

# Usage of Social Return on Investment modelling in the analysis of healthcare interventions: a review of current utilisation

Harrop D<sup>1</sup>, Hirst A<sup>1</sup>, Hughes R<sup>1</sup>, Weston G<sup>1</sup>

<sup>1</sup>Adelphi Values PROVE, Bollington, Cheshire SK10 5JB, United Kingdom



**Adelphi**  
ADELPHI VALUES

**PROVE**  
Expertise in Access and  
Value Evidence Outcomes

EE150

## Introduction

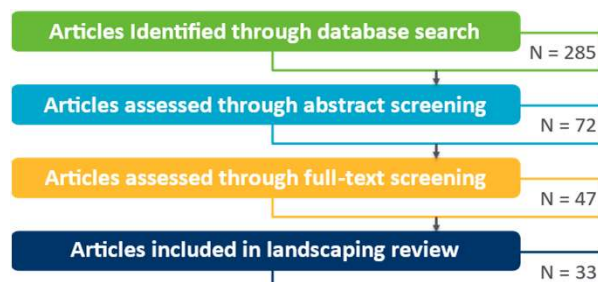
- > There is a rising significance of social and environmental outcomes in decision-making processes of national healthcare bodies and assessment groups.
- > Social and environmental outcomes are not currently captured within conventional health economic evaluations which has led to an evidentiary gap pertaining to healthcare interventions and investments.
- > NICE released guidance in 2005 and 2012 pertaining to how social value judgements should be included in the development of future NICE guidelines, with which the 2022 NICE guidelines for economic modelling refer to for further considerations in economic evaluations.<sup>1,2</sup>
- > Social Return on Investment Modelling (SROI) modelling is the process of quantifying the economic, social, and environmental outcomes resulting from an investment or intervention. The modelling process strives to understand and communicate broader societal perspective, identifying and involving stakeholder groups to diversify the viewpoint on the impact of investments and interventions to beyond the traditional "payer" perspective.

## Objectives

- > A landscaping review was conducted to explore the feasibility of SROI in the modelling of healthcare interventions, considering economic, social, and environmental outcomes beyond the current scope considered in traditional modelling and HTA submissions.
- > Furthermore, this study evaluated the current level of utilization of SROI modelling within healthcare interventions, compiling the limitations identified in the existing SROI modelling approaches. This will allow the feasibility of using SROI modelling as a tool in value messaging to be assessed, and the development of a standardised process.

## Methods

- > A landscaping review was conducted to investigate published SROI models within healthcare interventions, health improvement programmes, and health-based policies. The search was targeted at understanding the methodology used, outcomes measured, and the limitations identified.
- > An Ovid search was conducted in June of 2023, looking for published articles released between June 2013 and June 2023. Keywords in the search included SROI, SROI model, and SROI modelling AND healthcare, health intervention, health policy.
- > Publications were initially screened by title and abstract, using the modelling method and the intervention to exclude non-SROI models and SROI models in non-healthcare related interventions. No restriction was placed on population or comparator.
- > Publications which met the screening criteria were then subjected to a full-text screening, where the relevance of the of each publication was scrutinised.



- > Each publication included in the finalised list of relevant articles, the methods, outcomes, and narratives employed were evaluated to assess the current utilization of SROI models and their potential effectiveness in generating evidence concerning the benefits of healthcare.
- > The limitations of the SROI methodology noted in the publications were also assessed.

## Results

- > The landscaping review found 23 publications for SROI models and 10 publications relevant to SROI methodology within the healthcare setting that have been published since 2013.
- SROI models were found to have been published across the world, with models targeting interventions in the UK, Europe, New Zealand, Australia, and Thailand.
- The interventions assessed included direct treatments, such as surgery and post-operative therapy, to social support in chronic or palliative care, to entire national disease management strategies.

## Results

- The interventions assessed included direct treatments, such as surgery and post-operative therapy, to social support in chronic or palliative care, to entire national disease management strategies.
- The outcomes measured included; direct costs to the healthcare system, such as treatment costs, patient monitoring and emotional support, equipment usage, and training costs; societal costs, such as patient and carer productivity losses, costs of substance misuse, and physical and mental health costs on the patient and wider society; and environmental costs in the form of lifetime CO2 emissions.
- The usage and valuation of outcomes were informed from interviews with stakeholders, (including patients, clinical experts, and volunteers), literature reviews, and database and cost registry searches.
- > The analysis of papers revealed that the strength of SROI modelling lay in the broad range of outcomes and perspectives considered, allowing a more complete story to be told around the value of health interventions. Therefore, a closer approximation to the true value of the interventions was captured, which may have previously missed in traditional economic models.
- > The primary limitations identified in the review were the lack of standardisation in regard to the outcomes captured and the application of financial proxies to non-monetizable parameters, with a large source of variability in the SROI ratio across models stemming from methodical approach. Therefore, from the aggregation of approaches assessed, a six-step process was developed:
  - **Establishing the scope** of the model involves performing a preliminary literature review to gain an understanding of the intervention and the expected immediate and secondary impacts. The review should also be used to identify the relevant stakeholder groups for the intervention.
  - **Mapping the outcomes** involves identifying the outcomes of interest, the measure with which to capture the estimated impact on each outcome, and how the data should be collected using the results of the literature review, further targeted searches, and interviews with stakeholder groups.
  - **Valuation of outcomes** involves determining the approach to attach a financial proxy to non-monetary outcomes.
  - **Establishing the impact** of the intervention involves calculating the overall outcome in the scenario with versus without the intervention, with the difference between the two scenarios equating the impact of the intervention.
  - **Calculating the SROI ratio** using:  $SROI\ Ratio = \frac{Social\ Value\ Created\ (Impact\ of\ intervention)}{Investment\ Cost}$
  - **Reporting to stakeholders** involves the development and presentation to the relevant stakeholder groups and target audiences the impact of the interventions, ensuring transparency and clarity in the methodology and inputs used, and the interpretation of the results.



## Conclusion

- > The usage of SROI modelling can provide a more comprehensive assessment of health interventions compared to traditional health economic evaluations, allowing the demonstration of a much wider range of value sources for healthcare interventions. While the method has been shown to be applicable across a wide range of interventions, countries, and healthcare systems, a relative lack of standardisation when compared to traditional models can limit the comparability of SROI models.
- > The standardisation of approach to generating the outcomes of interest in a model and of the approach of attaching financial value to non-monetizable parameters would aid in creating comparability across SROI models.
- > The proposed approach would provide a framework for generating the methodology used for an SROI model while allowing the flexibility that SROI modelling provides in valuing the wider social and environmental benefits of different interventions.

**References**  
1. NICE. 2012. SOCIAL VALUE JUDGEMENTS: Principles for the development of NICE guidance second edition. <https://www.nice.org.uk/Media/Default/about/what-we-do/research-and-development/Social-Value-Judgements-principles-for-the-development-of-NICE-guidance.docx>; 2. NICE. 2022. NICE health technology evaluations: the manual. [www.nice.org.uk/process/pmg36](https://www.nice.org.uk/process/pmg36)