Alexandra Rose Vouchers Social Value Evaluation

About this Study

Envoy Partnership was commissioned to conduct an social impact evaluation of the Rose Vouchers on families in Southwark. This is a pilot evaluation, exploring the impact on families based in the London Borough of Southwark. This evaluation uses a social value approach, based on Social Return on Investment (SROI) methodology. The purpose of this evaluation is to measure the positive impact on nutrition, and wider impacts on families' physiological health, as well as impacts on their mental wellbeing. This study is *not* a healthcare economics evaluation, and does not attempt to quantify the health benefits to families in an objective sense; instead this study uses the principle of financial proxies used in social accounting, to represent the value to families of the associated physical and mental health impacts of the Rose Vouchers. In addition, it also includes estimated resource savings to the NHS based on secondary NHS unit-cost data, and insights from behaviour change demonstrated by the families.

i. Social Value

Social value refers to any non-financial value created through a project, activity, or organisation. The term has expanded out from Social Return on Investment (SROI), a principles-based method for measuring value not currently accounted for in traditional financial accounts, for example, environmental or social value. While the term SROI exists in cost–benefit analysis, a methodology for calculating social return on investment in the context of social enterprise was first documented in 2000 by REDF[1] (formerly the Roberts Enterprise Development Fund), a San Francisco-based philanthropic fund that makes long-term grants to organisations that run businesses for social benefit. Since then the approach has evolved to take into account developments in corporate sustainability reporting as well as development in the field of accounting for social and environmental impact. The SROI method as it has been standardised by **Social Value UK**[1] provides a consistent quantitative approach to understanding and managing the impacts of a project, business, organisation, fund or policy. It accounts for stakeholders' views of impact, and puts financial 'proxy' values on all those impacts identified by stakeholders which do not typically have market values. The aim is to measure the worth to people, of benefits they experience that are often excluded from markets, but in the same terms used in markets – i.e. money. This is in order to give people a voice in resource allocation decisions. A full SROI evaluation involves producing a final ratio, to indicate the amount of social value returned for every £1 of financial investment. However, researchers are commonly using the methodology of SROI to conduct more tailored social value evaluations and analyses and drawing in on the principles to conduct calculation in isolation.

Social Return on Investment, and related social value evaluation is becoming more common practice for charities, social enterprises, and the public sector. The Public Services (Social Value) Act came into force on 31 January 2013, and requires people who commission public services to think about how they can also secure wider social, economic and environmental benefits. In June 2018, central government announced it would go further and explicitly evaluate social value when awarding most major contracts. The NHS also introduced a Social Value Policy across its main procurement in 2022. Government departments are now expected to report on the social impact of their major contracts.[2]

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[1] What are the Principles of Social Value? - Social Value UK

[2] PPN 06_20 Taking Account of Social Value in the Award of Central Government Contracts (3) (publishing.service.gov.uk)

To help departments implement this change and following a public consultation, Cabinet Office and DCMS have worked with departmental commercial and policy teams and supplier representative bodies to develop a Social Value Model. Government has defined social value through a series of priority themes and policy outcomes which are important to deliver through government's commercial activities. Furthermore, Social Return on Investment is acknowledged in HM Treasury Green Book[3] as an effective means of assessing impact.

ii. Giving outcomes a value

A Social Value approach to evaluation involves attributing a monetary value (a 'financial proxy') to outcomes based on the latest guidance from practitioners and Social Value UK. This monetary amount represents the value of an outcome to stakeholders. This can include individuals, but it can also include bodies and organisations, such as the HMRC Treasury, or the NHS. In this way, the financial proxy represents what the outcome is 'worth' to the stakeholder. There are different approaches for obtain these values, and some are more intuitive than others. The final approach will to some extent be down to the judgement and experience of the researcher. In the case of the Alexandra Rose Charity's Rose Vouchers project, the physiological health impacts of better nutrition for carers and children, been given a monetised value to represent the estimated health benefit to the families. Likewise, the impact of Rose Vouchers easing financial and health-related stress have been attributed a monetised value for the estimated health benefits of improving their mental health and wellbeing.

iii. Incorporating Healthcare Economics

One approach to obtaining a financial proxy for health-related outcomes, is to use literature from healthcare economics as a benchmark for relative impact and importance. In the field of medicine, interventions are often evaluated in terms of their impact on a person's overall 'health status'. Within global healthcare, this is often done using a measure known as Quality Adjusted Life Years (QALYs).

NICE (National Institute for Health and Care Excellence) defines QALYs as:

> *"A measure of the state of health of a person or group in which the benefits, in terms of length of life, are adjusted to reflect the quality of life. One QALY is equal to 1 year of life in perfect health."* [4]

So, if a social or medical intervention leads to an individual 'gaining' a QALY, this could mean a number of things. It might mean that the individual is expected to live one year longer, and that one year of life will be lived in perfect health. More realistically, they may live two years longer, and those two years will be lived at 50% health. Or their life expectancy may not change at all, but the final five years of life will be lived at an additional 20% health. In deprived areas especially, where multiple long-term illnesses are high, an intervention that improves a person's health status by a small amount can be transformative – currently, women in deprived areas, such as pockets of Southwark, live a third of their life in poor health.[5]

QALYs are commonly used within the health sector in the UK when deciding if medical interventions represent good value for money and are an increasingly common measure for social interventions (see IOUH's commission for an economic assessment for free school meals expansion October 2022). Very roughly, a social or medical intervention is judged to be good value for money if it costs less than £30,000[6] for every QALY it creates for the patient. This is known as a cost-effectiveness threshold. It means that, in theory, the NHS would be prepared to pay up to £30,000 for each QALY created by for a patient by an intervention, and by extension, it is a useful benchmark for the value we, as a society place on achieving one year of "good quality of life". If £30,000 is the benchmark value for 1 QALY, to convert fractional QALYs into a financial proxies, we can multiply the QALY amount by the NHS £30,000 cost-effectiveness threshold. For example 1 QALY is 'worth' £30,000, and 0.1 QALY would be 'worth' £3,000.

[3] The Green Book (2022) - GOV.UK (www.gov.uk)
[4] https://www.nice.org.uk/glossary?letter=q
[5] Office for National Statistics Health state life expectancies, UK: 2018 to 2020
[6] The cost-effectiveness threshold is usually given as £20,000 - £30,000. We have used the upper threshold here.

iv. Valuing Physiological Health

A person's entire health status is made up of different components. The Centre for Mental Health's (CMH) report shows how much a person's health status is affected by having poor mental health.[7] The CMH calculates the average loss of health status for an individual developing a severe[8] mental health condition to be 0.352 QALYs, suggesting that a person's full mental wellbeing accounts for approximately 0.352 of a QALY, or their health status. It follows then, that in theory their physiological health is worth approximately 0.648 of a QALY, since 1 QALY represents their entire health status. The Rose Vouchers target nutritional and lifestyle related elements of a person's health status, and so, the project cannot claim to be improving *all* aspects of a person's physical health. Even if the Rose Vouchers were to significantly change a person's diet and lifestyle; this person may, for example, still smoke cigarettes or have non-diet related health conditions. Hence, of the 0.648 (100% physical health), nutrition and lifestyle health will represent a sub-component weighting.

There is a lack of QALY research into nutrition and early years, particularly relating to deprivation. Therefore, to get a breakdown of the proportion of a person's health that improvements in their nutrition account for, we have used the World Health Organisation's Global Health Estimates 2019, which contains point estimates for disability-adjusted-life-year (DALYs) by cause, age and sex[9]. DALYs are the opposite of QALYs in that they represent the number of QALYs lost through disease. For this analysis, they can be used as a weight in the same way, as either you can measure the QALYs *gained* from an intervention, or the DALYs *lost* from disease and illness. From the WHO data set, we have used the average DALY loss associated with the cause: "Nutritional Deficiencies" and taken an average of the sub measurements "Vitamin A deficiency", "Iron deficiency anaemia" and "Other nutritional deficiencies". These categories closely align the nutritional content of the foods the ARC voucher subsidise for families (fruit and vegetables). We have excluded the measurements of "Protein-energy malnutrition" and "Iodine deficiency" which are most applicable to countries with extreme widespread malnutrition, and explicitly not relevant for the families enrolled on the Southwark Rose Vouchers project who do not suffer from a chronic lack of protein, fortified foods like cereals and bread, or dairy in their diets.[10] The estimated global average impact of the cited nutritional deficiencies is **0.0041 DALY's per person,** meaning they lose the equivalent of 0.0041 of their health status over one year.

We have then broken this down by age and sex to capture the differences between children and adults. The DALY loss for infants (0-59 months) was higher than average, at **0.0088,** and slightly lower than average for Women (15-49) at **0.0038.** Women almost exclusively made up the primary carers completing the food frequency questionnaires and health scale tools.

This weighting has been multiplied by the NHS cost effectiveness threshold of £30,000 again to return a financial proxy value of 100% improvement, i.e., from a severe nutritional deficiency to perfect health. However, to reflect the actual change experienced by beneficiaries, we have then weighted this value by the self-reported change in health outcomes, associated with nutritional improvements.

The nutrition associated physiological health benefits beneficiaries were asked to report on were:

- Energy Levels
- Concentration
- Sleep
- Digestion

[7] Centre for Mental Health (2003), Economic and social costs of mental illness in England, https:// www.centreformentalhealth.org.uk/economic-and-social-costs-2003. The original report in 2003 was updated in 2009/10, although the per-person figures for social costs did not change in the update
[8] i.e. a 'level 3' mental health problem: severe problems, or extremely anxious
[9] https://cdn.who.int/media/docs/default-source/gho-documents/global-health-estimates/ghe2019_daly_global_2000_2019106cc197-7fec-4494-9b12-64d11150302b_f73d0faa-e6f4-41e6-93fd-61f437447299.xlsx?sfvrsn=ab2e645c_9
[10] Family Outcomes Report. Alexandra Rose Charity. 2023.

- Ability to maintain a healthy weight

Beneficiaries were asked to mark if they had noticed any change in these experiences on a scale of "Worsened a lot"; "Worsened a little"; "No Change"; "Improved a little"; "Improved a lot" – where "Improved a lot" represents an +100% improvement rate, and "Worsened a lot" represents a -100% deterioration.

The findings, based on a sample of 22 responses, showed:

- For children on the Rose Vouchers Scheme, parents have reported an average **improvement of 50%**
- Carers on the Rose Vouchers Scheme self-reported an average **improvement of 45%**

According to this methodology, the social value generated by the physiological health impacts were found to be **£107**[11] per child, and **£37**[12], per carer, per year.

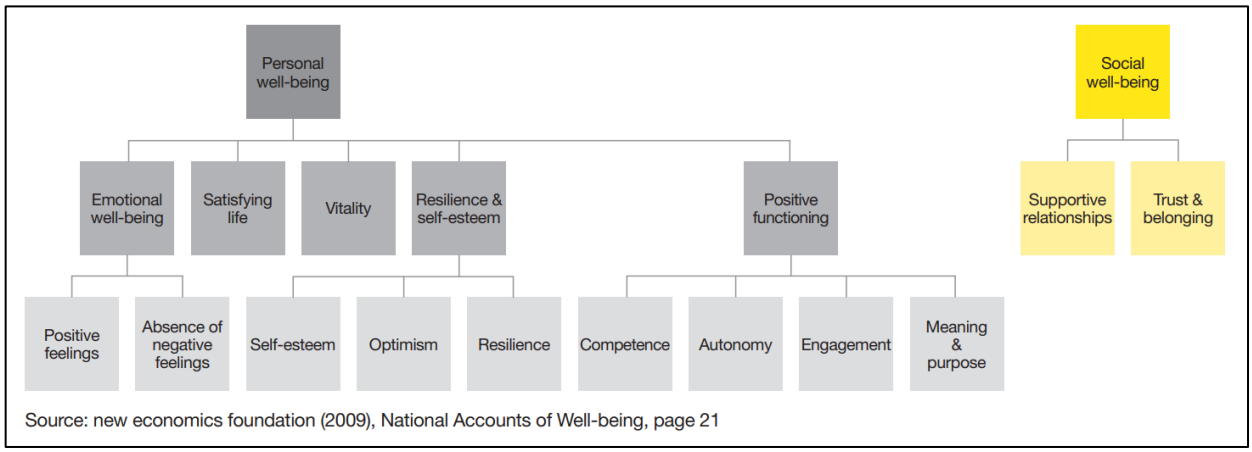
It is important to note that whilst the mental wellbeing value is somewhat higher than the physiological health value, this analysis is only a snapshot of the immediate benefits that would occur after one year. The physiological health benefits are likely to continue to improve in the medium term, and having lasting, potentially life-long impacts. Mental wellbeing benefits may be subject to more considerable drop-off in the short to medium term, in particular, when families stop receiving Rose Vouchers, and financial insecurity may return. Further analysis and modelling on the impacts over time can be complete with a full Social Return on Analysis at a later stage.

v. Valuing mental wellbeing

For this study, we have also valued mental wellbeing based on the extent to which it impacts a person's health status. The CMH calculates the average loss of health status for an individual with a severe[13] mental health condition to be 0.352 QALYs, i.e. having a severed mental health condition results in a loss of 0.352 of a person's health status, in one year. We therefore use this value to represent the difference between a person with perfect mental health, and a person with a level 3 mental health condition (assuming that there are no other health differences between the two).

This framework gives a financial value of mental health to be £2,940[14] for a level 2 mental health condition,[15] or £10,560[16] for a level 3 mental health condition, per person per year. There are also then subcomponents of a person's mental wellbeing. The New Economics Foundation (2009), National Accounts of Well-being, has drawn on global evidence to divide this up (see Figure 1).

Figure 1: National Accounts of Well-being: Wellbeing Components



Source: new economics foundation (2009), National Accounts of Well-being, page 21

[11] £30,000 x 0.648 x 0.0085 x 0.47 (Rate of improvement)
[12] £30,000 x 0.648 x 0.0085 x 0.54 (Rate of improvement)
[13] i.e. a 'level 3' mental health problem: severe problems, or extremely anxious
[14] Based on the calculation of 0.098 QALYs per person per year x £30,000 per QALY = £2,940 per person per year.
[15] i.e. a 'level 2' mental health problem: some problems, moderately anxious or depressed
[16] 0.352 QALYs per person per year x £30,000 per QALY = £10,560 per person per year.

For families receiving Rose Vouchers, we have measured reduced "Stress and anxiety" as an indicator for wellbeing. This falls within the category of "Absence of negative feelings". By allocating approximately 10% to each of the bottom row mental wellbeing components, we can estimate that "Stress and anxiety" is therefore worth approximately 10% *of* this 0.352 weighting (100% mental health) This will be applied to the mental wellbeing value outlined above in order to ensure value is not overclaimed. This is built on combining guidance above from the Centre for Mental Health, NEF's National Accounts of Wellbeing, and New Economy Manchester. However, it is important to note that many families on Rose Vouchers reported positive benefits to their personal and social wellbeing in qualitative results that could be explored in a more in-depth mental wellbeing social value assessment at a later date.

To calculate a social value number for mental wellbeing impacts, we have used the findings from the health scales in the Charity's Family Outcomes report (2023). This shows:

- For children on the Rose Vouchers Scheme, parents have reported an average **improvement of 39%** - where a 100% improvement represents complete eradication of the issue, 80% improvement is "A lot better", and a 30% improvement is a "bit better", and 0 is "the same".
- Carers on the Rose Vouchers Scheme self-reported an average **improvement of 50%**

The social value generated through the positive mental wellbeing impacts of the Rose Vouchers project, can therefore estimated to be **£222**[17] per child, and **£380**[18] per caregiver, per year.

vi. Resource Savings to the NHS

In addition to the value to the individuals directly targeted by the Rose Vouchers project, there are also associated resource savings to the NHS. For this we have taken estimates from the NHS National Tariff Workbook containing unit prices by intervention.[19] We have used the cost of *Nutritional Disorders without Interventions, with a CC Score (0-1)* – the mildest form of nutritional disorders.

- The estimated cost to the NHS for an **adult** for the combined elective day case is **£328.**
- For infants, the cost of *Paediatric Faltering Growth (Failure to Thrive) with CC Score 2+* (Associated with nutrition) costs approximately **£1,891** for the combined elective day case.

These are conservative cost estimates, and only take into account the immediate medical response required for this type of event, without taking into account the costs associated with longer-term health conditions caused by poor nutrition, such as Type 2 diabetes.

When building this cost saving into the model, we have weighted down the cost by 0.3 for children and 0.15 for adults, reflecting a qualitative-informed estimate that adults are visiting GPs **15%** less for health concerns, and taking their children approximately **30%** less.

We therefore suggest that the Southwark 2021-2022 cohort, the associated cost savings to the NHS were approximately **£56,457** for the carer population, and **£173,593** for the child population, based on the assumption that 459 children (30% of total Southwark children cohort), and 344 adults (15% of total Southwark Adult cohort) will forego **one** medical appointment associated with a nutrition related health problem as a result of the Rose Vouchers.

Impact Adjustments

[17] £30,000 x 0.352 x 0.1 x 0.39 (Rate of improvement)
[18] £30,000 x 0.352 x 0.1 x 0.54 (Rate of improvement)
[19] https://www.england.nhs.uk/wp-content/uploads/2020/11/22-23NT_Annex-A-National-tariff-workbook_Apr22.xlsx

i. Attribution

Within Social Value evaluation, it is important consider how much of the change recorded can truly be accredited to the intervention. One way of adjusting for this, is "attribution", which estimates the extent to which the change cited by beneficiaries is down to the Alexandra Rose Vouchers. A good example of this is the NHS Healthy Start programme, which also target families and young children in Southwark, supporting them to improve their health. Healthy Start could therefore be another, or even primary driver of the improved health outcomes. In order to understand this, we asked beneficiaries to rate the attribution of Rose Vouchers. The median response to this was that ARC was responsible for "Most" of the change they have experienced. This is supported by strong qualitative feedback that Healthy Start is used mostly for formula milk or one or two other items, lacking the range of nutrition impact that families report with Rose Vouchers (see section X for more details). We have therefore used an **70%** attribution weighting, to represent that "most" of the change in nutrition-driven health and wellbeing has been attributed to the project, and because no further evidence of additional factors were identified during the research. Despite this we have reserved an additional 30% to account for any unknown variable and to remain conservative.

ii. Deadweight

Another impact adjustment to consider is "Deadweight". This accounts for the likelihood that the change would have happened anyway, without the intervention, for example if the change is in line with wider national trends in health and lifestyle. For the carers, we have used a **90%** deadweight pro-rated score for the physiological health improvement, indicating there is a 10% chance that the improvements in diet and lifestyle would have happened anyway. This has been informed on qualitative research with the beneficiaries, who often referred to the intervention as "breaking a cycle" and giving them an opportunity to change their habits. Without the financial security of Rose Vouchers, it is unlikely families would be able to bare the risk of experimenting with fresh produce (which goes out of date sooner), particularly during the current cost of living crisis. We are therefore confident that these outcomes are unlikely to have happened anyway. Again, we reserved an additional 10% to account for any unknown variable and to remain conservative.

For the children, we have used a lower deadweight score. This is because the development rate of children 1-59 months is rapid and complex, and their food intake and behaviours are more likely to be changing anyway. It is therefore harder to unpick the extent to which children would have demonstrated these changes. However, the change rate of 2 additional daily portions for children suggests that children's nutrition has increased considerably from baseline. Moreover, the quantitative results and qualitative feedback strongly suggests children would have had more junk food in their early years without Rose Vouchers supplementing processed sugary foods with fruit and veg. We have therefore used an **80%** deadweight pro-rated score for their physiological health improvements. For children's mental wellbeing development, we have less evidence to confidently state that their stress and anxiety levels would have not improved anyway as they mature and grow. So for mental wellbeing, we have used a lower pro-rated score of **60%** deadweight, in line with our commitment to not overclaim and remain conservative.

Final Results

The final results for the Social Value creation of the Southwark Rose Voucher project in for one year given below. This includes the value of health and wellbeing benefits reported by the families, and the estimated resource savings to the NHS.

- Per Child (1-59 Months): **£2,220**
- Per Carer: **£745**

ARC currently distributes Rose Vouchers to approximately 1,530 carers, and 2,295 children. Based on this research, we calculate that the full social value generated for the London Borough of Southwark from this project, from 2022-2023 is approximately **£1,390,500**

For this project, a total of **£196,101** was directly invested in Rose Vouchers for Southwark. **This suggests that, for every £1 Rose Voucher, £7[20] of social value has been created for stakeholders.** This is allocated in the following way:

Figure 2: Distribution of social value

Outcome	Social value	% of total (descending)
Carer physical health	£763,409	55%
Children mental health	£264,648	19%
Children physical health	£127,235	9%
Children cost savings to the NHS	£121,516	9%
Carer physical health	£74,172	5%
Adult cost savings to the NHS	£39,520	3%

[20] This calculation only accounts for the direct investment in the Rose Vouchers. It does not include, in financial inputs, any operational or additional costs included in the running of the programme over 1 year. It also only gives an indication of a one year time-period and does model how these outcomes will change over-time. This is **not** a return on total investment ratio, it only indicated the return generated by a £1 Rose Voucher.

Appendix

Figure 3: Social Value Calculation Breakdown

Stakeholder description	Outcome	Indicator	Stakeholder Reach	Financial Proxy	QALY Breakdown	Amount of change	Attribution	Deadweight	Social Value per year per person	Total Social Value for all stakeholders
Children (1-59 Months)	Improved Physical Health	Reported improvements by caregiver: Energy; Concentration; Sleep; Digestion; Healthy Weight	1530	£30,000.00	0.0088	50%	0.70	0.90	**£83.16**	Children (1-59 Months)
Children (1-59 Months)	Improved Wellbeing	Caregiver reported change in Stress & Anxiety	1530	£10,560.00	0.10	39%	0.70	0.60	**£172.97**	Children (1-59 Months)
Caregivers	Improved Physical Health	Reported improvements: Energy; Concentration; Sleep; Digestion; Healthy Weight	2295	£30,000.00	0.0038	45%	0.70	0.90	**£32.32**	Caregivers
Caregivers	Improved Wellbeing	Self reported change in Stress & Anxiety	2295	£10,560.00	0.10	50%	0.70	0.90	**£332.64**	Caregivers
NHS	Reduction in need for Adult nutritional related health care	GP visit frequency	344.25	£328.00	N/A	50%	0.70	1.00	**£114.80**	NHS
NHS	Reduction in need for child nutritional related health care	GP visit frequency	459	£1,891.00		20%	0.70	1.00	**£264.74**	NHS
TOTAL:										**£1,390,500**