



A Social Return on Investment evaluative analysis based on a common outcomes framework

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Version Control

Version Number	Date	Author	Comments
V1			Saved as master copy
V1a		Carol Deslandes	Working draft
V2	1 Dec 2016	Carol Deslandes	Final draft – for circulation to Friends of St George’s Community Hydrotherapy Pool committee members
Final	8 Dec 2016	Carol Deslandes	Approved subject to inclusion of relevant logos

Executive Summary

The scope of this project represents an evaluative SROI analysis of St. George's Community Hydrotherapy Pool for the investment period of the financial year 2016.

In this analysis the impact of St. George's Community Hydrotherapy Pool activities is based on the investment in the organisation for that year but in the Sensitivity Analysis we have also considered the potential for additional benefits to be secured over a longer period of time.

Whilst use has been made of a very comprehensive user survey undertaken by the Friends of St George's Pool in 2015-16 limited stakeholder engagement has taken place. This document will form the basis of processes to be put in place to collect the data that would further evidence the change presented. However, steps will also need to be taken to:

- improve the measurement approach through ongoing and consistent data collection in the future
- ensure stakeholders will be more fully involved in the development and testing of financial proxies. I

The analysis indicates that St. George's Hydrotherapy Pool will deliver circa £1,525m of social and economic value in a one year period. Based on a projected investment of £97,879, this results in an SROI ratio of 16:1. That is, approximately £16 of value will be created for every £1 invested in St George's Pool.

Background

Definition

Hydrotherapy (also known as aquatic therapy) is physiotherapy/exercises conducted in warm water (32-35°C) pool. The combination of heat and buoyancy provide a relaxing pain-relieving medium. It is therapy that cannot be done on land. The level of exercise can be adjusted by an aquatic physiotherapist or trained instructor.

History

When the New City Hospital in Peterborough was designed, it was decided that it would not have a hydrotherapy pool because this service was best delivered in the community.

As a response to public demand, Peterborough City Council (PCC) opened the hydrotherapy pool at St George's, Dogsthorpe (a former special school) to the community in 2011. PCC has continued to manage St George's Community Hydrotherapy Pool, which enjoys good support for the local community and a service user group. Despite never having a budget, demand for this facility, usage and income has continued to grow.

35,000 people have long-term health conditions in Peterborough and St George's is the only hydrotherapy pool accessible to those living in Peterborough and communities in a 40-mile radius.

Beneficiaries

Potential beneficiaries of the service could include those of all ages with:

- musculoskeletal, orthopaedic, rheumatological, neurological conditions
- Rehabilitation: joint replacement, other surgeries, severe head and spinal injuries, sports injuries
- Learning disabilities
- Other complex and severe disabilities
- Ante postnatal, cancer, bariatric needs
- Anyone seeking to relax/improve their fitness and general health

Structure of the report



1: Project scope

1.1 Project boundaries and timing

There are two forms of SROI analyses described in the SROI Guide¹: a forecast and an evaluative SROI analysis.

A forecast SROI analysis estimates the social value an organisation will create in the future. There is unlikely to be substantive evidence to support the value an organisation will create (because it has not happened yet). An evaluative SROI analysis estimates the social value an organisation has created in the past. In contrast to a forecast SROI analysis, an evaluative SROI should be based on evidence that has been collected over time.

The scope of this project represents an evaluative SROI analysis of St. George's Community Hydrotherapy Pool for the investment period of the financial years 2016. In this analysis we are projecting the impact of the programme based on the investment in St. George's Community Hydrotherapy Pool over this period.

Analysis of a three year investment period of FY16 to FY18 was also undertaken. The results of this analysis are included in the sensitivity analysis

1.2 Defining stakeholder groups

Stakeholders are defined as people or organisations that experience change, whether positive or negative, as a result of the activity being analysed. For stakeholders to be included they must be considered material to the analysis.

Materiality is a concept that is borrowed from accounting. In accounting terms, information is material if it has the potential to affect the readers' or stakeholders' decisions about the programme or activity. According to the SROI Guide, a piece of information is material if leaving it out of the SROI would misrepresent the organisation's activities.

Due to constraints on time and budget this phase there was limited opportunity to engage with stakeholders but a meeting was held in the summer of 2016 with a small group of pool and the results of this session together with empirical evidence available have formed the basis of the outcomes referenced in this report.

Whilst the overarching SROI principles have been followed wherever possible it should be made clear that, at this stage, there has been limited stakeholder engagement and this will need to be rectified if the findings of this report are to be validated.

For the purposes of this analysis, initially six potential stakeholder groups have been identified:

Stakeholder 1: Participants (users of the Hydrotherapy Pool)

Stakeholder 2: Carers

Stakeholder 3: Families

Stakeholder 4: Local communities

¹ The SROI Guide, released in May 2009 and updated in January 2012

Stakeholder 5: NHS

Stakeholder 6: Local Authorities

Stakeholder 7: The State

Through consultation with the service users it was determined that there will be four material stakeholder groups that experience outcomes:

Stakeholder 1: Participants (users of the Hydrotherapy Pool)

Stakeholder 2: NHS

Stakeholder 3: The State

It is anticipated that these stakeholder groups will experience material changes in the forecast period. In addition there are two material stakeholder groups that provide input to the GRPTA:

Stakeholder 4: Friends of St. George's Community Hydrotherapy Pool Trustees

Stakeholder 5: St. George's Community Hydrotherapy Pool funders

Table 1: Rationale for inclusion/ exclusion of stakeholders from the analysis

The table below identifies the stakeholders that will be impacted by St. George's Community Hydrotherapy Pool activities and the rationale for including or excluding them from the SROI analysis.

Stakeholder	Included/ Excluded	Reason
Participants (users of the Hydrotherapy Pool)	Included	Major beneficiaries who are, or will be likely to, experience significant outcomes from the success of St. George's Hydrotherapy Pool
Carers	Excluded	Although there is potential for the sector to be major beneficiaries of the service the evidence would not be sufficiently robust for inclusion
Families	Excluded	Although there is potential for the sector to be major beneficiaries of the service the evidence would not be sufficiently robust for inclusion
Local communities	Excluded	Although there is potential for the sector to be major beneficiaries of the service the evidence would not be sufficiently robust for inclusion
NHS	Included	Major beneficiaries who are, or will be likely to, experience significant outcomes from the success of St. George's Hydrotherapy Pool
Local Authorities	Excluded	Although there is potential for the sector to be major beneficiaries of the service the evidence would not be sufficiently robust for inclusion
The State	Included	Major beneficiaries who are, or will be likely to, experience significant outcomes from the success of St. George's Hydrotherapy Pool
Friends of St. George's Hydrotherapy Pool Trustees	Excluded	Responsible for providing leadership and strategic direction for Friends of St George's Hydrotherapy Pool. Excluded as they were identified as a valuable input for the organisation but did not experience change themselves outside their usual responsibilities.
St. George's Hydrotherapy Pool funders	Excluded	Their input helps the organisation to achieve strategic targets but mainly through the social value created for the other relevant ² stakeholders

² The value created for clients will be calculated under other stakeholders ; calculating this value for funders would lead to double counting

1.3 Projected investment (inputs) and activities (outputs)

Investment

Both monetary and non-monetary (in-kind) contributions were required during the investment period to support the activities of St. George's Community Hydrotherapy Pool.

Monetary investment

In a Power Point presentation delivered on behalf of Peterborough City Council in 2016³ the income for 2015-26 was shown as £73,767. In addition to this a further £20,500 was received from Peterborough City Council⁴

In all, a total monetary investment of £94,267 was made for the year under review

Non-monetary investment

For the purposes of this analysis any time spent by the Trustees of the Friends of St. George's Hydrotherapy Pool in conducting the business of the support group has not been included. It is considered that whilst this time is relevant to the effective running of the group it should be excluded to ensure that a conservative estimation of the overall value created is reported

However, we have included volunteer time for those volunteers who support the pool users during their session time at the pool. We have assumed that of the 176 sessions available there is a usage rate of 90% leading to 158 sessions delivered, each of 1 hour in duration. At each of those sessions there are 2 volunteers and using an hourly rate of £11.70⁵ the notional value of volunteer time is £3,612

Investment Summary

Table 2 provides the summary of the investment, both monetary and non-monetary investment, into St. George's Hydrotherapy Pool during FY16 to FY20. This total investment is material, as it is forecast to be essential to achieving the outcomes of the programme. Over the 5 year period the predicted investment is £132,806

Table 2: Summary of Investment

Summary of investment	Source	FY16 (actual)	FY16 – FY18 (3 year period)	Rationale
Monetary	PCC and others	£94,267	£282,801	Assumes input on same basis as Year 1 and excludes any inflationary increase
Total (cash investment only)	—	£94,267	£282,801	—
Non-Monetary	Volunteer time	£3,612	£10,836	Assumes input on same basis as Year 1 and excludes any inflationary increase
Total (in-kind investment only)	—	£3,612	£10,836	—
Total investment		£97,879	£293,637	

³ Hydrotherapy Pool; Review and future plans 2016

⁴ E mail from Karen Oldale 15th June 2016

⁵ Per Neighbourhood Statistics average wages in Peterborough in 2015 were £422 per week. Based on a 37 hour week this equates to £11.40 per hour <http://www.neighbourhood.statistics.gov.uk/HTMLDocs/dvc126/index.html>

1.4 Activities and outputs

The benefits of hydrotherapy include:

- Reduced pressure on weight bearing joints while exercising
- Restoration /maintenance of muscle power
- Muscle relaxation
- Relief of pain
- Improved/ maintained range of joint movement

This can mean:

- Faster rehabilitation: out of hospital, back to work and normal activities
- Improved physical health and wellbeing, independence, and mobility
- Prevention of surgery, hospitalizations, and additional care needs
- Decreased isolation, care needs, medication, GP appointments

The investment, or inputs, of the programme are pooled together to deliver the activities of St. George's Community Hydrotherapy Pool

Within 2015-16⁶ St George's Hydrotherapy Pool had:

- 2,721 registered users
- 240 users per week
- 93% of users were those for whom physical health was the reason for using the pool

2. Understanding the change

2.1 Stakeholder engagement

An SROI analysis requires that the changes are described, measured and valued. The purpose of stakeholder engagement is to understand the relative importance of changes (or outcomes), how the stakeholders would prove and measure change, how they would place value on outcomes, the duration of outcomes and what proportion of the outcome is attributable to others or would have taken place anyway.

2.2 Consultation

For the purposes of this report, there has been limited consultation with the users of the pool.

2.3 Verification of results

The Chairman of the Friends of St. George's Pool and was involved in the verification of results through feedback on the programme logic; the measurement approach; the calculation of the value of outcomes); and through feedback on the draft report).

⁶ 2016 Survey

2.4 Other sources of data used

Other data sources used are outlined in the table below.

Table 3: Other data sources used

Other data sources used	Description	Use in the SROI analysis
1. Data provided by the Karen Oldale (KO), Chair of Friends of St. George's Pool	Survey report 2016 Meeting notes from meeting with KO	To understand activities undertaken by Friends of St George's Pool To understand the context and background to St George's Pool
2. Data sourced by the author of this report	A range of documents, reports produced by NHS, Local Authorities both in Peterborough and further afield	To assist in the understanding of policy from a broad academic and practice evidence base
	St. George's Pool Newsletters	To assist in the understanding of St George's Pool activities
	Meeting with a number of key users of the Pool	To assist in the understanding of the benefits to pool users and their families

2.5 Stakeholder outcomes

The stakeholder outcomes represent the most significant consequences that were experienced by people and organisations that interact with St George's Pool over the year under review.

Attention was paid to all possible consequences that will arise as a result of the activity: intended and unintended, positive and negative.

This section outlines the outcomes for the following stakeholders:

Stakeholder 1: Participants (users of the Hydrotherapy Pool)

Stakeholder 2: NHS

Stakeholder 3: The State

The outcomes included in the SROI analysis are considered "material", that is, they are the significant and relevant changes that stakeholders experienced due to St George's Pool activities. Materiality is a concept that is borrowed from accounting. In accounting terms, information is material if it has the potential to affect the readers' or stakeholders' decision. According to the SROI Guide, a piece of information is material if leaving it out of the SROI would misrepresent the organisation's activities.

Defining the material outcomes for stakeholder groups is complex. When defining the material outcomes for each stakeholder group, an SROI practitioner must ensure that each outcome is unique or it would be considered double counting. This is difficult as the outcomes for each stakeholder group are necessarily related because they describe all of the changes experienced by the stakeholder. For example, people do not compartmentalise the different changes they experience. Outcomes also happen at different times throughout the period being analysed with different levels of intensity. There are also complex relationships between outcomes for different stakeholder groups.

Stakeholder outcomes were determined by applying the materiality test to the range of consequences identified in the theory of change. Appendix 1 illustrates the Theory of Change leading to the final outcomes chosen

3. Measuring the change

Measurement approach

Regular surveys of the pool users are already in place and these provide the basis upon which to make a reasoned assessment of the benefits to them.

Steps will need to be taken to further improve the measurement approach through ongoing and consistent data collection in the future. The recommended approach involves collecting quantitative data that indicates how many participants have experienced outcomes as a result of the St George’s Pool work programme, and the extent of the change they experienced.

Indicators are a way of knowing that change has happened and the following table summarises the key outcomes and that may be used in determining what change has happened

Table 5: Indicators of Change

Activity	Stakeholder	Outcome	Indicator
Hydrotherapy sessions	Participants (Pool users)	1. Improved quality of life	Number of participants reporting an improvement in their quality of life
		2. Improved health and well-being	Number of participants reporting improved health and well-being
		3. Improved social network	Number of participants reporting an increase in their social contact
Hydrotherapy sessions	NHS	4. Reduction in the number of falls	Number of falls incidents reported by participants
		5. Reduction in number of visits made by GP	Number of participants reporting a reduction in the number of visits made by their GP
		6. Reduction in number of items prescribed by GP	Number of participants reporting a reduction in the number of items prescribed by GP
		7. Reduction in hospital visits and treatment costs	Number of participants reporting postponement of hip and spinal surgery interventions due to an improvement in their condition
Hydrotherapy sessions	The State	8. Reduction in employment costs	Number of participants reporting a reduction in the anticipated rehabilitation time required
		9. Reduction in care needs	Number of participants reporting an improvement in their ability to complete functional activities

4. Valuing change

4.1 SROI Filters

To present a realistic and pragmatic view of the social value created through the St George's Pool programme of work, valuation filters (SROI filters) are applied to the financial proxies. This is in accordance with the SROI principle of not over-claiming.

This is done by applying a few key filters, which are outlined below:

1. **Deadweight**- Deadweight is an estimation of the value that would have been created if the activities from the programme did not occur

Category	Assigned Deadweight (%)
1. The outcome would not have occurred without the activity	0%
2. The outcome would have occurred but only to a limited extent	25%
3. The outcome would have occurred in part anyway	50%
4. The outcome would have occurred mostly anyway	75%
5. The outcome occurred anyway	100%

Table 6: Deadweight description

2. **Displacement**- Displacement is an assessment of how much of the activity displaced other outcomes.

Category	Assigned Displacement (%)
1. The outcome did not displace another outcome	0%
2. The outcome displaced another outcome to a limited extent	25%
3. The outcome partially displaced another outcome	50%
4. The outcome displaced another outcome to a significant extent	75%
5. The outcome completely displaced another outcome	100%

Table 7: Displacement description

3. **Attribution** – Attribution reflects the fact that the activity is not wholly responsible for all of the value created. For example, do other people and/ or organisations contribute to the changes that stakeholder's experience?

Category	Assigned Attribution (%)
1. The outcome is completely a result of the activity and no other programmes or organisations contributed	0%
2. Other organisations and people have some minor role to play in generating the outcome	25%
3. Other organisations and people have a role to play in generating the outcome to some extent	50%
4. Other organisations and people have a significant role to play in generating the outcome	75%
5. The outcome is completely a result of other people or organisations	100%

Table 8: Attribution description

4. **Duration and Drop-off** – Duration refers to how long an outcome lasts for. In the impact map, the first period of duration refers to the period of investment. Subsequent periods of duration refer to the number of years after the period of investment.

Drop-off recognises that outcomes may continue to last for many years but in the future may be less, or if the same, will be influenced by other factors. The drop off rate indicates what by what percentage the value of the outcome declines each year

Category	Assigned Attribution (%)
1. The outcome lasts for the whole period of time assigned to it	0%
2. The outcome drops off by 25% per year from year 2 on	25%
3. The outcome drops off by 50% per year from year 2 on	50%
4. The outcome drops off by 75% per year from year 2 on	75%
5. The outcome drops off completely by the end of the time period	100%

Table 9: Drop-off description

Calculating the SROI

5.1 Financial proxies

Financial proxies are used to value an outcome where there is no market value. The use of proxies in this SROI forms a critical component of the valuation exercise as most of the outcomes identified have no market values.

There are a number of techniques used to identify financial proxies and value outcomes. Importantly, within an SROI, the financial proxy reflects the value that the stakeholder experiencing the change places on the outcome.

Financial proxies in this SROI analysis have been identified by either using the resource reallocation technique, cash transaction or revealed preferences techniques

The financial proxies approximate the value of the outcome from the stakeholder's point of view.

In future SROI analyses it will be critical for stakeholders to be more fully involved in the development and testing of financial proxies. Investigation of the cost savings and resource reallocation that result from participation in and use of the facilities at St George's Pool will provide a sounder basis on which to assess the impact of St George's Pool in the future.

Appendix 1 summarises the Theory of Change, outcomes and proxies for each of the stakeholders

.2 Calculating the ratio

In future SROI analyses it will be critical for stakeholders to be more fully involved in the development and testing of financial proxies. Investigation of the cost savings and resource reallocation that result from participation in and use of the facilities at St George's Pool will provide a sounder basis on which to assess the impact of St George's Pool in the future.

Appendix 1 summarises the Theory of Change, outcomes and proxies for each of the stakeholders

The total adjusted value is the value calculated for each outcome, which takes into account the following components:

- Financial proxy: value of the outcome
- SROI filters: accounting for whether the outcome would have happened anyway (deadweight), who else will contribute to the change (attribution), whether the outcome will displace other activities or outcomes (displacement) and the how long the outcome will last for (duration and drop off)

- Quantity: the number of stakeholders that will experience an outcome

The following table is a summary of the total adjusted for all of the outcomes experienced by each stakeholder group.

Table 10: Total adjusted value of outcomes

Outcomes	Total value for outcome (£)
1.Pool Users	
1.1 Improved quality of life	71,000
1.2 Improved health and well-being	276,775
1.3 Improved social network	279,762
2. NHS	
2.1 Reduction in number of falls	262,196
2.2 Reduction in the number of visits to GP - NHS costs	21,489
2.3 Reduction in number of items prescribed by GP - NHS costs	1,661
2.3 Reduction in hospital visits and treatment costs - NHS costs	463,444
3. The State	
3.1 Reduction in employment costs	22,442
3.2 Reduction in care needs	126,145
TOTAL	1,524,916

For a detailed description of the valuation of each of the outcomes, please refer to the Impact Map (Appendix 4).

Sensitivity analysis

It is important that the SROI calculations are tested by understanding how the judgements made throughout the analysis affect the final result.

The judgements that are most likely to influence the SROI ratio have been identified and consideration given to how sensitive the ratio is to changes in these judgements. To decide which judgements to test, two key questions were considered:

- How much evidence is there to justify our judgement? The less evidence available, the more important it is to test
- How much does it affect the final result? The greater the impact, the more important it is to test.

- The assumptions that were tested in the sensitivity analysis for this report are in Table below

Variable	Baseline judgement	New assumption	SROI ratio
-	Baseline	-	16:1
Investment period	1 year forecast	3 year forecast No increase in outputs and outcomes	5:1
Quantify: Projected numbers of participants	2721 registered users at start of investment period	Increase number of pool users by 10%	17:1
Deadweight: adjustment of all deadweight calculations	25%	0%	24:1

As with any financial modelling, it is expected that any changes in the variables would result in changes to the SROI ratio. This sensitivity analysis is a useful indicator of which variable/s have the most significant impact on the ratio. The most sensitive is the deadweight assumption

In all scenarios tested the SROI ratio remains above 1:1, indicating that social value that is forecast to be created is likely to be greater than the investment that is forecast to be made in St George’s Pool. It will be important to collect data related to the most sensitive variables to ensure that these assumptions are robust and monitor any departures from the baseline judgements to ensure that St George’s Pool is creating the expected level of social return on investment

Summary

Appendix 1 provides a summary of the Theory of Change, outcomes and proxies for stakeholders

The analysis indicates that St George’s Pool will deliver £1,525m of social and economic value in a one year period FY 15-16. Based on a projected investment of £97,879, this results in an SROI ratio of 16:1. That is, approximately £16 of value was created for every £1 invested in St George’s Pool activities.

Appendix 1: Theory of change: outcomes and proxies for stakeholders

Participants (Pool Users)

Outcome 1: Improved quality of life	
Activity: Hydrotherapy sessions	
Individuals unable to participate in land-based forms of exercise were able to engage in exercise	
Theory of Change:	<p>As a result, things don't hurt as much</p> <p>As a result, they experience an improvement in core strength and joint movement</p> <p>As a result, they are more relaxed and experience an improvement in mobility</p> <p>As a result, they experience an improvement in health and well-being</p> <p>As a result, they experience an improved quality of life</p>
Number of stakeholders	2721
Rationale:	Number of registered pool users at the time of the survey
Outcome incidence	<p>% of users for whom physical health was the reason for using the pool = 93% (2531)</p> <p>% of users reporting either a great improvement or improvement in their overall physical health = 98%</p> <p>Outcome incidence = 2467</p>
Deadweight description:	25%
Rationale:	<p>This is an estimation of the value that would have been created if the activities from the programme did not occur i.e. the likelihood that they would have happened anyway. Given the uniqueness of St George's Pool it could be assumed that without it the activity couldn't have happened. However, a more conservative approach has been adopted and it has been assumed that the outcome would have occurred but only to a limited extent</p>
Attribution description:	25%
Rationale:	<p>Attribution reflects the fact that the activity is not wholly responsible for all of the value created. For example, do other people and/ or organisations contribute to the changes that stakeholder's experience. Again, given the uniqueness of St George's Pool it could be assumed that no other organisations have contributed but a more conservative approach has been</p>

Outcome 1: Improved quality of life	
	taken and it has been assumed that other organisations and people have some minor role to play in generating the outcome
Displacement description:	0%
Rationale:	No other activities/ outcomes were displaced
Drop- off period:	100%
Rationale:	The drop off rate indicates what by what percentage the value of the outcome declines each year i.e. how long an outcome lasts for. Arguably, this will be longer than one year but for the purposes of this report we have assumed that the outcome will last for one year only
Proxies:	£52 Cost of swim session with Vivacity Card http://www.vivacity-peterborough.com/venues/regional-fitness-and-swimming-centre/information/admission-fees/
Rationale:	Cost to participant to use a public swimming pool

Outcome 2: Improved health and well-being	
Activity: Hydrotherapy sessions	
Individuals unable to participate in land-based forms of exercise were able to engage in exercise	
Theory of Change:	As a result, they feel better As a result, they experience an improvement in muscle strength and mobility As a result, a reduction in pain and discomfort is experienced and they feel more confident and in control of their condition (self-management) As a result, they feel that their recovery/ maintenance of good health was helped As a result, they experience improved confidence in self-management of long term conditions
Number of stakeholders	2721
Rationale:	Number of registered pool users at the time of the survey
Outcome incidence	% of users for whom pain was a relevant reason for using the pool = 71% (1918) % of users reporting either a great improvement or improvement in their

	<p>overall pain levels = 95%</p> <p>Outcome incidence = 1821</p> <p>To mitigate any potential for over-reporting the outcome incidence has been restricted to 10% = 18</p>
Deadweight description:	25%
Rationale:	As per Outcome 1
Attribution description:	25%
Rationale:	As per Outcome 1
Displacement description:	0%
Rationale:	As per Outcome 1
Drop- off period:	100%
Rationale:	As per Outcome 1
Proxies:	<p>£27,000 Reduction in mortality risk - Annual wage</p> <p>http://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/bulletins/annualsurveyofhoursandearnings/2013-12-12#annual-earnings</p> <p>https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/277588/Wellbeing_and_Longevity.pdf</p>
Rationale:	High levels of subjective well- being can add 4-10 years to life compared with low levels of subjective well- being - reduction in mortality risk.

Outcome 3: Improved social network

Activity: Hydrotherapy sessions

Individuals unable to participate in land-based forms of exercise were able to engage in exercise

Theory of Change:	<p>As a result, it is a safe place to be</p> <p>As a result, it encourages a sense of supportive community</p> <p>As a result, participants are able to socialise with like-minded people</p> <p>As a result, positive relationships are developed</p> <p>As a result, they experience an improved social network</p>
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Outcome 3: Improved social network	
Number of stakeholders:	1959
Rationale	% of users for whom the activity provided an opportunity for social contact = 72%
Outcome incidence	1822 % of pool users for whom this was relevant reporting an improvement or great improvement in social contact = 93%
Deadweight description:	25%
Rationale:	As per outcomes 1 and 2
Attribution description:	25%
Rationale:	As per outcomes 1 and 2
Displacement description:	0%
Rationale:	As per outcomes 1 and 2
Drop-off period	100%
Rationale:	As per outcomes 1 and 2
Proxies:	£280 Average cost of a hobby http://www.ybonline.co.uk/media/news-releases/2008/are-brits-burning-a-hobby-hole-in-their-pockets
Rationale:	The cost for an alternative use of leisure time

Outcome 1: Reduction in the number of falls	
Activity: Hydrotherapy sessions	
Individuals unable to participate in land-based forms of exercise were able to engage in exercise	
Theory of Change:	<p>As a result, As a result they experienced an improvement in core strength and joint movement</p> <p>As a result mobility and co-ordination was improved</p> <p>As a result balance was improved and they are less likely to experience falls</p> <p>As a result, attendance at Hospital A&E departments is reduced</p> <p>As a result, there will be a reduction in costs to the NHS</p>
Number of stakeholders:	2128
Rationale:	% of pool users for whom this was relevant reporting an improvement or great improvement in balance and co-ordination = 92%
Outcome incidence	<p>319</p> <p>The % assumed to require intensive treatment following a fall = 15%</p>
Deadweight description:	25%
Rationale:	This is an estimation of the value that would have been created if the activities from the programme did not occur i.e. the likelihood that they would have happened anyway. Given the uniqueness of St George’s Pool it could be assumed that without it the activity couldn’t have happened but a more conservative approach has been adopted and it has been assumed that the outcome would have occurred but only to a limited extent
Attribution description:	25%
Rationale:	<p>Attribution reflects the fact that the activity is not wholly responsible for all of the value created. For example, do other people and/ or organisations contribute to the changes that stakeholders experience</p> <p>Again, given the uniqueness of St George’s Pool it could be assumed that no other organisations have contributed but a more conservative approach has been taken and it has been assumed that other organisations and people have a role to play in generating the outcome to some extent</p>
Displacement description:	0%

Rationale:	No other activities/ outcomes were displaced
Drop- off period	100%
Rationale:	The drop off rate indicates what by what percentage the value of the outcome declines each year
Proxies:	£1,460
Rationale:	Cost of preventative physiotherapy Cambs and Peterborough CCG http://www.csp.org.uk/professional-union/practice/your-business/evidence-base/cost-falls

Outcome 2: Reduction in the number of visits made by GP

Activity: Hydrotherapy sessions

Individuals unable to participate in land-based forms of exercise were able to engage in exercise

Theory of Change:	As a result things don't hurt as much As a result, they are actively self-managing their conditions As a result, there is a reduction in the requirement for medical support As a result, there is a reduction in the number of visits made to the GP As a result, there will be a reduction in costs to the NHS
Number of stakeholders:	1415
Rationale:	% of users for whom the reduction in number of GP visits was relevant = 52%
Outcome incidence	990 % of those who said hydrotherapy had enabled them to reduce the number of visits made to GP = 70%
Deadweight description:	25%
Rationale:	As per Outcome 1
Attribution description:	25%
Rationale:	As per Outcome 1
Displacement	0%

Outcome 2: Reduction in the number of visits made by GP

description:

Rationale: As per Outcome 1

Drop-off period 100%

Rationale: The drop off rate indicates what by what percentage the value of the outcome declines each year – it has been estimated that the outcome lasts for the whole of the period assigned to it

Proxies: £45

Rationale: Cost of visit to GP Source: 2013 Units Health & Social Care Report Personal Social Services Research

Outcome 3 Reduction in the number of items prescribed by GP

Activity: Hydrotherapy sessions

Individuals unable to participate in land-based forms of exercise were able to engage in exercise

Theory of Change: As a result, there is an improvement in mobility and confidence
As a result, there has been a reduction in their intake of medication
As a result, there has been a reduction in the number of items prescribed by the GP
As a result, there will be a reduction in costs to the NHS

Number of stakeholders: 1401

Rationale: % of users for whom reduced medication intake was relevant – 52%

Outcome incidence 617
% of users who had reduced their medication intake = 44%

Deadweight description: 25%

Rationale: As per Outcomes 1 and 2

Attribution description: 25%

Rationale: As per Outcomes 1 and 2

Outcome 3 Reduction in the number of items prescribed by GP

Displacement description: 0%

Rationale: As per Outcomes 1 and 2

Drop-off period: 100%

Rationale: The drop off rate indicates what by what percentage the value of the outcome declines each year – it has been estimated that the outcome lasts for the whole of the period assigned to it

Proxies: £8

Rationale: Average net ingredient cost (NIC) per prescription item Source: Prescription Cost Analysis, England - 2014 Health and Social Care Information Centre

Outcome 4: Reduction in the number of hospital visits

Activity: Hydrotherapy sessions

Individuals unable to participate in land-based forms of exercise were able to engage in exercise

Theory of Change:
 As a result, there is an improvement in mobility and confidence
 As a result, regular access enables individuals to manage conditions and pain
 As a result, there has been an increase in the postponement of complex hip and spinal surgery interventions
 As a result, there has been a reduction in hospital visits and treatment costs
 As a result, there will be a reduction in costs to the NHS

Number of stakeholders: 1551

Rationale: % of users for whom reduced and postponed hospital admissions was relevant = 57%

Outcome incidence: 760
 % of those who said they were using hydrotherapy in order to avoid or postpone this = 49%

Deadweight description: 25%

Rationale: As per Outcomes 1-3

Outcome 4: Reduction in the number of hospital visits

Attribution description: 25%

Rationale: As per Outcomes 1-3

Displacement description: 0%

Rationale: As per Outcomes 1-3

Drop-off period: 0%

Rationale: The drop off rate indicates what by what percentage the value of the outcome declines each year – it has been estimated that the outcome lasts for the whole of the period assigned to it

Proxies: £1,660

Rationale: In patient cost based on a hospital stay of 5 days Source: <http://www.globalvaluexchange.org/valuations/8279e41d9e5e0bd8499f2976>

The State

Outcome 1: Reduction in employment costs	
Activity: Hydrotherapy sessions	
Individuals unable to participate in land-based forms of exercise were able to engage in exercise	
Theory of Change:	<p>As a result, those patients with multiple injuries who cannot weight bear can start rehabilitation after 2 weeks (3 months on dry land)</p> <p>As a result, rehabilitation time is shortened</p> <p>As a result, people can return to work earlier</p> <p>As a result, there will be a reduction in costs to The State</p>
Number of stakeholders:	313
Rationale:	% of users using the pool for rehabilitation from an illness, accident or surgery = 12%
Outcome incidence	<p>47</p> <p>% of users who experienced a reduction in recuperation time - no data available, therefore, % conservatively estimated = 15%</p>
Deadweight description:	25%
Rationale:	This is an estimation of the value that would have been created if the activities from the programme did not occur i.e. the likelihood that they would have happened anyway. Given the uniqueness of St George's Pool it could be assumed that without it the activity couldn't have happened but a more conservative approach has been adopted and it has been assumed that the outcome would have occurred but only to a limited extent
Attribution description:	25%
Rationale:	<p>Attribution reflects the fact that the activity is not wholly responsible for all of the value created. For example, do other people and/ or organisations contribute to the changes that stakeholders experience</p> <p>Again, given the uniqueness of St George's Pool it could be assumed that no other organisations have contributed but a more conservative approach has been taken and it has been assumed that other organisations and people have some minor role to play in generating the outcome</p>
Displacement	0%

Outcome 1: Reduction in employment costs	
description:	
Rationale:	No other activities/ outcomes were displaced
Drop- off period	100%
Rationale:	The drop off rate indicates what by what percentage the value of the outcome declines each year – it has been estimated that the outcome lasts for the whole of the period assigned to it
Proxies:	£850
Rationale:	Based on ill health up to 6 days absence from work Source: Cost to Britain - 2013/14 Health & Safety Executive

Outcome 2: Reduction in care needs	
Activity: Hydrotherapy sessions	
Individuals unable to participate in land-based forms of exercise were able to engage in exercise	
Theory of Change:	<p>As a result, there is an improvement in mobility</p> <p>As a result, confidence is improved</p> <p>As a result, they are better able to complete functional activities</p> <p>As a result, they are better able to stop further decline in independence</p> <p>As a result, there will be a reduction in care needs</p> <p>As a result, there will be a reduction in costs to The State</p>
Number of stakeholders:	408
Rationale:	% of users for whom their independence was improved in a way which reduced their care needs - no data available, therefore % conservatively estimated = 15%
Outcome incidence	<p>61</p> <p>% of users who experienced a reduction in their care needs - no data available, therefor % conservatively estimated = 15%</p>
Deadweight description:	25%

Outcome 2: Reduction in care needs	
Rationale:	As per Outcome 1
Attribution description:	25%
Rationale:	As per Outcome 1
Displacement description:	100%
Rationale:	As per Outcome 1
Drop- off period	100%
Rationale:	The drop off rate indicates what by what percentage the value of the outcome declines each year
Proxies:	£3,663
Rationale:	http://www.jwebb.co.uk/rehabilitation-cost-article/the-real-cost-of-home-care#.V4kYYegrLIU

Appendix 2. Social Return on Investment - Principles

The SROI methodology was first developed in the 1990s in the USA by the Roberts Enterprise Development Fund, with a focus on measuring and evaluating organisations that provided employment opportunities to previously long-term unemployed. During the early to mid-2000s, the United Kingdom (UK) Office of the Third Sector provided funding to continue the development and application of the SROI methodology, resulting in the formation of the UK SROI Network.

The SROI principles developed through the UK SROI Network are:

Principle	Definition
1. Involve stakeholders	Stakeholders should inform what gets measured and how this is measured and valued.
2. Understand what changes	Articulate how change is created and evaluate this through evidence gathered, recognising positive and negative changes as well as those that are intended and unintended.
3. Value the things that matter	Use financial proxies in order that the value of the outcomes can be recognised.
4. Only include what is material	Determine what information and evidence must be included in the accounts to give a true and fair picture, such that stakeholders can draw reasonable conclusions about impact.
5. Do not over-claim	Organisations should only claim the value that they are responsible for creating
6. Be transparent	Demonstrate the basis on which the analysis may be considered accurate and honest and show that it will be reported to and discussed with stakeholders
7. Verify the results	Ensure appropriate independent verification of the analysis.

Appendix 3: Theory of Change and Proxies (Table format)

Stakeholder	No. stakeholders	Outcome	Indicator description	Indicator	Outcome incidence	Deadweight description	Deadweight proportion	Proportion of stakeholders or outcome incidence?	Deadweight incidence	Incidence after deadweight	Attribution proportion	Incidence after attribution & deadweight	Displacement proportion	Incidence after attribution, deadweight & displacement	Financial proxy description	Proxy	Total Annual Value Produced
Participants (Pool Users)	2531	1. Improved quality of life	Number of participants reporting improved quality of life	98%	2467	Estimated proportion of people with health issues without similar intervention reporting improvement in quality of life in the previous 12 months	0.25	Stakeholders	633	1835	0.25	1376	0	1376	Cost of swim session with Vivacity Card http://www.vivacity-peterborough.com/venues/regional-fitness-and-swimming-centre/information/adm	£52	£71,000
	1822	2. Improved health and well-being	Number of participants reporting an improvement in their health and well-being	10%	18	Estimated proportion of people with health issues without similar intervention reporting improvement in health and well-being in the previous 12 months	0.25	Stakeholders	5	14	0.25	10	0	10	Reduction in mortality risk - Annual update https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/277588/Welbeing_and_Longevity.pdf	£27,000	£276,775
	1959	3. Improved social network	Number of participants reporting an increase in their social contact	93%	1822	Estimated proportion of people with health issues without similar intervention reporting improvement in social network in the previous 12 months	0.25	Stakeholders	480	1332	0.25	999	0	999	Average cost of a hobby http://www.ybonline.co.uk/media/news-releases/2008/are-brits-burning-a-hobby-hole-in-their-pockets	£280	£279,762
NHS	2128	4. Reduction in number of falls	Number of participants likely to require intensive physio support	15%	319	Estimated proportion of people with health issues without similar intervention reporting improvement in their stability	0.25	Stakeholders	80	239	0.25	180	0	180	Cost of preventative physiotherapy Cambs and Peterborough CCG http://www.csp.org.uk/professional-union/practice/your-business/evidence-base/cost-falls	£1,460	£262,196
	1415	5. Reduction in the number of visits to GP - NHS costs	Number of participants reporting a reduction in the number of GP visits	70%	990	Estimated proportion of people with health issues without similar intervention reporting reduction in the number of GP visits in the previous 12 months	0.25	Outcome incidence	354	637	0.25	478	0	478	Cost of visit to GP Source: 2013 Units Health & Social Care Report Personal Social Services Research	£45	£21,489
	1401	6. Reduction in number of items prescribed by GP - NHS costs	Number of participants reporting a reduction in the number of items prescribed by their GP	44%	617	Estimated proportion of people with health issues without similar intervention reporting a reduction in the number of items prescribed by their GP in the previous 12 months	0.25	Outcome incidence	350	266	0.25	200	0	200	Average net ingredient cost (NIC) per prescription item Source: Prescription Cost Analysis, England - 2014 Health and Social Care Information Centre	£8	£1,661
	1551	7. Reduction in hospital visits and treatment costs - NHS costs	Number of participants reporting a reduction in hospital visits	49%	760	Estimated proportion of people with health issues without similar intervention reporting a reduction in hospital visits in the previous 12 months	0.25	Outcome incidence	388	372	0.25	279	0	279	In patient cost based on a hospital stay of 5 days Source: http://www.globalvalueexchange.org/valuations/8279e41d9e5e0bd8499f2976	£1,660	£463,444
State	313	8. Reduction in employment costs	Number of participants reporting an improvement in their recuperation time	15%	47	Estimated proportion of people with health issues without similar intervention reporting an improved recuperation time in the previous 12 months	0.25	Outcome incidence	12	35	0.25	26	0	26	Based on ill health upto 6 days absence from work Source: Cost to Britain - 2013/14 Health & Safety Executive	£850	£22,442
	408	9. Reduction in care needs	Number of participants who report a reduction in their care needs	15%	61	Estimated proportion of people with health issues without similar intervention reporting improvement in their requirement for personal care support in the previous 12 months	0.25	Outcome incidence	15	46	0.25	34	0	34	Source: http://www.jwebb.co.uk/rehabilitation-cost-article/the-real-cost-of-home-care#V4kYegrLIU	3,663	£126,145

Appendix 4: Impact Map

Stakeholder	No. stakeholders	Outcome	Indicator description	Indicator	Outcome incidence	Deadweight description	Deadweight proportion	Proportion of stakeholders or outcome incidence?	Deadweight incidence	Incidence after deadweight	Attribution proportion	Incidence after attribution & deadweight	Displacement proportion	Incidence after attribution, deadweight & displacement	Financial proxy description	Proxy	Total Annual Value Produced	Annual Drop Off	Value Year 1	Value Year 2	Value Year 3	Value Year 4	Value Year 5	Total Value	Present Value	
Participants (Pool Users)	2531	1. Improved quality of life	Number of participants reporting improved quality of life	98%	2467	Estimated proportion of people with health issues without similar intervention reporting improvement in quality of life in the previous 12 months	0.25	Stakeholders	633	1835	0.25	1376	0	1376	Cost of swim session with Vivacity Card http://www.vivacity-peterborough.com/venues/regional-fitness-and-swimming-centre/information/admin-centre	£52	£71,000	1.00	£71,000	£0	£0	£0	£0	£0	£71,000	
	1822	2. Improved health and well-being	Number of participants reporting an improvement in their health and well-being	10%	18	Estimated proportion of people with health issues without similar intervention reporting improvement in health and well-being in the previous 12 months	0.25	Stakeholders	5	14	0.25	10	0	10	Reduction in mortality risk - https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/77268/Walking_and_Living.pdf	£27,000	£276,775	1.00	£276,775	£0	£0	£0	£0	£0	£276,775	
	1959	3. Improved social network	Number of participants reporting an increase in their social contact	93%	1822	Estimated proportion of people with health issues without similar intervention reporting improvement in social network in the previous 12 months	0.25	Stakeholders	490	1332	0.25	999	0	999	Average cost of a hobby http://www.ybonline.co.uk/media/news-releases/2008/are-brits-burning-a-hobby-hole-in-their-pockets	£280	£279,762	1.00	£279,762	£0	£0	£0	£0	£0	£279,762	
NHS	2128	4. Reduction in number of falls	Number of participants likely to require intensive physio support	15%	319	Estimated proportion of people with health issues without similar intervention reporting improvement in their stability	0.25	Stakeholders	80	239	0.25	180	0	180	Cost of preventative physiotherapy Cambs and Peterborough CCG http://www.csp.org.uk/professional-union/practice/your-business/evidence-base/cost-falls	£1,460	£262,196	1.00	£262,196	£0	£0	£0	£0	£0	£262,196	
	1415	5. Reduction in the number of visits to GP - NHS costs	Number of participants reporting a reduction in the number of GP visits	70%	990	Estimated proportion of people with health issues without similar intervention reporting reduction in the number of GP visits in the previous 12 months	0.25	Outcome incidence	354	637	0.25	478	0	478	Cost of visit to GP Source: 2013 Units Health & Social Care Report Personal Social Services Research	£45	£21,489	1.00	£21,489	£0	£0	£0	£0	£0	£21,489	
	1401	6. Reduction in number of items prescribed by GP - NHS costs	Number of participants reporting a reduction in the number of items prescribed by their GP	44%	617	Estimated proportion of people with health issues without similar intervention reporting a reduction in the number of items prescribed by their GP in the previous 12 months	0.25	Outcome incidence	350	266	0.25	200	0	200	Average net ingredient cost (NIC) per prescription item Source: Prescription Cost Analysis, England - 2014 Health and Social Care Information Centre	£8	£1,661	1.00	£1,661	£0	£0	£0	£0	£0	£1,661	
	1551	7. Reduction in hospital visits and treatment costs - NHS costs	Number of participants reporting a reduction in hospital visits	49%	760	Estimated proportion of people with health issues without similar intervention reporting a reduction in hospital visits in the previous 12 months	0.25	Outcome incidence	388	372	0.25	279	0	279	In patient cost based on a hospital stay of 5 days Source: http://www.gobahvalueexchange.org/valuations/8279e41d9e5e0bd8499f2976	£1,660	£463,444	1.00	£463,444	£0	£0	£0	£0	£0	£463,444	
State	313	8. Reduction in employment costs	Number of participants reporting an improvement in their recuperation time	15%	47	Estimated proportion of people with health issues without similar intervention reporting an improved recuperation time in the previous 12 months	0.25	Outcome incidence	12	35	0.25	26	0	26	Based on ill health upto 8 days absence from work Source: Cost to Britain - 2013/14 Health & Safety Executive	£850	£22,442	1.00	£22,442	£0	£0	£0	£0	£0	£22,442	
	408	9. Reduction in care needs	Number of participants who report a reduction in their care needs	15%	61	Estimated proportion of people with health issues without similar intervention reporting improvement in their requirement for personal care support in the previous 12 months	0.25	Outcome incidence	15	46	0.25	34	0	34	Source: http://www.jwebb.co.uk/rehabilitation-cost-article-the-real-cost-of-home-care@V&YVegpLU	3,663	£126,145	1.00	£126,145	£0	£0	£0	£0	£0	£126,145	
																						Total benefits		£1,524,916		
																						Total inputs		£97,879		
																						SROI Ratio		15.58		