



# **Social Return on Investment (SROI) Approach Guide**

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**Department of Communities and Justice  
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# 1. Introduction to SROI

Social Return on Investment (SROI) is a systematic way of incorporating social, non-market benefits in decision making processes. It is a newer branch of economics and as yet there is no universal standard for measurement and computation.

In many instances, financial return alone does not measure the full value created by the NSW Department of Communities and Justice (DCJ) (formerly Family and Community Services or FACS) funded services including intangible benefits that may be difficult to quantify. SROI emphasises the importance of social impacts for a more holistic approach to appraising value of various programs. This creates a fuller perspective of the benefits of an investment.

**While DCJ does not compute nor endorse SROI as an evaluative measure of program performance,** third parties may make SROI claims regarding DCJ services that DCJ needs to be able to respond to. Thus, this document sets out DCJ's approach to SROI (**'SROI Approach'**) with a focus on how DCJ should appraise and interpret third-party SROI claims.

SROI is different to *Social Investment*. *Social Investment* is a business plan or business case supporting a financially-viable enterprise or programme targeting social purposes or outcomes rather than typical commercial returns. *Social Investment* is out of scope for this guide.

This document is an update to and replaces the DCJ Social Return on Investment Model (SROIM) developed in 2016.

## Objectives of the DCJ SROI Approach

This guide seeks to update the DCJ SROI Approach so that it aligns with the 2017 NSW Government Guide to Cost Benefit Analysis (TPP 17-03)<sup>i</sup>, and to provide DCJ with a common framework to benchmark and interpret SROI claims.

Historically, DCJ has not had a standardised approach to calculating SROI or appraising third-party SROI claims put forward by proponents. This DCJ SROI Approach guide provides an overview of best-practice method with reference to current international best-practice in an Australian context.

The ambitious intent of SROI to include broad social benefits lends itself to inherent difficulties in establishing attribution and ascribing suitable values to benefits. Consequently, many SROI assessments return inflated results, do not stand up to objective scrutiny, and are unsuitable for advising policy decisions. The framework outlined in this DCJ SROI Approach seeks to address this by providing basic principles to assess the rigour and credibility around assumptions and suitability for purpose.

Unlike previous versions of the DCJ SROI Approach, this guide does not investigate the general principles cost or benefit estimation/valuation. These are best described in the DCJ costing manuals (in the case of program cost estimation) and the NSW Treasury TPP 17-03 (in the case of benefits). However, this guide does provide an overview of the relative usefulness of approaches for different elements of return in the context of DCJ.

## SROI is different to Cost-Benefit Analysis

Despite the apparent similarity, SROI is different to Cost-Benefit Analysis (CBA). The results of the two measurement approaches are not comparable. The general intent of the two concepts is similar, that is, quantifying the benefits of a government program against expenditures. However, in practice the differences are in the degree of rigour in assessment, and what is included in the benefit calculations.

CBA in NSW should be conducted using guidelines set by NSW Treasury. These guidelines set out a transparent framework for CBA and enable comparability across programs and the broader NSW Government sector. No equivalent guidelines exist for SROI. This is why FACSIAE Economics has produced this guide.

SROI claims put forward by proponents have been more ambitious in the benefits which are ascribed to interventions. In principle, CBA takes all social outcomes into account. When an outcome is too hard to quantify, it is often described as an “unquantified” or “intangible” outcome. This reflects practical difficulties in valuation, not an in-principle opposition to quantification of values. Due to methods around SROI being less defined, benefits are ascribed more liberally and proxies for values are frequently used. These techniques can be non-compliant in CBA as not meeting the evidence threshold.

Another important distinction is that CBA measures impact *relative to the base case*. If the CBA is done ‘after the event’, i.e. *ex-post*, it can be incorporated into an evaluation and form the basis of an economic evaluation. By comparison, most SROI frameworks use simplistic assumptions around intervention effectiveness and attribution (see Section 3 for more details). Consequently, SROI cannot be used for economic evaluation.

## 2. Measuring SROI

There are generally accepted principles in use by governments for measuring SROI and appraising third-party SROI assessment and claims.

The UK Cabinet Office through the Office of the Third Sector has developed a six-stage framework for SROI determination and assessment<sup>ii</sup>. This is the best articulated framework for SROI computation and assessment. The recommended DCJ SROI Approach has drawn upon the UK experience, among others, to develop an SROI computation and appraisal approach which incorporates some of the principles that informed the NSW Human Services Outcomes Framework.

Table 1 below sets out how DCJ's approach aligns to the UK Cabinet Office approach and describes how the calculation steps should best be adapted for DCJ's programs.

**Table 1: Stages of SROI calculation and DCJ's approach**

| UK Cabinet Office Stage of SROI                                                                                                                                                                                        | DCJ's SROI Approach                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. <b>Establishing scope and identifying key stakeholders.</b> It is important to have clear boundaries about what your SROI analysis will cover, who will be involved in the process, and how.                        | <ul style="list-style-type: none"> <li>The SROI calculation should focus on the value delivered to the client and how improved client outcomes lead to savings for government. This approach mirrors DCJ client-centred principles.</li> <li>The DCJ's approach provides treatments for value delivered to the broader community through better collective outcomes. However, these should be included with caution.</li> <li>DCJ does not include value to other stakeholders (such as staff or business partners).</li> </ul> |
| 2. <b>Mapping outcomes.</b> Through engaging with stakeholders you will develop an impact map, or theory of change, which shows the relationship between inputs, outputs and outcomes.                                 | <ul style="list-style-type: none"> <li>The NSW Human Services Outcomes Framework should guide which outcomes are included in the SROI calculation.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                   |
| 3. <b>Evidencing outcomes and giving them a value.</b> This stage involves finding data to show whether outcomes have been achieved and valuing them.                                                                  | <ul style="list-style-type: none"> <li>When computing SROI indicators an established evidence base should be used.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                   |
| 4. <b>Establishing impact.</b> Having collected evidence on outcomes and monetised them, those aspects of change that would have happened anyway or are a result of other factors are eliminated from consideration.   | <ul style="list-style-type: none"> <li>Indicators included in SROI calculations should reflect impact pathways with an established evidence base or can be validated from administrative data.</li> </ul>                                                                                                                                                                                                                                                                                                                       |
| 5. <b>Calculating the SROI.</b> This stage involves adding up all the benefits, subtracting any negatives and comparing the result to the investment. This is also where the sensitivity of the results can be tested. | <ul style="list-style-type: none"> <li>Assessment of third party SROI needs to ensure suitably robust calculation steps and sample sizes.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                            |

| UK Cabinet Office Stage of SROI                                                                                                                                                                      | DCJ's SROI Approach                                                                                                                                                                                                     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6. <b>Reporting, using and embedding.</b> This vital last step involves sharing findings with stakeholders and responding to them, embedding good outcomes processes and verification of the report. | <ul style="list-style-type: none"> <li>SROI alone should not be used for evaluative purposes.</li> <li>NSW Government CBA guidelines provide a more robust and consistent assessment of economic evaluation.</li> </ul> |

Source: UK Cabinet Office – *A Guide to Social Return on Investment* pp.9-10; FACSAR.

## 2.1 Social vs. Financial Returns

Unlike a purely financial assessment, SROI takes social outcomes into account in addition to financial returns. Notwithstanding, good practice provides that elements of SROI should be calculated and appraised in categories which identify the different sources of benefits. Figure 1 below outlines the framework for which we recommended benefits be categorised. Not every intervention will have a measurable and quantifiable benefit for all of the return elements for each of the NSW Human Services Outcomes Framework domains.

For some purposes, it will not be practical to include all elements of Social Return (SR) into a calculation.

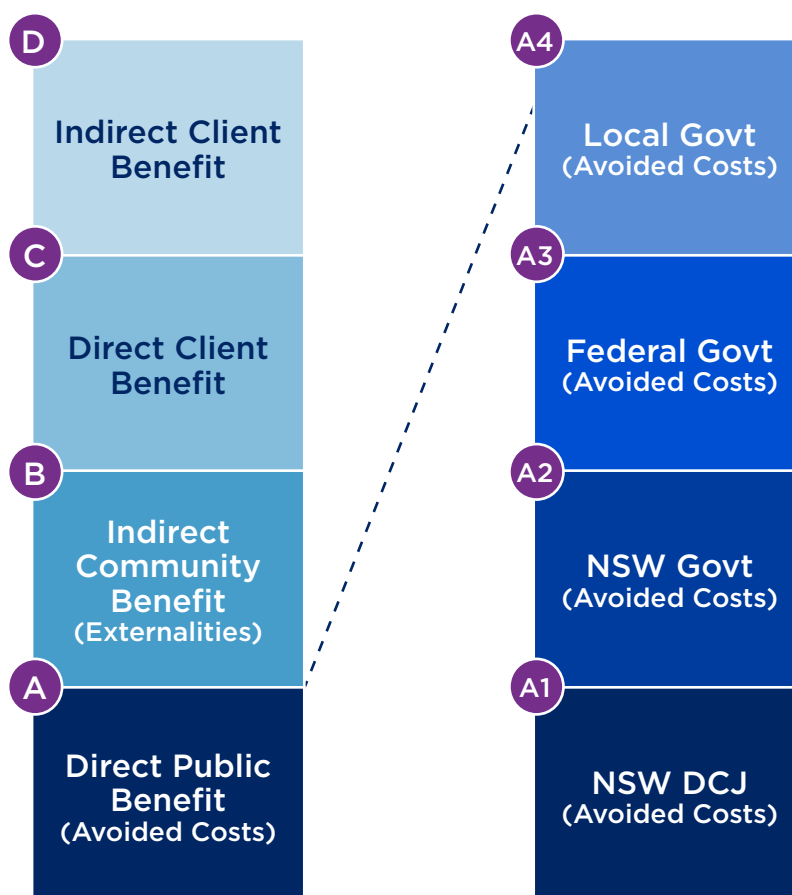
1. In the DCJ SROI Approach, the first element of SROI is **Direct Public Benefit** or a conventional return on investment measure. This is the cost to government which can be avoided by an intervention. For example, investment in social housing (intervention) improves access to primary healthcare and reduces expensive and preventable hospitalisations - a measure of the health outcome domain.

Direct Public Benefit could be further broken down by the level of government and department benefiting from the reduction in avoided cost. The model identifies Direct Public Benefit in four components – DCJ's avoided cost, the NSW Government's avoided cost (excluding DCJ), federal government avoided cost and local government avoided cost.

2. The second element of SROI is **Indirect Public Benefit**. This is the non-financial benefit or 'externality' of an intervention which benefits the broader community. For example, investment in social housing might mean environments where people feel safer and crime is lower. The SROI framework adds the amenity value of reduced crime to the return calculation.
3. The third element of SROI is **Direct Private Benefit**. This is the direct welfare benefit received by the client as a result of an intervention. For example, access to social housing means that a client spends less of their income on housing costs.
4. The fourth element of SROI is the **Indirect Private Benefit**. This is the non-financial benefit received by clients in social housing. For example, access to social housing increases the stability of school attendance for students, leading not only to improved educational outcomes and higher lifetime benefits (a direct benefit), but also improved client satisfaction.

It should be noted that the distinction between indirect public and indirect private benefits may not always be clear. However all benefits could be captured by one of the above SR categories.

Figure 1: DCJ SROI Approach investment categories



Source: FACSIAR Economics, 2016

## 2.2 Identifying what can be included in Social Return

One of the common challenges of SROI measurement is correctly identifying the component benefits of SR. It is important that identified components reasonably capture the value delivered yet do not double-count or falsely ascribe value. When reviewing third-party SROI assessments, particular care needs to be paid to attribution assumed.

One pitfall to be aware of in assessing the veracity of third-party SROI claims is they are often ambitious in the scope of what is included as a benefit or assumptions on attribution.

When identifying appropriate returns, the component elements of SR should be able to be mapped to the impact pathways in the NSW Human Services Outcomes Framework for validity. For practical purposes, no more than one indicator is selected for each return type (i.e. A1, A2, A3, A4, B, C, D) for each outcome domain. Thus, while one indicator might have multiple benefits (i.e. it might be used for more than one return type in a domain), each return type has only one indicator *per domain* to prevent double-counting returns. For example, suppose a program sought to get children in public housing into exercise and sports. It would be double counting to include avoided 'A2' health cost values for reductions in obesity rates as well as lower prevalence of type-two diabetes.

## 2.3 Recommended exclusions from SROI calculations

Some SR is very diffuse. This means it is either not practical to measure or immaterial to an intervention's total SR. A test for materiality must be applied before an element of SR is included in an SROI calculation. In the DCJ SROI Approach, this materiality test is applied against gains accruing to DCJ's relevant stakeholders. When appraising third-party SROI assessments, returns (or costs) ascribed to exclusions should be omitted.

An important point of investigation when appraising third-party SROI assessments to identify and isolate misallocated returns. For example:

- **Volunteers** - Some programs may engage volunteers either directly or through NGO partners. While volunteer time is a valuable resource, it is valued at zero in the SROI approach as the time is given willingly with volunteer satisfaction offsetting volunteer opportunity costs. Similar treatment is also applicable to facilities offered by community groups for free.
- **Implied value-in-kind contributions** – The delivery of some programs might see some inputs included which are not directly paid for by the program. For example, a community engagement program might make use of a public hall or meeting place in a social housing estate. Although this facility might have a theoretical value if leased to a third party, it should not be included in the intervention cost.
- **Staff benefits** – Human services sector staff operate in a challenging yet rewarding environment. Their day-to-day work adds tremendous value to the community it serves. For staff, it provides development and training experience as well as potential satisfaction akin to volunteers operating in the sector. Any value which indirectly accrues to staff in the discharge of their duties should not be included. Similarly, any distress or injury sustained by staff (to which a value can be ascribed), should not be included in the holistic intervention cost.
- **Direct welfare 'transfers'** – Overall, direct client benefit of a program from cash-transfer payments should offset one another in the system. For example, increased Centrelink payments included as a 'C' category benefit in the return computation, with an equivalent negative 'A3' return (cost to Federal Government) cancel one another out. In the context of DCJ's mission to break the cycle of disadvantage, the inclusion of increased welfare as a benefit is a misnomer in any case.

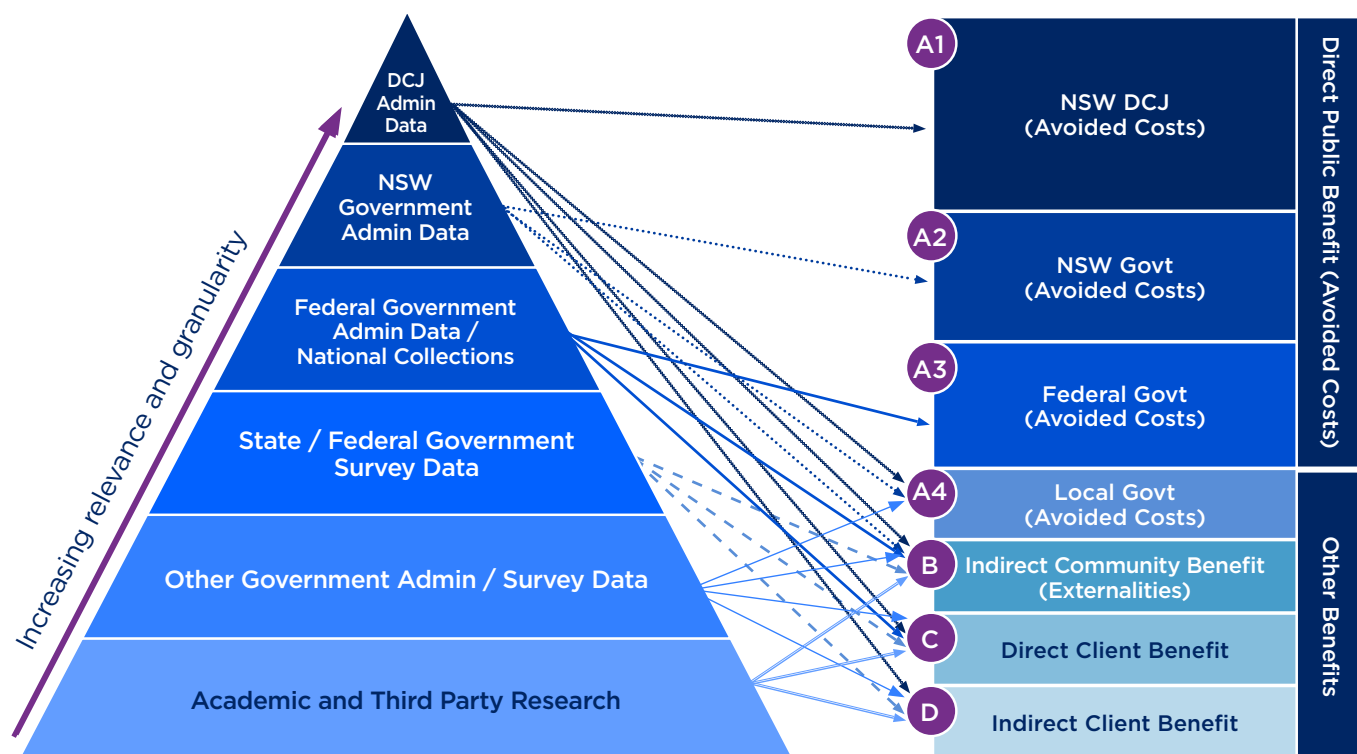
## 2.4 Data sources

SROI necessitates drawing on a greater number and variety of data sources. This carries risk to the validity and comparability of results, as it is not always possible to determine all of the assumptions and measurement standards used by third parties.

It is almost always outside the direct scope of SROI to establish an evidence base behind an indicator. However, when extrapolating values from literature as value inputs into a SR calculation, a review of robustness and fitness for purpose is required.

Figure 1 below sets out the hierarchy of data sources that can be used as inputs and assumptions in SROI analysis. Data sources higher in the hierarchy are inherently easier to validate. These data sources should form the basis of A1 to A3 return calculations. A4 to D return categories are by nature more diffuse and difficult to measure. In many instances, it is not possible to ascertain returns from administrative data due to data limitations. Rather, returns need to be implied from a wider range of secondary sources with associated controls to protect the integrity of modelled results.

Figure 2: Hierarchy of data sources



Source: FACSIAR Economics, 2016

Where possible, SROI measurement should make use of linked data. In practice this is rare given most SROI proponents do not have access to government administrative data sets.

SROI can draw heavily upon conclusions from wellbeing surveys and other research. Data and findings from other governments, academic and third party research as well as specialist consultants commissioned for elements of the model are used to augment the dataset for computing returns. We recommend that this type of information be considered for *A4 to D* calculation returns only.

Non-administrative data are lower in the data hierarchy due to the limitations of comparing data and conclusions from wide-ranging sources. Some of the difficulties with non-administrative data include the inability to independently verify the data, assumptions, quotation basis and bias. In developing the DCJ approach, unintuitive or unrealistic results were noted in some SROI analysis in other jurisdictions due to the way assumed value was simply extrapolated from various sources.

When including non-administrative data as inputs or values in an SROI assessment, particular consideration needs to be given to the suitability of the data as a model input. This is a different burden of review compared to establishing whether research might be considered as part of the evidence base.

Table 2 below outlines how some of the more common problems around third-party data integrity can be identified and managed in SROI appraisal.

Table 2: Non-administrative or static data inclusion protocols

| Risk                       | Rationale                                                                                                | DCJ SROI approach protocol                                                                                                                                                                                                                                                        |
|----------------------------|----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dated Research             | Using values from old research could be erroneous and/or misleading.                                     | <ul style="list-style-type: none"> <li>Data older than 10 years should be verified for suitability before being included as a value in SROI.</li> <li>Dated historic values should be adjusted for cost inflation so that they can be compared to contemporary values.</li> </ul> |
| Basis & Comparability      | The basis of the calculation cannot be reasonably compared with services delivered by DCJ.               | <ul style="list-style-type: none"> <li>Assumptions of causality should be assessed before using third-party sources as proxies.</li> </ul>                                                                                                                                        |
| Suitability for Comparison | Inputs to the model are extrapolated from evidence ill-suited to the Australian or DCJ clients' context. | <ul style="list-style-type: none"> <li>Review to ensure that the service provision environment is a realistic representation of the Australian context (for example, advanced economies with similar government service provision, and socio-economic structure).</li> </ul>      |
| Bias                       | Model inputs are distorted by potential bias.                                                            | <ul style="list-style-type: none"> <li>This is covered by DCJ existing evidence protocols.</li> </ul>                                                                                                                                                                             |

## 2.5 Investment basis

To compute SROI, the investment component needs to be established. Human services are delivered through different channels and a baseline for calculation is required.

For some shorter-duration or specific programs, such as some early-intervention programs, the investment basis is easier to identify. For other interventions like Out-of-Home Care (OOHC) or Social Housing which are provided over a longer period of time, a discrete investment basis is more difficult to identify. Additionally, some interventions target an individual client (e.g. OOHC), whilst others a family or household (e.g. Brighter Futures or the provision of Social Housing).

For the purpose of the appraising SROI in a DCJ context, the investment basis should be:

- For an intervention with a duration of less than one year, the investment basis is the *unit cost of the intervention*.
- For an intervention extending beyond one year, the investment basis is the *unit cost to deliver the intervention for a one year period*.

For example, in the case of social housing, the investment basis would be the unit cost to provide one dwelling for a one year period.

## 2.6 Return basis

Investment returns are most frequently expressed on a percentage basis per annum. When expressed in this way, return is the annual (or annualized) value generated as a proportion of the initial investment.

For SROI, this is not the optimal basis as many human services interventions do not have recurring returns (implied by a percentage return rate).

**Figure 3: SROI calculation**

$$SROI = \frac{\sum \text{Intervention Return}}{\text{Intervention Cost}}$$

Consequently, the DCJ SROI Approach adopts a return expressed as a ratio, typically expressed to two decimal places. The value of this ratio represents the number of times benefits (in real, inflation-adjusted terms) are created compared to the cost of the intervention. For example, a ratio of 4.50:1 means \$4.50 in social benefit is generated for each \$1 invested in the intervention.

The modular classification of the return categories in the SROI calculation means further breakdowns can be identified or computed. In the example above, the A1, A2 and A3 return might be 0.5:1, 1.9:1 and 0.9:1 respectively. In this case, for every \$1 invested by DCJ in the intervention, DCJ would expect avoided costs of 50 cents across other programs. The broader NSW Government would expect savings outside of DCJ of \$1.90 across other service areas such as health and justice (i.e. total NSW Government return of 2.4:1 or \$2.40 per \$1 invested). The Federal Government would expect an avoided cost of 90 cents for every \$1 invested by DCJ and consequently may wish to partially sponsor the program.

## 2.7 Limitations of SROI

Although SROI can be a tool to better understand the full value created by interventions, it is not a substitute for judgement into the viability of an intervention investment. SROI results must only be considered alongside traditional financial considerations or CBA.

This is particularly the case when a larger than normal portion of the SR from an intervention is skewed towards private benefits (i.e. 'C' and 'D' return types). If these interventions require significant public funding they can be financially unviable despite high SROI results.

### 3. Elements of the SROI calculation model

Most SROI frameworks and calculations include the following parameters in the calculation steps - *Deadweight, Attribution and Displacement*. These concepts are at odds with the protocols and ethos of the NSW Government 2017 Guidelines for Cost-Benefit Analysis.

Specifically, NSW Cost-Benefit Analysis Guidelines determine a base case and then measure costs and benefits as a comparison to the base case. An economic evaluation using the NSW Government guidelines would identify attribution and benefit against comparator groups. By comparison, SROI frameworks typically do not include this degree of rigour. Rather, they make assumptions on the effectiveness vs. 'do nothing' (deadweight) and assume the attribution.

Notwithstanding these shortcomings, we provide the following guidance on identifying suitable assumptions:

#### 3.1 Deadweight

**'Deadweight'** is the assumed improvement that would have occurred without the intervention. More specifically, it is the proportion of the intervention population who would have still achieved a better outcome had they not participated in the intervention. Deadweight is expressed as a percentage.

Deadweight is difficult to measure and quantify. In different SROI frameworks, it is an estimated or assumed component of the SROI calculation. For the interventions DCJ provides or commissions, deadweight values are typically low reflecting the multiple disadvantages often faced by DCJ clients.

In the DCJ approach, each SR calculation should have an associated deadweight rather than a single deadweight for the program or intervention. In line with deadweight assumptions used in other SROI frameworks for human services where clients face multiple disadvantages, a default of around 5% should be considered reasonable unless evidence exists that an alternate deadweight is more appropriate.

In the SR computation equation, the complement of deadweight is arithmetically multiplied by the assumed value created. This means an unrealistic assumption on deadweight is a potential risk to be acknowledged and managed.

#### 3.2 Attribution

**'Attribution'** is the proportion of a change in outcomes that result from an intervention, expressed as a percentage. A multitude of factors can contribute to client's outcomes in addition to an intervention. Like deadweight, this makes attribution difficult to measure.

Attribution is an important and subjective component of SR calculation. Attribution can theoretically be modelled through regression analysis. However, in most instances, the datasets required to build such a model are either unavailable or would take so long to assemble as to render the SROI analysis unworkable. In practice, a statistical approach to attribution is rarely used and assumptions need to be made.

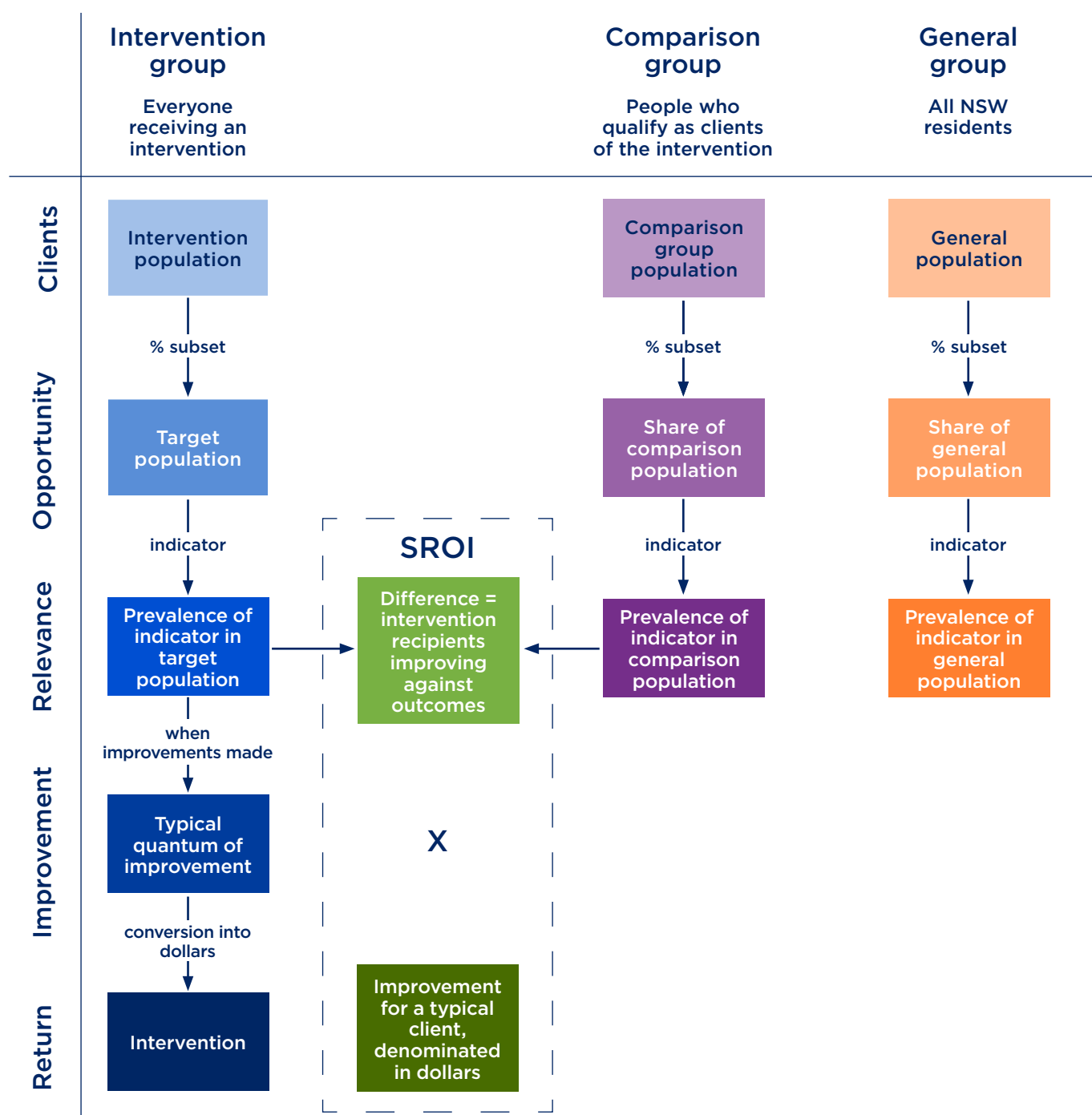
Consequently, attribution is determined by the SROI analyst's assessment of the impact on outcomes, and available evidence. An attribution rate must be determined for each calculation rather than for the intervention as a whole.

Like deadweight, the rate of attribution is multiplied by the assumed social value. An erroneous assumption of this approach is that attribution has a linear relationship with the SR for a calculation, which is a potential risk that needs to be acknowledged and managed. In particular, when appraising third-party SROI claims, a thorough review of attribution assumptions is essential as it represents a significant opportunity for error.

To mitigate the difficulty and risks posed by attribution, we suggest the following measures:

1. **Comparison group selection:** a comparison group must be carefully chosen such that it represents the most appropriate counterfactual cohort. An appropriate comparison group isolates the impact of an intervention and reduces attribution risk. The preferred method to obtain a comparison group is by random selection, however, this is difficult to achieve in the context of social services. Therefore, the analyst should choose the most appropriate group with similar needs based on available data to ensure that it is representative of the counterfactual cohort. For example, in the case of Social Housing, the comparison groups will be people on the social housing waiting list or other clients in social housing with similar circumstantial characteristics (i.e. cohort).

Figure 4: Determining optimal comparison groups



2. No Duplication: Similar indicators can create duplication and double-counting. When appraising third-party SROI claims, particular attention needs to be focused on identifying duplication.

### 3.3 Displacement

**‘Displacement’** represents the outcomes of other interventions displaced by the intervention being appraised.

For example, a community outreach program where volunteers teach art to elderly residents at a public housing estate may help to improve the wellbeing and quality of life for local residents. However, this could lead to a decrease in volunteering in other areas as volunteers commit to delivering the program. Therefore, although there is a net increase in SR through the program, not all of the measured improvement can be counted towards the intervention’s SROI.

Ideally, this should be captured in the base case scenario (or through a comparison group); however, we acknowledge that this data is not always available. Furthermore, the displacement effects are not often applicable in the context of DCJ services.

### 3.4 Sensitivity analysis

Sensitivity analysis is an important part of SROI calculation as it acknowledges the inherent subjectivity in determining SR. Sensitivity analysis helps us to understand the drivers of SR and which assumptions or values most heavily influence the result.

When reviewing a third-party SROI claim, it is important to review the suitability of sensitivity parameters to ensure they adequately capture the degree of uncertainty surrounding SROI estimates.

## 4. Determining ‘Social Value’

### 4.1 Valuation methods

Every indicator included in an SROI analysis needs to have a corresponding Social Value. To ensure integrity in the underlying value assumptions, best-practice valuation protocols are required.

The heterogeneous nature of the different SR elements necessitates a number of valuation methods to accommodate different indicators. When reviewing third-party SROI claims, it is essential to review the assumptions that underpin the Social Values. If these are questionable, then the resulting SROI is likely flawed.

#### Recommended valuation protocols for ‘A1’, ‘A2’, ‘A3’ and ‘A4’ returns

‘A1’, ‘A2’, ‘A3’ and ‘A4’ returns are the SR categories that pertain to the avoided costs for DCJ, the NSW or Commonwealth Governments.

Using administrative data it is possible to estimate how changes in client outcomes correspond to changes in demand for different government services, and therefore current or future costs. For example, clients accessing social housing typically have better access to primary healthcare and consequently suffer fewer preventable hospitalisations, which comes at a significant cost saving.

Although each client experience is unique, typical usage patterns of a particular service can be established from historical data and assigned a probability. The expected average cost is then the probability-weighted Net Present Value (NPV) of likely client pathways. By extension, the avoided cost return is the difference between the expected pathways. This actuarial type of analysis is beyond the scope of most SROI proponents.

Using the same example above, an increase in the number of GP visits – obtainable from client Medicare administrative data (a proxy for primary healthcare access) – corresponds to a lower likelihood of client pathways involving more serious hospitalisation episodes. By reducing the likelihood of these expensive pathways, a quantified estimate for healthcare saving per GP visit for a client can be determined. Consultation with a subject-matter expert is recommended to ensure prevalence measures are interpreted in context. For example, reduced usage may be a good or bad outcome depending on the context.

This same logic and calculation structure can be used to deduce the avoided cost returns for other government services like justice (reduced crime rates mean less court and gaol costs) and health (reduced domestic and family violence and/or drug and alcohol abuse lowers costs across a range of health services).

The provision of government services contains both fixed and marginal costs. For simplicity, it is reasonable to use the average unit cost of delivered services for social values.

#### Intangibles valuation protocols for ‘B’, ‘C’ and ‘D’ returns

Intangible benefits include benefits such as ‘client feeling safer’, ‘client feeling more empowered’ etc. These benefits are inherently more difficult to measure. Given the difficulty in assigning values to these outcomes, NSW Government CBA guidelines generally recommend that these benefits are noted as a qualitative benefit and not quantified due to the difficulty in monetizing these values. SROI specifically seeks to ascribe values to these amounts.

In SROI, the valuation of intangible benefits generally seeks to use indirect methods to gauge the value people place on intangible benefits. This can be achieved using proxy market goods or services as a guide, survey techniques which elicit preferences for intangibles in a way that enable estimation of monetary value (stated or revealed preference), or regression analysis of longitudinal survey data (life-satisfaction modelling). Care needs to be taken to assess the suitability of the valuation method employed. Inappropriate proxies that falsely ascribe value undermine the validity of SROI results.

## 4.2 Wellbeing Valuation & modelling

Recent development in happiness economics has given rise to a method of valuing non-market public goods or social outcomes. The Wellbeing Valuation method ascribes values to outcomes which are statistically associated with measured differences in self-evaluated life satisfaction. The method assumes a set 'exchange rate' between income and life satisfaction and calculates valuations as the change in income required to offset the wellbeing effect of an outcome, as determined through regression models.

Life-Satisfaction Wellbeing Valuation methods will be most commonly used for calculating returns for the Social & Community and Empowerment domains.

However, Wellbeing Valuation methods are highly sensitive to assumptions made in the particular regression models used, and, currently, no set guidelines regarding the inputs into the model. Wellbeing Valuation is not accepted in cost-benefit analysis but the convenience of the available modelled values means it is frequently included in SROI calculations.

## 4.3 Value of Statistical Life (VSL)

Sometimes, Social Value will accrue not as a result of improving a client's feeling of wellbeing, but rather by improving public amenity and reducing the contingent risk of harm. For example, a reduction in violent crime has the obvious benefit of reducing court and justice costs ('A2' returns) but it also reduces the number of victims of crime, a valuable 'B' return. Valuing the latter is intuitively more difficult. Additionally, it is not possible to deduce how people value the additional safety of a reduced likelihood of assault or death through longitudinal surveys (i.e. Wellbeing Valuation approach). A different valuation method is required.

There are well-established precedents used by the NSW and Commonwealth Governments to value the trade-off between money and fatal safety risks. Value of Statistical Life (VSL) is an estimate of the value (in dollars) that society places on reducing the average number of deaths by one. Expressed differently, it is the theoretical amount society would pay to reduce the risk of death.

For example, when conducting a cost-benefit analysis for a new road project, if one of the benefits assumed is reduced fatalities and injuries, then VSL can be used to ascribe a value to improved safety. This is done by multiplying the number of assumed fatalities prevented by the VSL.

There are derivations of VSL such as the Value of Statistical Life Year (VSLY), which is the value of one life year. VSL is most useful in calculating returns for the Safety domain. VSL should not be applied to the valuation of gains made in the health domain.

## Endnotes

<sup>i</sup> NSW Treasury 2017, *NSW Government guide to Cost-Benefit Analysis*, NSW Government, Sydney.

<sup>ii</sup> Nicholls, J, Lawlor, E, Neitzert, E & Goodspeed, T 2009, *A guide to Social Return On Investment*, Cabinet Office, Office of the Third Sector, London.

