represents good value for money.

Table 2: Costs of delivering the South Yorkshire GSP project

	2021/22	2022/23	2023/24	Total
Total GSP programme expenditure	£400,000	£336,000	£99,000	£835,000
(i.e. grants, management, admin, evaluation etc)				
Total expenditure on nature-based providers	£250,000	£150,000	£84,000	£484,000
(i.e. grants only)				

^{**}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

Table 3: Estimated number and value of WELLBYs created through the South Yorkshire GSP project

		Estimate				
Stage	Lower	Central	Upper			
Key variables:						
Change in life satisfaction	1.2	1.3	1.5			
Total number of WELLBYs	1,967	2,324	2,682			
Total value of a WELLBY	£10,827	£14,076	£17,324			
Time discount	0.12	0.17	0.23			
WELLBY estimates:	•					
Number	236	395	617			
Value	£2,555,172	£5,560,020	£10,699,908			
ROI (all GSP project costs)	£3.06	£6.66	£12.81			
ROI (nature-based providers only)	£5.28	£11.49	£22.11			

4. National Evaluation Evidence

The National Evaluation of the GSP project² presented wider evidence about the value for money of GSP. It found that 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. Compared with other interventions for people with mental health needs such as behavioural activation (£231-£250 for ten sessions), CBT (£1,060 for ten sessions), early intervention for psychosis (£4,043 for the first year) and collaborative care for depression (£858 over six months), nature-based activities appear to be a relatively cost-efficient way to support people across a wide spectrum of mental health needs.

The National Evaluation found that 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.

2 For a full outline discussion of the findings see the final evaluation report (Chapter 6, pp182-202): Haywood, A., Dayson, C., Garside, R., Foster, A., Lovell, B., Husk, K., ... Wilson, I. (2024). National evaluation of the preventing and tackling mental ill health through green social prescribing project: Final report - March 2021 to June 2023. London: Department for Environment, Food and Rural Affairs.



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