





# Development of a Social Return on Investment Study of Nature-Based Social Prescribing

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## Introduction

Loneliness is a significant public health concern with negative effects on physical and mental well-being<sup>1</sup>. One type of intervention to alleviate loneliness is called nature-based social prescribing (NBSP). We aim to study the social value generated by an investment in NBSP interventions.

## Methods

We searched for methods and guidelines to consider social, environmental, and economic impacts beyond financial effects of a NBSP intervention. This approach complements our cost-effectiveness analysis along the randomized controlled trial (RCT) in Barcelona and decision-analytic modeling study conducted within the EU-project RECETAS<sup>2,3</sup>.

#### Results

The concept of a Social Return on Investment (SROI) study based on the RCT was chosen. Following key principles and stages<sup>4</sup> (Figure 1), stakeholder identification, outcome mapping, and measurement were performed. If a material change is observed in the RCT, annual financial proxies, retrieved from the Social Value Bank<sup>4</sup> and standardized to 2023 Euro, are attached per participant.

#### **Identify Stakeholders**



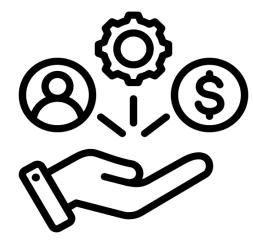
Participants Care providers

VCSO

Volunteers

NHS

Inputs | Valuation



Time | 0 €

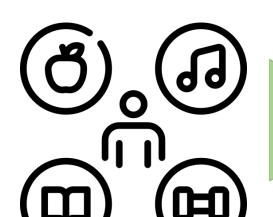
Time | Average wage

Provided resources

Time | 0 €

Adoption and implementation Intervention costs

#### Output



NBSP - Group activity in nature

#### Outcome | Measure



Loneliness | DJGLS, HRQoL | EQ-5D-5L

(Social) care system burden | Considered in NHS

Utilization of provided resources | No. of activity users

Uplift in life satisfaction | Volunteering (yes / no)

Physicians', specialists' visits, medication | Trial-specific health economic questionnaire

#### **Material Change**



 $\downarrow$  Loneliness > 2 on DJGLS  $\uparrow$  HRQoL > 0.1 on EQ-5D-5L

↑ Before / after intervention

↑ Before / after intervention

↓ Before / after intervention

# Financial Proxy (Social Value Bank<sup>4</sup>)



Being a member of a social group | 2,059€ Good overall health | 22,420€

Feel belonging to neighborhood | 4,178€

Regular volunteering | 2,624€

Physicians', specialists', medication-related costs

DJGLS, De Jong Gierveld Loneliness Scale; HRQoL, Health-related quality of Life; NHS, national healthcare system; VCSO, voluntary and community sector organizations

Figure 1. Stages for a SROI study<sup>4</sup>

# Conclusion

The SROI approach quantifies the total social value generated by each Euro invested in NBSP interventions based on the RECETAS trial results. The SROI ratio will be calculated by dividing the social value by the total costs. Engaging stakeholders and experts from the RECETAS trials will validate and support the study's quality to inform healthcare decision-makers for optimal resource allocation.

#### References:

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