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SOCIAL RETURN ON INVESTMENT (SROI): A CASE STUDY WITH AN EXPERT PATIENT PROGRAMME

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ABSTRACT

BACKGROUND: Expert Patient Programmes are well recognised interventions to help individuals with long term conditions improve their quality of life. Social Return on Investment (SROI) methodology measures the social value created by interventions.

OBJECTIVES: To use the SROI methodology to evaluate the social impact of an EPP programme for Substance and Alcohol Misuse (SAM) in a UK region.

METHODS: Course participants and other Stakeholders created a 'Theory of Change' map of desired outcomes and derived a questionnaire to evaluate the actual outcomes observed as a result of the programme. Indicators of change for these outcomes were assigned monetary values which were then adjusted with participant input to account for external influences. The total impact (monetary value) of all social outcomes was then calculated and divided by the cost of the programme to derive an SROI ratio. This was subjected to a sensitivity analysis varying key assumptions.

RESULTS: The most important direct outcome was increase in confidence. Important indicators of change were: improved relationships, volunteer work and educational and employment opportunities taken. 25% of course participants (n=18) completed the questionnaire. The social return was calculated to be £212,255 and total investment required was £35,856. Therefore the social return on investment ratio was: 6.09. This ratio appeared robust in sensitivity analysis.

CONCLUSIONS: For every £1 spent on these EPP programmes in the Wirral, £6.09 of social return is created in addition to the health benefits for participants. The SROI methodology, by assigning monetary value to more intangible outcomes, may be a useful way of assessing the broader value of healthcare interventions.

Key words: Expert Patients Programme, Social Return on Investment, Substance and Alcohol misuse.

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INTRODUCTION

The Expert Patients Programme (EPP) is an important part of chronic disease management policy in the UK. The programme uses peer-led training to deliver support for self-management in order to improve the quality of life of people with long-term conditions. Initially, the EPP was designed to be delivered within the National Health Service (NHS) and administered by Primary Care Trusts (primary care organisations responsible for commissioning, organising and delivering community care in a specific locality). A community interest company was set up by the Department of Health in England to provide ongoing support to the NHS.

The Expert Patients Programme Community Interest Company (EPP CIC) was formed in April 2007. So far over 75,000 people have attended an EPP CIC course and 2,000 people have been trained as tutors. The main aim is to improve the quality of life for people with long-term health conditions by developing generic self-management skills and improving an individual's confidence and motivation to take control over their lives and illness. The generic EPP CIC course runs for 2.5 hours per week for 6 weeks and includes a number of topics including action plan setting, healthy eating and 'working with your care team'. The intervention used in the study is based on the Chronic Disease Self-Management Program, which was developed and licensed by Stanford University[1].

The health benefits of expert patient programmes (e.g. reduced use of health service resources and hospitalisations) have been established for many long term health conditions[2]. A national evaluation study[3,4] of the effectiveness and cost-effectiveness of the Expert Patient Programme in England concluded that such programmes were effective in improving self efficacy (confidence in one's ability to manage life with a long term condition) and energy levels in patients with long term conditions and were likely to be cost effective using conventional measures[5]. However the authors of these studies questioned whether existing outcome measures captured the benefits that were most important to the participants in these programmes. Recent work suggests that patients assign a high value to self efficacy[6], but the impact of this outcome is difficult to capture in conventional health related quality of life (HRQoL) measures.

Increased confidence and energy can in turn influence an individual's relationships with others and ability to contribute to society in a variety of ways. Improvements in these potentially important contributors to quality of life can have broader benefits to society but these in turn are difficult to quantify. Although the value individuals create by their actions and activities goes far beyond what can be captured in purely financial terms, this is, for the most part, the only type of value that is measured and accounted for. As a result, many important factors can get left out when the impact of a programme is evaluated.

Social Return on Investment (SROI) is a framework to measure the value created by interventions outside of direct financial return or health benefit. SROI uses monetary values to represent social, environmental and economic costs and benefits, allowing a ratio of benefit to cost to be

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calculated. For example, a SROI ratio of 3:1 indicates that an investment of £1 in a programme delivers £3 of social value.

SROI is a principles-based methodology that includes qualitative, quantitative and financial information to produce data on the relative social value of interventions to inform funding decisions. The methodology has been applied in a number of environments and case studies are available on the internet through the SROI network[7] – an international organisation for those seeking to apply the methodology. The principles, a Guide to SROI and further information are available at: www.theSROInetwork.org. The Guide documents the standard approach to SROI which this study followed. Organisations engaging in SROI studies are strongly encouraged to submit their evaluation to the SROI Network for validation or 'assurance' by expert practitioners that the principles have been applied correctly. This study has not yet undergone this full external assurance process.

To our knowledge there are no previous reports of studies using the SROI methodology applied to health interventions in the published healthcare literature.

The aim of this study was to apply the SROI methodology to an EPP CIC programme so as to capture information on the social impact of the intervention in relation to the amount invested to run it.

METHODS:

This Social Return on Investment (SROI) study investigated the impact from April 2009 to March 2010 of specific EPP CIC programmes in The Wirral with particular focus on the ancillary (non health-related) impacts. The courses run in the Wirral focus exclusively on Substance and Alcohol Misuse (SAM) and are run by both paid employees of EPP CIC and volunteers (sessional tutors). A typical course structure is given in Table 1.

The SROI Process

The SROI evaluation involves a stepwise process:

Step 1: Establishing scope and identifying key stakeholders

Step 2: Mapping outcomes as a result of stakeholder interviews into a 'Theory of Change'

Step 3: Deciding on indicators of change for outcomes and assigning a value for them

Step 4: Establishing impact of the outcome in financial terms

Step 5: Calculating the SROI, future projections, calculation of the net present value, and calculation of the ratio.

Step 6: Sensitivity analysis varying the key assumptions

In step 1 the course leaders of the EPP programmes defined the key stakeholders to evaluate

the impact of the programme. Those selected as well as those considered and rejected are given in Supplemental information Table S1 and S2.

Table 1: Course overview for CPP SAM course

Course Overview						
Topic	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Overview of self-management people in recovery from substance/alcohol misuse and /or long-term health conditions or related conditions	✓					
Making an action plan	✓	✓	✓	✓	✓	✓
Relaxation/cognitive symptom management	✓		✓	✓	✓	✓
Feedback/problem-solving		✓	✓	✓	✓	✓
Difficult emotions		✓				
Fitness/exercise		✓	✓			
Better breathing	✓					
Fatigue			✓			
Healthy eating				✓		
Communication				✓		
Medication					✓	
Depression					✓	
Working with your care team						✓
Looking back - looking forward						✓

In order to map the outcomes for the intervention these stakeholders were engaged in three stages:

1. A representative focus group from The Wirral were brought together and interviewed with a set of open ended questions (Supplemental information Questionnaire 1). From this interview a general 'theory of change' was developed. This theory of change went through a number of iterations and was finally tested and ratified by a number of course participants, EPP staff and staff from the Primary Care Trust.

2. From the theory of change a questionnaire based on the identified indicators of change was developed by a SROI working group which comprised:

- An external SROI practitioner
- The EPP CIC Business Development Manager from The Wirral
- An EPP CIC researcher.

The detailed questionnaire derived by the SROI working party is given as supplemental information to this paper (Supplemental information Questionnaire 2).

The questionnaire was delivered by an experienced member of the course staff. All participants were contacted to take part.

3. The final stage of the data collection involved re-engaging with a sample of the participants to test and finalise the financial proxies, attribution, displacement, deadweight and duration used to adjust the calculated social return for each indicator of change. Definitions for these terms can be derived from Table 2, which shows the questions used to explore these aspects.

Table 2: Impact related questions grouped under relevant terminology headings:

Impact related questions	
Financial Proxies	**How would you value the changes highlighted?** **How else could you reasonably achieve the same changes and what would be the cost for you?**
Duration	**Do you expect these benefits will continue if you continue to be involved with the EPP?** **For how long do you feel this change will last for you as a result of taking part in a programme?**
Deadweight	**If you had not been involved in an EPP programme, would you expect any of the changes mentioned to have happened anyway?**
Displacement	**Are there any other similar programme/services provided by other organisation that you might have chosen over EPP and how much of this change might have happened anyway?**
Attribution	**Other than EPP, did anyone else contribute to the changes described?** **Overall, what is the percentage/proportion you think EPP contributed to your changes?**

The indicators of change included objective measures such as the number of hours committed to volunteering or the number of EPP sessions run as a volunteer or sessional tutor, and subjective indicators such as an improvement in relationships. The financial proxies (an approximation of value where an exact measure is impossible to obtain) were developed by the SROI working group following consultation with the participants. For some of the participants it was easy to talk about the value or relative value of certain outcomes. For others this was more

difficult and in this case the 'revealed preference' method was used to try to establish relative valuation for the participants. Participants were not asked about 'drop off' (the deterioration of an outcome over time) as it was thought this was too technical a concept.

Not everyone was able to answer these impact related questions but an average was taken from those that did and then discussed among the SROI working group. Displacement (as defined in table 2) was discussed with a representative sample of the participants and then discussed among the SROI working group. In the same way, participants were asked questions about attribution in the questionnaire. An average was taken for those that did answer and this average was then discussed among the SROI working group.

The changes identified for each stakeholder were explored, measured, valued and recorded on an impact map. (Impact map - supplemental information Table S4).

RESULTS

From April 2009 to March 2010, there were 6 EPP CIC courses in the Wirral with 12 attendees per course (estimated total 72). The age range for attendees was 25-44 years and the majority were white and unemployed (based on available data). All subjects were contacted to complete the derived questionnaire on course benefits and the response rate was 25% (18 individuals).

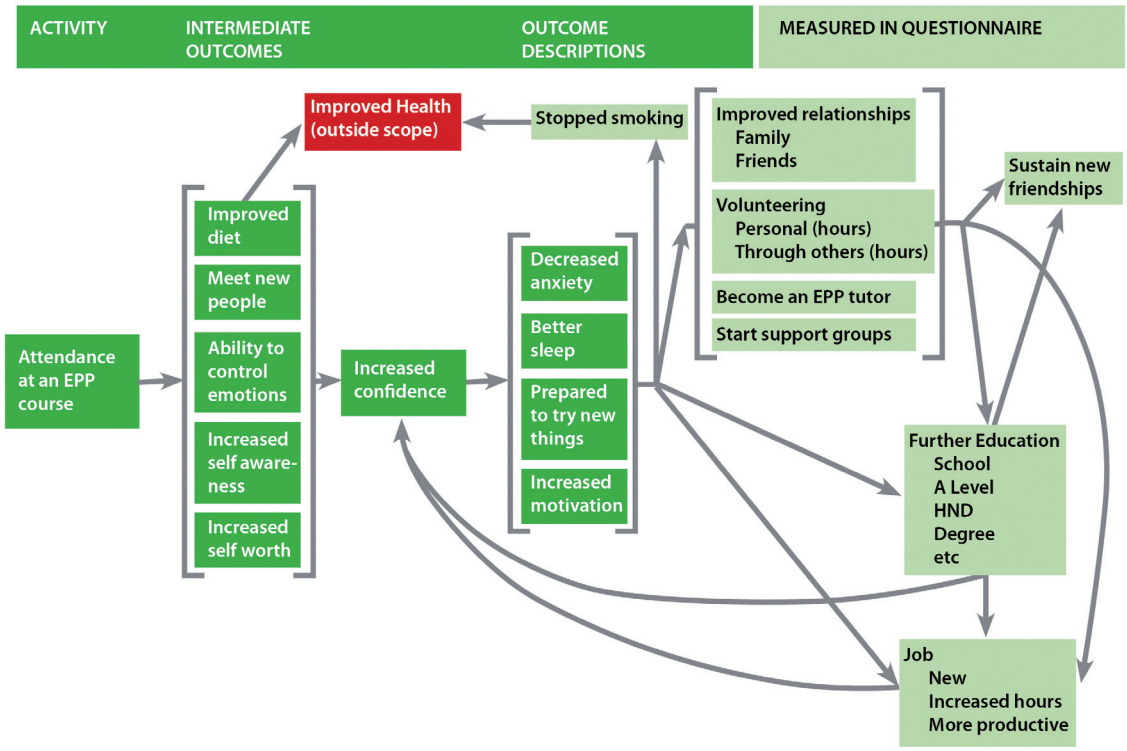
The major input into these programmes was the funding from the PCTs and the Wirral Drug and Alcohol Action Team (DAAT). The DAAT funding within the scope for the EPP programme was £31,020 (including Value Added Tax (VAT) and an estimated 10% additional cost in managing the contract). The only other cost input is the estimated travel costs of £3,836 incurred by participants in The Wirral. The major output is the attendance by the participants at six 2.5 hour EPP course sessions.

Following the first stage of the data collection a Theory of Change (Figure 1) was developed. This went through a number of iterations before it was ratified by all parties including a selection of participants.

The direct outcomes of attending an EPP course included an improved diet, meeting new people, having a better control of one's emotions, and having increased self-awareness and self-worth. These are direct outcomes as they are taught as part of the EPP 'curriculum'.

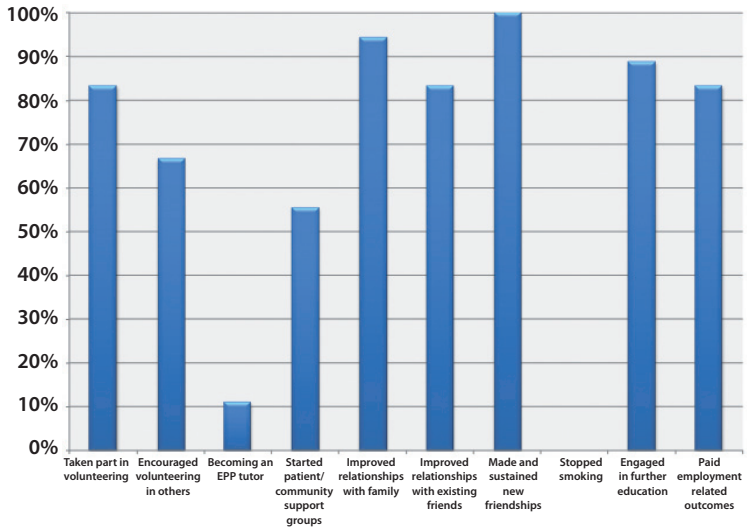
The major result of these direct course outcomes is an increase in general confidence. This increase in confidence leads to further outcomes such as decreased anxiety, better sleep, the ability to try new things and increased motivation. From here there are a variety of outcomes experienced by different participants. Many had improved relationships with family and friends while others took part in various volunteering initiatives, further education or job related outcomes. From here there was a positive feedback loop back into increased confidence which led to even better anxiety, sleep and motivation outcomes and so on.

Figure 1: Theory of Change



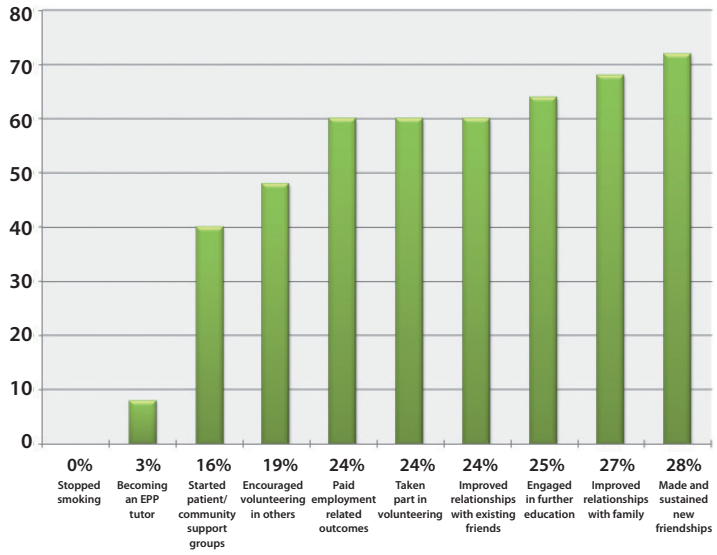
The distribution of outcomes experienced from the programme is given in Figure 2:

Figure 2: Distribution of Outcomes (n=18 - 25% of participants)



This distribution of outcomes was then scaled up to the total population attending the courses. From this the modelled number of people experiencing each of the outcomes can be seen in Figure 3.

Figure 3- Modelled total number of people experiencing each outcome



SOCIAL RETURN CALCULATION AND RATIO

INDICATORS OF CHANGE

The financial proxies were developed by the SROI working group following consultation with the participants. All financial proxy sources are disclosed in the impact map. This table / financial worksheet captures how resources are used to provide activities that then lead to particular outcomes for different stakeholders. The indicators of change for each outcome are then assigned agreed values before the total financial impact is calculated. (Impact map - supplemental information Table S4).

Modelling assumptions

The changes experienced by the participants are potentially life-changing. However to avoid over-estimation the duration of change was modelled conservatively for 5 years.

Drop off (the deterioration of an outcome over time) was discussed amongst the SROI working group and it was agreed that the changes experienced by the participants were potentially very long-lasting. However in order to not over-claim the drop off was set at 50%.

Following the final stage of stakeholder consultation in the Wirral the SROI working group decided to increase attribution (i.e. contribution from factors outside the course) to 50% across the board to ensure that EPP CIC's contribution to the changes experienced by the participants was not over-valued. This is because in the Wirral there is an integrated recovery programme

for substance and alcohol misuse and all the partners work together to achieve outcomes such as progress to work, education and volunteering.

Calculation of impact

The impact, the total value of each change, was calculated as:

The financial proxy

Multiplied by the reported quantity of the outcome

Minus any deadweight, attribution and / or displacement factors

This calculation was carried out for each row of the impact map. The total is then the total of all the impact calculations for each outcome. The total impact (at the end of the period of analysis) of activities identified by this analysis and using this calculation, was valued at £212,255 and is shown on the impact map (supplemental information Table S4).

SROI CALCULATION

The social return is expressed as a ratio of the present value of all impacts over the course of the analysis period divided by the value of inputs. Total investment required to run the programmes was £35,856.

Total present value of Social return calculated from all impacts: £212,255

For this analysis, the social return ratio is therefore: SROI = £212,255 / £35,856 = 6.09

For every £1 spent on EPP programmes in The Wirral £6.09 of social return is created in addition to the health benefits for the beneficiaries.

A sensitivity analysis was conducted varying some of the key assumptions on which the impact calculations were based and the SROI ratio did not change substantially.

DISCUSSION

This pilot evaluative SROI case study shows that the estimated value created between April 2009 and March 2010 as a result of the EPP CIC programmes relating to Substance and Alcohol Misuse in The Wirral was £212,255. This represents an SROI ratio of 6.09:1. For every £1 invested in the programmes, an estimated £6.09 of social value will be created. It is important to realise that the SROI ratio calculation is based on a number of key estimates and assumptions. Some of these key assumptions were subjected to a sensitivity analysis, and the SROI ratio would have been little affected by the projected variations that resulted.

The estimates on which this SROI calculation is based are deliberately conservative; especially the modelled assumption that outcomes will only last for 5 years for all stakeholders. This is likely to be a significant under-estimate for some outcomes, such as participants moving into

employment (through volunteering and further education), the effects of which could last for much longer.

Due to resource availability and the widespread and diverse community impact of the programmes in this study, this project was not able to value all the outcomes of EPP CIC in the areas within the scope. Most notably participation in local community organisations was not included in the SROI calculation. Therefore the ratio does not include the impact of the over 19,000 hours of voluntary work estimated to have taken place as a result of the EPP CIC programmes. Further, the study does not include impact from other associated outcomes such as reduced re-offending and increased employment which could accrue significant benefits for society.

Finally this study did not investigate the direct health outcomes which happen as a result of EPP CIC programmes as these have been previously documented and are well understood. The final ratio therefore includes all of the investment but leaves out a substantial quantity of the return.

This is the first SROI exercise that has been carried out on EPP CIC programmes and is the first evaluation of these programmes which focuses specifically on non-health outcomes. The most prevalent outcomes are: improved and new relationships with family and friends; engagement in volunteering; and employment related benefits. These outcomes are clearly recognised and highly valued by the participants, and capturing their value is important in assessing the full impact of EPP programmes.

The advantages of the SROI process are that by assigning financial values to social impacts, SROI creates a common language to evaluate interventions. The SROI methodology offers the ability to measure broader and more patient-centred impacts from healthcare interventions. However, even with this methodology, some benefits (e.g. increased self esteem and improved relationships), are difficult to monetise and therefore may be relatively undervalued.

One weakness of this pilot study is that a relatively small proportion (25%) of participants participated in the evaluation. It is possible that these responders may have represented those with more favourable responses and attitudes to the programme. This in turn would have overestimated the modelled number of people experiencing positive outcomes. If the SROI methodology is adopted to evaluate other EPP programmes, consideration could be given to incorporating the evaluation more closely into the programme, to enable collection of data from the majority of participants.

This study evaluated the EPP intervention for Substance and Alcohol Misuse. This programme has considerable commonality with EPP programmes for other long term medical conditions. However the participants in SAM programmes may have significant demographic and socio-economic differences from participants with other long term conditions. Previous evaluations of EPP interventions suggest that response may vary with some attributes of the population

participating e.g. ethnicity[8,9] and age: younger individuals may benefit more than others[10]. For this reason, although this study suggests that SROI methodology may be useful in evaluating the social impact of EPP interventions, the ratio obtained is not transferrable to other populations and conditions. Further SROI evaluations of EPP interventions could build on the experience from this case study to tailor and validate the methodology for this purpose.

Financial Statement: CAN was commissioned to run the study by EPP CIC which funded the study. Richard Kennedy is head of Social Investment for CAN. Jim Phillips is employed by EPP CIC.

Note: This study has not yet completed the assurance process recommended by the SROI network.

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