Value for Money in Arthritis Care's Training Courses

Making Self-Management Count
A Social Return on Investment Evaluation

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December 2011

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Abbreviations

COPD	Chronic obstructive pulmonary disease
CYC	Challenging Your Condition
DEFRA	Department for Environment, Food and Rural Affairs
GP	General Practioner
HM Treasury	Her Majesty's Treasury
HMSO	Her Majesty's Stationery Office
NGO	Non-governmental Organisation
NHS	National Health Service
NI	Northern Ireland
NPV	Net Present Value
PV	Present Value
Southern H&SC Trust	Southern Health and Social Care Trust
SROI	Social Return on Investment
UK	United Kingdom
UK Govt	United Kingdom Government
VfM	Value for money

Executive Summary

This study considers the value for money generated for the participants of 15 training courses delivered by Arthritis Care in Northern Ireland in partnership with NI Chest, Heart and Stroke that took place during 2010. The courses were part of Arthritis Care's broader training offering that is delivered across the UK. The course that is being measured in this study is the Challenging Your Condition course delivered under license from Stanford University.

Indicators were grouped under three broad outcomes:

1. Health Condition Improved
2. Better able to self-manage pain
3. Improved Social Life

And were evaluated for change as reported by the participants themselves.

Impact was assessed taking into consideration deadweight, attribution and drop-off before financial proxies were determined using the most recent data from the Family Spending Review 2011 and Family Food 2010, both published in late 2011.

Having determined impact over a future five-year period, the social return ratio delivered by these 15 courses in Northern Ireland is determined as being:

Social return = £7.25

This means that for every pound invested by Southern H&SC Trust in the course, £7.25 worth of social change will be returned over a period of five years.

The recommendations made with this report are:

1. Complete 6, 12, and 18-month surveys after all courses with sample from each course group to capture longitudinal data for similar analysis. Although robust, the data set used here is very small and may be open to challenge. Performing a value for money study across the whole training programme in the UK would possibly support the findings here or improve upon them;
2. Consider the impact derived from activities that result in changes in purchasing behaviour during recessionary times. This may be an opportunity for the charity to consider additional partnerships and sponsorships to respond to value-adding trends over time; and
3. Consider what level of advocacy the charity wishes to adopt in relation to the potential to influence change in the way long-term prescription medication is handled for people living with arthritis, this may require the setting up of expert patient groups to provide support at the GP level.

Background

What is SROI?

Social Return on Investment (SROI) is about value rather than cost-benefit. It is a framework for measuring and accounting for a much broader concept of value that goes beyond what can normally be captured in financial terms. It aims to reduce inequality, environmental degradation and improve wellbeing by combining social, environmental and economic costs and benefits.[1]

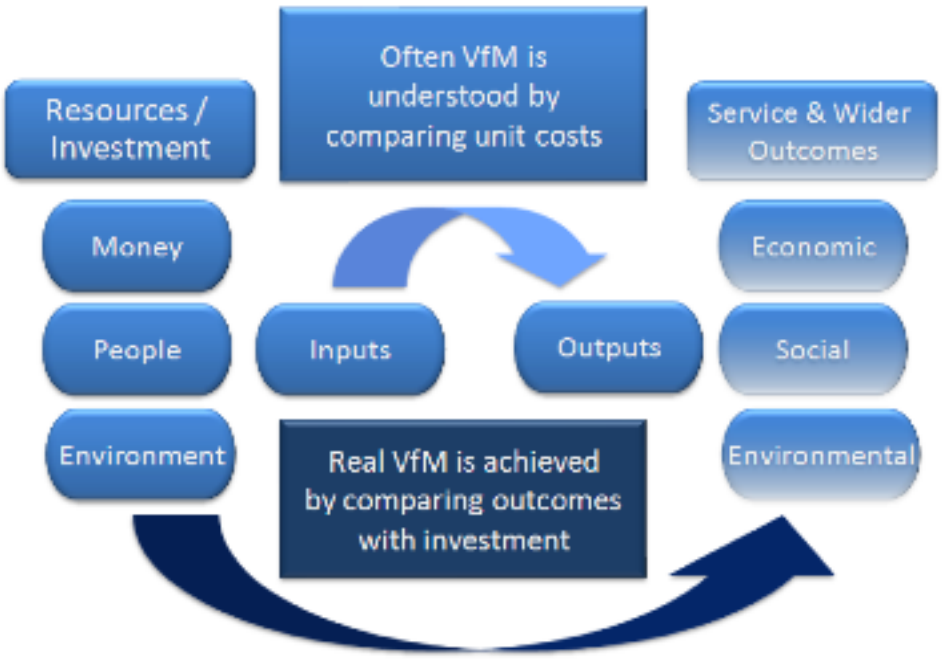

Figure 1: Understanding value for money (new economics foundation position paper on value for money in international development, 2010)

SROI evaluations aim to determine the value of the social change that has been created by an intervention. For example, a service that provides transport for older people to attend a community centre may find that for every pound that is spent on the service, £2 worth of social change has been created by bringing older people together in a community setting, reducing isolation, increasing exercise and mobility, etc.

SROI evaluations are not just about the return on investment ratio however. By including the community, beneficiaries and other stakeholders in the evaluation and design process, the results reflect not just the organisation's priorities, but also that of the beneficiaries. This means better strategic decisions are likely to be made and ownership of the intervention being

[1] Nietzart et all, A guide to Social Return on Investment, Cabinet Office, Office of the Third Sector, UK Govt, April 2009, pg 5

measured will generally be more widespread, which could lead to greater sustainability under the right conditions.[2]

Self-management of Long Term Conditions

Self-management (sometimes also referred to as self-care) is increasingly seen as a significant part of care and support for people with long-term conditions. David Challis et al found that although there are similarities between the objectives for self-management and case managed care for people with long-term conditions, there is also significant local and regional variation in the delivery of care.[3]

In addition the Long-term Conditions Pathway stresses the use of care plans produced in collaboration between patients and carers and that patients should have choice in deciding which care they wanted to use.[4] Thereby encouraging greater local and regional variation.

The challenge therefore is clear: deliver greater choice within all four health economies in the UK; with increased and consistent standards of care across the UK.

The Diabetes Year of Care programme between 2007 - 2010 took this approach one step further and looked at commissioning non-traditional providers such as charities and voluntary groups to provide care support on a paradigm that moved from medical to social care and from high support (intensive and costly) towards self care (low cost and less intensive).[5]

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[2] In the current (2011 – 2012) economic conditions, sustainability is increasingly reliant on a diverse number of factors and conditions that most NGO's have not had to consider before.

[3] Challis, D. Hughes, J. Berzins, K. Reilly, S. Abeil, J. Stewart, K, Self-care and Case Management in Long-term Conditions: The Effective Management of Critical Interfaces, National Institute for Health Research Service Delivery and Organisation Programme, HMSO, April 2010

[4] Supporting People with Long-Term Conditions, Department of Health, Crown Copyright, 2007, http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/Browsable/DH_4100317

[5] Year of Care, Thanks for the Petunias – a guide to developing and commissioning non-traditional providers to support the self-management of people with long term conditions, 2011

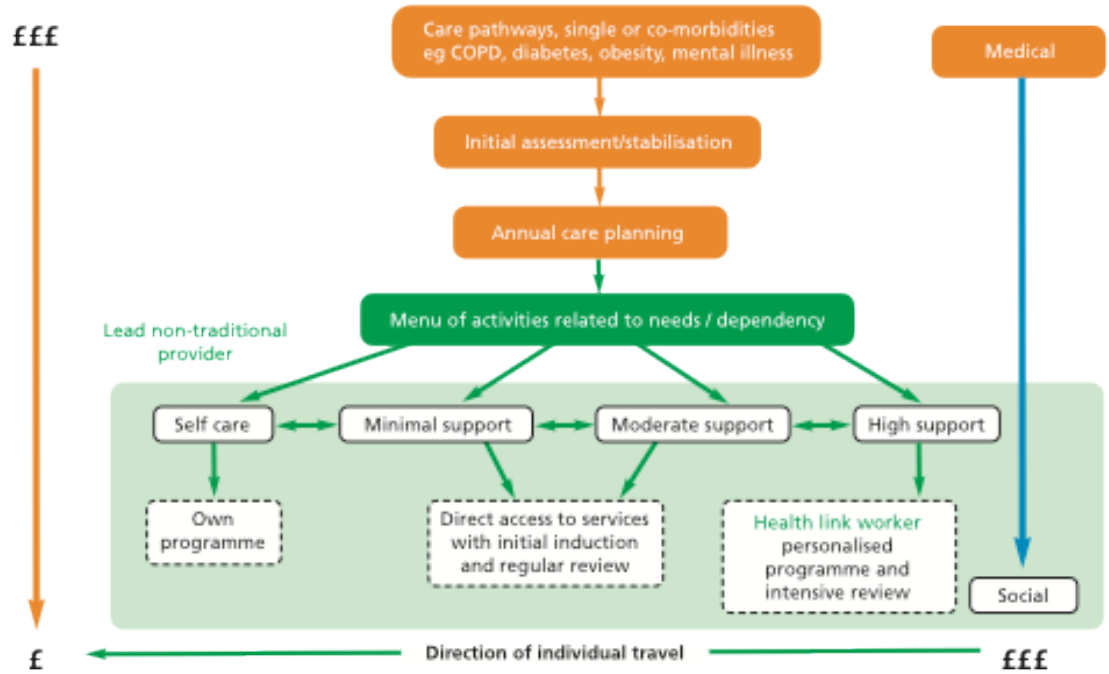


Figure 2: Pathways between medical and social models of health for people with long-term conditions[6]

With personalised budgets for healthcare and benefits becoming a reality in the UK, individuals will increasingly have more choice in what services and support they buy. This means that charities, voluntary groups and healthcare companies will have to be able to demonstrate significant impact over the long-term in order to make themselves attractive both to commissioners (who would put such providers forward as a possible 'preferred provider' for care) and to patients, who will exercise their choice with a different regard to the commissioners.

So the onus is increasingly on organisations like Arthritis Care to demonstrate the ability to generate value over a long period of time.

Arthritis Care in Northern Ireland

Arthritis Care acts on behalf of people in Northern Ireland who are affected by arthritis, providing support, understanding, information and expertise so that they can cope better with the impact of the condition and get the most out of life.

Arthritis Care offers workshops and courses free to the end-user to help people with arthritis learn how to cope with their condition. They also provide courses to people with other long-term conditions and run workshops to develop other people's understanding of arthritis.

Family and youth work forms a significant part of Arthritis Care's activities in Northern Ireland. They encourage young people to get together as a support for young people with arthritis to increase their confidence and reduce their feelings of isolation.

[6] Ibid, pg 5

In addition Arthritis Care distributes its full range of publications and leaflets in Northern Ireland as in the rest of the UK, making use of an extensive volunteer network and the organisation's branch network.

Approximately 20 of Arthritis Care's branches are in Northern Ireland. Branches are run by volunteers and provide a space where people with arthritis can meet and find support, information, services such as exercise classes and hydrotherapy classes, as well as fundraising activities for Arthritis Care.

Arthritis Care's Self-Management Training Programme

Arthritis Care runs a programme of training courses that are delivered across the UK:

1. Challenging Your Condition (under license from Stanford University): six-week course
2. Challenging Pain (copyright Arthritis Care): two-week course
3. Challenging Arthritis (under license from Stanford University): six-week course
4. Arthritis Awareness (copyright Arthritis Care): one-day workshop
5. Seated Exercise (FIT project) (copyright Arthritis Care): half-day workshop
6. Pain Monster (copyright Arthritis Care): half-day workshop for children

In addition there is evidence that the following two courses are either delivered in some parts of the UK or have previously been delivered by the organisation:

7. Preparing for Work (copyright Arthritis Care): eight-week course
8. Positive Future Workshops (copyright Arthritis Care): weekend workshop aimed at young people with arthritis

Arthritis Care delivers 'Challenging Your Condition' and 'Challenging Arthritis' under license from Stanford University.

In addition, Arthritis Care adheres to the requirements for the quality assurance framework Stepping Stone to Quality (SS2Q) to ensure accreditation of its courses.

This study considers only the impact of 'Challenging Your Condition' (CYC) run on 15 occasions in Northern Ireland during 2010. The trainer's manual for CYC and the marketing leaflet for CYC are appended to this report.

Arthritis Care does collect some standard data on its courses, although the data is not consistent with the all the questions asked in the twelve month sustainability survey following the courses run in Northern Ireland in 2010.

Methodology

This is a desk-based SROI evaluation of a series of 15 six-week courses that were run by Arthritis Care in partnership with NI Chest, Heart and Stroke within the Southern H&SC Trust area between September 2009 and February 2010.

209 people participated in the course, of which 131 were randomly surveyed at six-month and twelve-month post-course intervals. 75 of the 131 surveyed responded (57%). This analysis considered 15 different outcome indicators measured at six and twelve months.

The results of these courses were reviewed and a key informant interview was conducted with the Director of Northern Ireland, Kate Fleck to gain additional information and to agree the outcomes that would be used in this evaluation.

Financial proxies were proposed from the Family Spending 2011 report from the Office of National Statistics and the Family Food 2010 report from the Department for Environment, Food and Rural Affairs.

Limitations

Full SROI process (stakeholder consultation on outcomes, indicators and the impact map) was not followed due to time and resource constraints. However as survey sampling of the 209 participants included some outcomes that relate directly to known spending that had already been costed by the Office of National Statistics, it was relatively straightforward to identify appropriate financial proxies that could be used in this report.

Scope and Stakeholders

This evaluation only looks at the impact generated by 15 six-week courses that were run within the Southern H&SC Trust area between September 2009 and February 2010. The courses were delivered in three areas: Craigavon / Bandridge, Armagh / Dungannon and Newry / Mourne.

209 people completed a six-week course each and are the primary beneficiaries for whom impact has been calculated. Arthritis Care and the Southern H&SC trust are also identified as stakeholders, however value is not calculated for them. The Trust provided the funding for the course and Arthritis Care provided the management and administration for the course. A simplified cost-benefit analysis of Arthritis Care's management and administration of these courses may provide some useful insights alongside this report (but is not necessary for this report), however long-term value is not calculated for Arthritis Care as a provider.

Outcomes and Evidence

Indicators were grouped under three broad outcomes:

4. Health Condition Improved
5. Better able to self-manage pain
6. Improved Social Life

These three outcomes related directly to questions 1, 3, 4, 5, 7, 9 in the survey completed by participants.

Each outcome was assigned the following indicators, based on available data from the survey:

Description	Indicator	Source
Health condition improved	Reduction in use of prescription medication	course attendees
	Participants demonstrate improved diet	course attendees
Better able to self-manage pain	Increase in the level of exercise being taken	course attendees
	Reduced number of visits to GP service	course attendees
Improved social life	Increased participation in new courses, hobbies, etc	course attendees

Table 1: Outcomes and indicators, with source

Health Condition Improved: reduction in use of prescription medication

23% of respondents said that they had reduced the amount of prescription medication that they were using. For many participants, the reality is that their prescription medication is set of longer periods than the 12 month time period being measured, for example Warfarin or aspirin, medication that is not specifically prescribed for arthritis or musclo-skeletal conditions alone. Those that did report a reduction in their medication were able to ascribe it to the impact that the training course had had on their ability to self-manage their pain.

Health Condition Improved: Participants demonstrate improved diet

72% of respondents said that their health had improved as a result of the course and no-one reported eating less healthy foods after the course. This is significant not only because of the impact that the course has had, but

also due to the trends reported in household expenditure that suggest that less fresh fruit and vegetables were bought in the UK during the evaluation period[7], suggesting that courses and training that highlight health benefits to participants (even if the primary reason is not to deliver nutrition information) could have an impact on the buying habits of the participants.

Better able to self-manage pain: Increase in the level of exercise being taken

51% of respondents reported increases in the amount of exercise that they do, which they reported had a direct impact on the level of pain they experienced. However what is important to note are those that reported less exercise (5.6%) often did so as a result of their condition deteriorating.

Better able to self-manage pain: Reduced number of visits to GP service

25% of respondents reported visiting the GP less often following these courses. Those that did report increased visits to the GP (10.6%) said that this was because of general deterioration in their health, new diagnosis of a co-morbidity or the fluctuating nature of their condition.

Improved social life: Increased participation in new courses, hobbies, etc

31% reported an increase in their social life; including making friends with other people on the course and meeting up with them regularly as well as attending local community centre courses. The majority did not report an increase in their social life and this is ascribed to the age range of some of the participants and that some people live in rural communities with little or no transport available to them.

Impact

Impact refers to identifying the financial value of the intervention over a standard period of five years. To do this we need not only the financial proxies for the indicators identified above, we also need to consider three other processes:

1. Deadweight
2. Attribution
3. Displacement

Financial Proxies

To determine impact we need to consider the financial value of the outcomes indicators referred to above. In order to do this I referred to the Family Spending Review 2011 and the annual DEFRA report, Family Food 2010.

[7] Family Spending, A report on the 2010 Living Costs and Food Survey, edition 2011, ed. Giles Horsfield, Office of National Statistics, Crown Copyright 2011

Where possible financial proxies for Northern Ireland spending were used. Where this was not possible, the approach of proportionality was used to determine the likely spend in Northern Ireland.

As a result the following financial proxies were applied:

Description	Indicator	Financial Proxy	Source
Health condition improved	Reduction in use of prescription medication	Weekly NHS Prescription charges and payments in NI £0.21	Family Spending Report 2011
	Participants demonstrate improved diet	Weekly spend on fresh fruit and vegetables in NI £6	Family Food 2010
Better able to self-manage pain	Increase in the level of exercise being taken	Weekly subscriptions to sports and social clubs in NI £1.56	Family Spending Report 2011
	Reduced number of visits to GP service	Weekly cost to use NHS medical, optical, dental and medical auxiliary services in NI £0.55	Family Spending Report 2011
Improved social life	Increased participation in new courses, hobbies, etc	Weekly admissions to clubs, dances, discos, bingo in NI £0.77	Family Spending Report 2011

Table 2: Indicators and their financial proxies and sources

It is important to remember that these proxies are costs to the household or individual, not the costs to the NHS or local council for providing a service.

The Family Spending Report 2011 and Family Food 2010 record the spending habits and behaviours of a broad sample of people in the United Kingdom each year. This data, collected annually gives a strong insight into the actual spending patterns of people in all the countries of the UK.

As reported previously, some spending during the evaluation period has gone down rather than up due to the recession. As a result, when we consider what would have happened anyway if the course had not taken place, we need to consider that the participants in the course may well have not spent those funds in that way. Both the Family Spending Report 2011 and Family Food 2010 show a reduction in some expenditure between 2010 and 2009. The decrease in spending has been taken into account when calculating the change over a five-year period and has been reflected as a negative cost. Where we have instead seen participants report that they have increased spending on certain items such as food, we have to conclude that they have chosen food over some other item that they may have bought

or invested in instead. Hence it could be said that attending these courses has affected the economic choices being made by this group of participants.

Deadweight

Deadweight refers to the potential that some change would have happened anyway, without the intervention being in place. The change that would have taken place without the course being run needs to be taken in account so that we do not attribute the change that would have happened anyway as an impact of the courses being run. As mentioned above, some of the change would have been less spending on certain items each month. Where this is the case, we have represented this change as a negative rather than as a positive percentage to reflect the fact that less would have been purchased, not more.

Deadweight		
People living with arthritis - Reduction in use of prescription medication	0%	Course Participants
People living with arthritis - Participants demonstrate improved diet	-3%	Family Food 2010
People living with arthritis - Increase in the level of exercise being taken	-6%	Family Spending Review 2011
People living with arthritis - Reduced number of visits to GP service	0%	Course Participants
People living with arthritis - Increased participation in new courses, hobbies, etc	-6%	Family Spending Review 2011

Table 3: Percentages of deadweight for each indicator and sources

Attribution

Attribution literally means the amount of the change that can be attributed to this intervention, in this case, the courses run by Arthritis Care. Significantly, there is only one arthritis agency in Northern Ireland, Arthritis Care, and the courses being considered in this study are licensed to Arthritis Care. This may suggest that attribution should be set at 100% on the assumption that without Arthritis Care's license of these courses, this intervention would not have happened, therefore the change would not have taken place. However, there are other agencies in Northern Ireland that could have licenses similar courses and pain is a generic experience, so other non-specialist agencies could have offered courses that would have had similar results.

Ultimately however in this case, it was what the participants have told us that was the most revealing: after twelve months 93% of respondents were still using the techniques that they learnt in the training course. This suggests that during the time of the study, these participants are either not getting access to any other intervention or are not aware of any other intervention, or no other similar intervention is available in Northern Ireland.

Attribution		
People living with arthritis - Reduction in use of prescription medication	93%	Course Participants
People living with arthritis - Participants demonstrate improved diet	93%	Course Participants
People living with arthritis - Increase in the level of exercise being taken	93%	Course Participants
People living with arthritis - Reduced number of visits to GP service	93%	Course Participants
People living with arthritis - Increased participation in new courses, hobbies, etc	93%	Course Participants

Table 4: Percentages of attribution for each indicator and sources

Drop off

Drop off measures the rate of decline over years that an intervention continues to influence change. Naturally, the further away in time you get from something like a training course, the less it influences behaviour and change. So even if after 10 years participants of this course are still using some of the techniques they learned during the courses run in 2010, it is likely that the impact of the 2010 course would be significantly reduced and may have been replaced entirely if the participant had taken a refresher course in the interim.

For the purposes of this study we have calculated drop off based on the response given to the survey after 12 months of those participants who were still using the techniques learned on the course.

Drop off		
People living with arthritis - Reduction in use of prescription medication	7%	Course Participants
People living with arthritis - Participants demonstrate improved diet	7%	Course Participants
People living with arthritis - Increase in the level of exercise being taken	7%	Course Participants
People living with arthritis - Reduced number of visits to GP service	7%	Course Participants
People living with arthritis - Increased participation in new courses, hobbies, etc	7%	Course Participants

Table 5: Percentages of Drop off for each indicator and sources

Social Return Calculation

The calculation of the social return ratio is done over a period of years (usually five, but could be longer). To do this, net present value had to be calculated so that the value generated in each year following the intervention year (2010) was being properly attributed. HM Treasury's Green Book states that when calculating social value over a period of 30 years or less, the discount rate of 3.5% should be used.

The discount rate is a financial concept based on the future cash flow in lieu of the present value of the cash flow. The divisor in the discount rate formula is the resultant future value, including income. The concept of a discount rate differs from that of an interest rate, most notably in that the divisor in the interest rate formula is the original investment. A high discount rate is often preferred by governments attempting to stimulate an economy (for example Japan); a higher discount rate makes money cheaper for banks, which then have greater lending power.

For every interest rate, there is a corresponding discount rate, given by the following formula:

$$d = \frac{i}{1+i}$$

inversely,

$$i = \frac{d}{1-d}$$

Net present value is applied after the drop off rate has been taken into account over all the years that value is being calculated for. In this case we are looking at a standard five-year future period.

Thus the total value for all indicators generated over five years is:

Description	Indicator	2010	2011	2012	2013	2014	Total
Health condition improved	Reduction in use of prescription medication	£488	£454.01	£422.23	£392.67	£365.18	£2,122
	Participants demonstrate improved diet	£45,179	£42,016.81	£39,075.63	£36,340.34	£33,796.51	£196,409
Better able to self-manage pain	Increase in the level of exercise being taken	£9,019	£8,387.57	£7,800.44	£7,254.41	£6,746.60	£39,208
	Reduced number of visits to GP service	£1,279	£1,189.07	£1,105.83	£1,028.42	£956.43	£5,558

Improved social life	Increased participation in new courses, hobbies, etc	£2,880	£2,677.98	£2,490.53	£2,316.19	£2,154.06	£12,518

Table 6: Total present value over five years

This means that net present value for this period is:

Total Present Value (PV)	£255,815
Net Present Value (NPV)	£232,155

Therefore the social return ratio can be calculated as

$$\text{Social return} = \frac{\text{Net Present Value}}{\text{Value of Inputs}}$$

The value of the inputs in this case is the value of the grant from Southern H&SC Trust of £32,000. Therefore:

$$\text{Social return} = \frac{£232,155}{£32,000}$$

$$\text{Social return} = £7.25$$

or

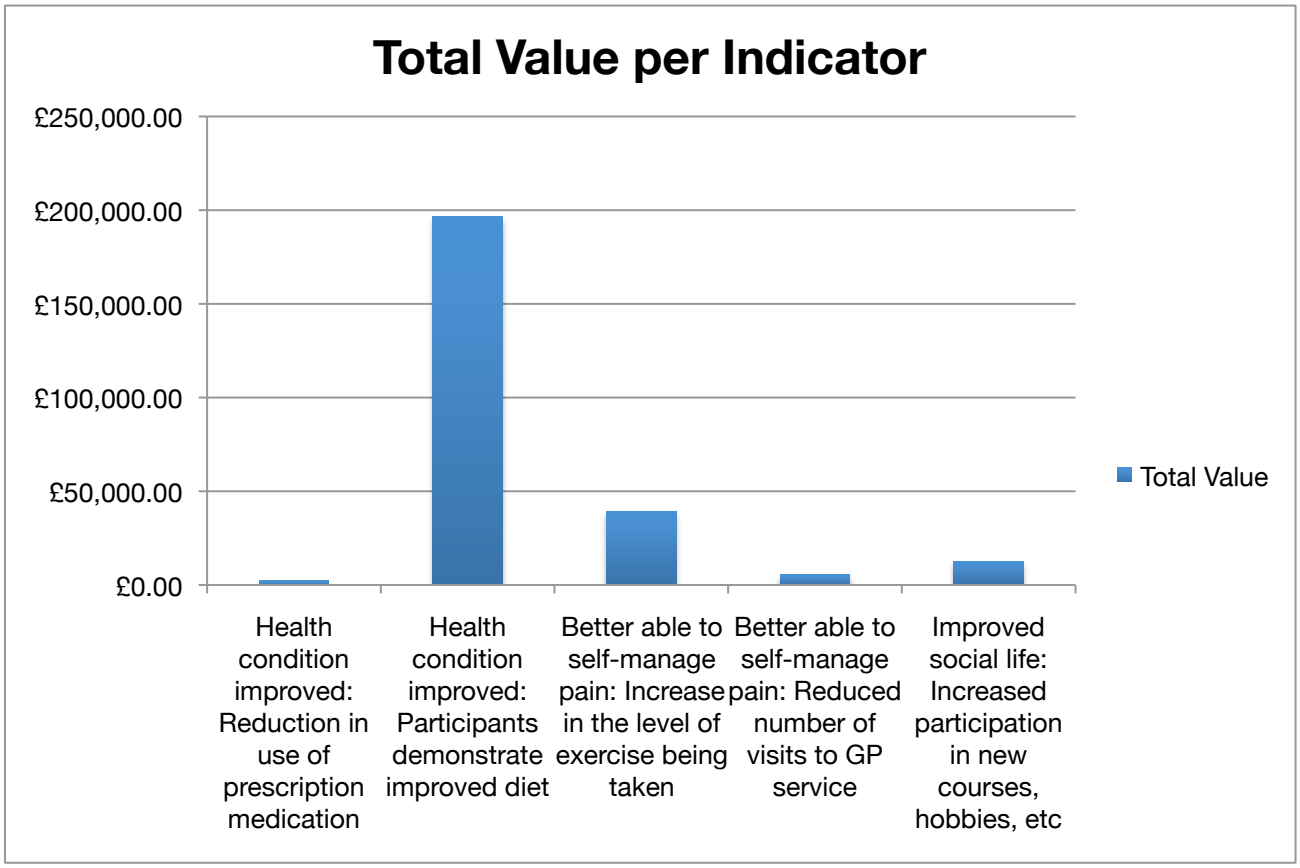
1:7.25

This means that for every pound invested in the training courses delivered by Arthritis Care, £7.25 worth of social change in the lives of participants has been generated over 5 years.

This ratio is in keeping with other SROI evaluations that have been undertaken in the UK and suggests that the value being created by Arthritis Care in Northern Ireland is similar to value being created by other agencies across the UK. If the social return ratio had been significantly higher or lower it may have caused concern, either for the robustness of this evaluation or the robustness of the claims of the organisation.

Conclusion

The social return ratio is not the end of the story however. We need to consider the overall impact that has been created for the participants, especially in the context of the current recession. Especially where we know that had individuals not participated in the training courses, they may not have spent funds on the outcome indicators in the way that they did.

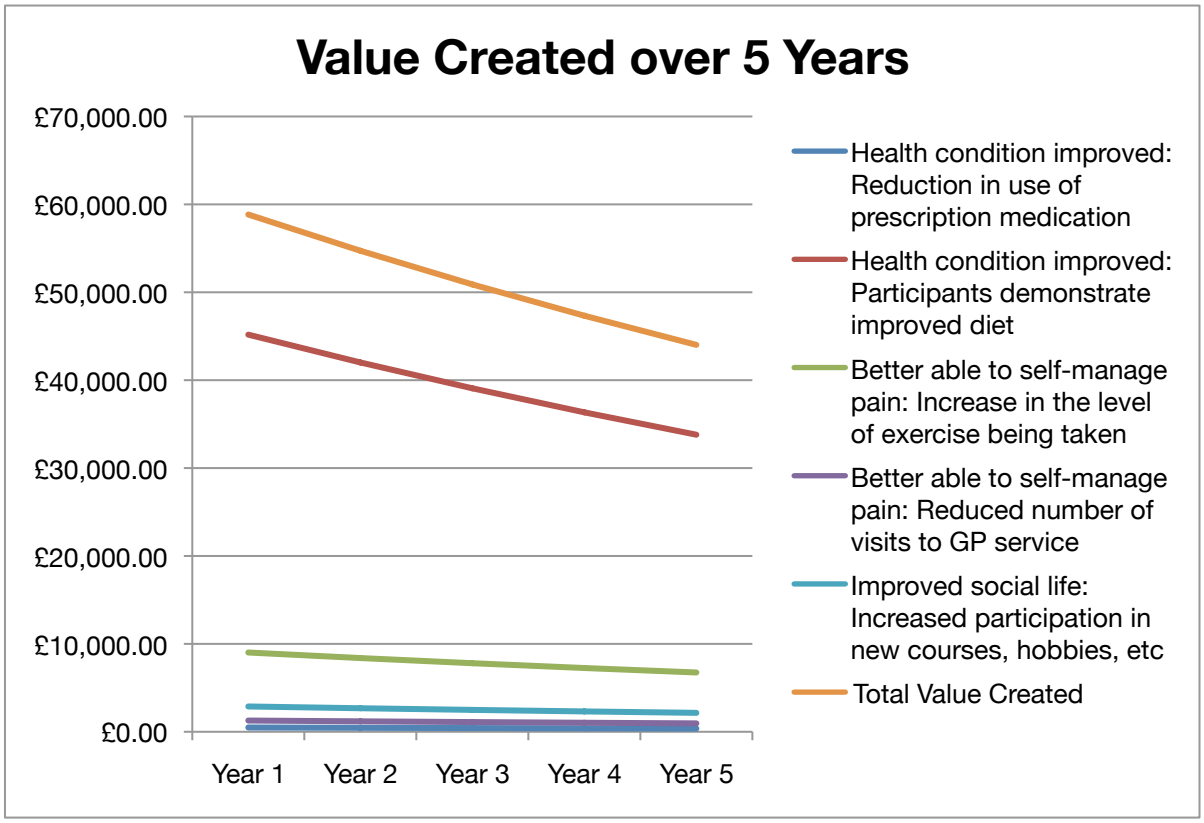


Graph 1: Total Value per Indicator

It is clear from the graph above that the highest value created is in improved diet. This is significant; not only has this influenced people's spending choices, it has varied positive knock-on effects for general health and well-being that were unintended when the training programme was originally designed.

The lowest value created is in the reduction of prescription medication. Because such medication is agreed between the GP and their patients at long intervals and not often reviewed on a regular basis (save for medication such as Warfarin), it is not possible to affect change to drug regimes that easily. This suggests that affecting change in the amount of prescription medication that people take in relation to pain management or arthritis may require additional advocacy activity with GP's and expert patient groups. Self-management will work only to the degree that it complements the medical support provided by GP's and specialists, but if self-management is to be a significant delivery channel for healthcare at a local and personal level as suggested by some reports mentioned earlier[8] in this report, long-term prescription medication practices may need to be reviewed.

[8] See pages 6 and 7



Graph 2: Total Value Created over 5 Years

The indicators that retain their value the most (although not a significant amount of value) are the improved social life and increased exercise taken indicators. It is important to note however that this evaluation has not tried specifically to measure wellbeing on this occasion. It is likely however that the combination of these two indicators and their relative robustness over a five-year period may result in higher sustained wellbeing overall than any other measure in this evaluation. Measuring wellbeing within people with arthritis who get support for self-management may be a useful exercise to determine actual impact over a longer timeframe.

Recommendations

1. Complete 6, 12, and 18-month surveys after all courses with sample from each course group to capture longitudinal data for similar analysis. Although robust, the data set used here is very small and may be open to challenge. Performing a value for money study across the whole training programme in the UK would possibly support the findings here or improve upon them;
2. Consider the impact derived from activities that result in changes in purchasing behaviour during recessionary times. This may be an opportunity for the charity to consider additional partnerships and sponsorships to respond to value-adding trends over time; and
3. Consider what level of advocacy the charity wishes to adopt in relation to the potential to influence change in the way long-term prescription medication is handled for people living with arthritis, this may require

the setting up of expert patient groups to provide support at the GP level.

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Appendices

1. Impact Map
2. Trainers Manual for ‘Challenging Your Condition’
3. Marketing Leaflet for ‘Challenging Your Condition’
4. Stanford License for ‘Challenging Your Condition’
5. One Year Random Sampling Report March ‘11