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# West Lothian Leisure

## Social Impact Evaluation

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## **West Lothian Leisure Limited (“WLL”) Opening Remarks**

West Lothian Leisure Limited is a registered charity, a social enterprise, and was incorporated on 1 February 1998 to provide sports, physical activity and leisure facilities and activities for the community of West Lothian. We have come a long way since 1998: we now have over 1.8 million visits per year to our facilities and have grown the business to have an annual turnover of over £8 million. The true measure of our success, however, is the positive difference we make to the lives of people - the impact we have in our communities. That is why I welcome this report, which for the first time measures this impact and shows how West Lothian Leisure has helped to improve the health and wellbeing of the people of West Lothian.

This report demonstrates that in the 2010/11 financial year the work of WLL generated benefits of some £16.92 million which exceeds our total revenue by at least £8.26 million. The projects evaluated represent around 66% of the activities of WLL, so the impact will be even greater if the whole organisation is evaluated.

We are also acutely aware that our key partner West Lothian Council invests over £2 million per year in WLL and at a time when budgets are under severe pressure we need to demonstrate that they are getting value for money, or ‘bang for their buck’. This report shows that for an investment of £2.17 million in 2010/11 the social and economic benefits evaluated of £16.92 million gives a return of nearly 8 times the level of funding.

Another key partner is NHS Lothian who provided £76,000 of funding for the Exercise Referral and Ageing Well programmes. These programmes together generated benefits of over £2.7 million.

I’d like to commend the SROI Team for their work which takes us a step closer to demonstrating the scale of the impact that we have in the communities we serve.

**Dr Cindy Brook**  
**Chair**  
**West Lothian Leisure**



## **West Lothian Leisure Limited (“WLL”) General Manager’s Foreword**

At our annual business planning conference in January 2011 the Board of Directors of West Lothian Leisure set a challenge. They said, “We know that WLL does a lot for the community, we know we are a successful business and we know we are valued by our partners. However, we need to measure the impact we are having in our communities and we need to sell the good work we’re doing a bit harder to our partners”. I think the term used was “blow our own trumpet”, but you get the picture.

We are very proud of what we do at WLL and usage and income figures show a pattern of continued growth year on year. What we haven’t been able to do, until now, is to give a flavour of the scale of the impact we are having. We looked at several social impact models but settled on the SROI (Social Return on Investment ) model as it is recognised by the Scottish Government and the UK network of Leisure Trusts (Sporta UK) has adopted it as their recommended model.

In our evaluations we focused on the key areas of our operations including our Exercise (Health) Referral scheme, our Ageing Well Programme, swimming lessons, free swimming for under 16’s and our Xcite membership scheme. In total we measured the impact from approximately 66% of the activities of WLL during the 2010/11 financial year.

So how did we do? How much benefit did we bring to West Lothian? In our assessment we measured £16.92 million of social and economic benefits, which is nearly double our total revenue for the year, and nearly 8 times the level of funding received from our key partner West Lothian Council. We are delighted with this outcome, but are not resting on our laurels, we want to build on this and increase our social impact. So what are we planning to do?

- In 2012, in partnership with West Lothian Council, we are planning to introduce an improved Concessionary Access Scheme so that those people who are in receipt of certain benefits can access our facilities at cheaper rates
- We are introducing a new fitness facility in Fauldhouse, a community identified as having low uptake in physical activity and at risk of poor health
- We have entered into a new agreement with NHS Lothian to deliver a Child Healthy Weight Programme (Get Going)
- We are working towards the Healthy Living Award offering customers healthy alternatives at our cafes
- We will continue our investment programme to improve and add to the facilities we operate
- We have implemented a community engagement plan so that we can better match delivery to need
- We are delivering a joint legacy plan with West Lothian Council to optimise the opportunities that the London 2012 Olympic and Paralympic Games and Glasgow 2014 Commonwealth Games bring
- Our target groups for the next year have been identified, in liaison with our key partners as older people, young women, communities most at risk of poor health and communities that are inactive.

I would commend this report to you, and as a participant in the process have been impressed by the way that data was regularly tested and scrutinised linking validated data to published governmental and other statistics. Baker Tilly’s involvement has brought a robustness to the process that would have been harder to achieve unaided. My thanks go to Baker Tilly’s social impact specialists and to the internal SROI Team for the many hours poring over and scrutinising the data.

**Robin Strang**  
**General Manager**  
**West Lothian Leisure**

## **West Lothian Leisure Limited (“WLL”) Introductory Comments from Jim Clifford**

WLL is one of a series of leading Third Sector providers that is embracing the need to clarify and measure its outcomes, and to evaluate what it is about its activities that achieves them. The production of a SROI study has been a process of learning for the whole organisation. It focuses on part, but an important part, of WLL’s work, covering benefits brought to all ages of the people of the West Lothian area, through specific programmes, and through the wider provision of leisure facilities.

The total gains, from just part of the wider activities of WLL, have been evaluated at £16.92 million, a figure which significantly exceeds both the organisation’s turnover and its West Lothian Council funding. The level of gain achieved must be set in the context of the demographics of the area in which it is located, and the areas of its need. With some 172,000 people resident in its catchment area, it provides for around 1.8 million separate visits (per year) across its nine sites, with around 8% of the population as regular members.

Following the work by new economics foundation over the past decade, and latterly the Scottish Enterprise-sponsored work, the Social Return on Investment methodology was published in a Cabinet Office paper in May 2009. Leading commentators and researchers, including nef, New Philanthropy Capital (NPC), SROI Network, and ourselves and Cass Business School recognise that, although there are some wrinkles to be ironed out, SROI is a practical and workable solution to demonstrating social impact. With such a need to focus on this during times of cuts in public funding, and increased social pressures, this is needed now more than ever. It is rightly described by NPC in their April 2010 position statement as “an incredibly useful tool.”

The methodology used in this research project, and indeed the majority of similar projects we are undertaking, is Action Research, also known as Action Science. In a process which allows the research to reflect the stories that it can tell about its work, it allows the organisation to be supported by the researcher in learning about what it achieves and for whom. In this context, it gathers quality information, from those that best understand it, building in relevant, validated third party data, and giving the organisation the knowledge to be able to embed it in its performance monitoring systems: all in one go. It works, and delivers results cost-effectively.

SROI can become a process-driven exercise in which the answer emerges as a function of the process. It can also suffer from the use of financial proxies that have a poor correlation with the outcomes they attempt to measure, or are based on over-enthusiastic assumptions, and a lack of robustness in linking outcomes to the activities in which they originate. This is not the case here. The evaluations have been developed with real thought, care and prudence, and are soundly based on validated underlying data, with conservative assumptions where such are necessary. It fairly represents the very valuable contribution of WLL to its services users and to the West Lothian area.

This is a carefully-constructed, conservative, informed and exciting piece of work that adds to our understanding of social impact. I look forward to it both informing the ongoing development of the SROI methodology, and becoming the foundation for more focussed development of WLL’s mission.

*Jim Clifford*

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**Jim Clifford** is Head of Non-profit Advisory Services, and Chairs the Public Sector Group at Baker Tilly. He has authored a number of high profile and cost studies including the social impact protocol for Sector Skills Councils, published in 2010, the study of PACT’s domestic adoption and fostering services, referenced in the Narey Report on Adoption, Alan House Women’s Community Centre, the PRTC National Carer’s Centre Network, and comparative study of costs of special schools for NASS. He is a Visiting Fellow at Cass Business School’s Centre for Charity Effectiveness where he is undertaking research into evaluative protocols for transactional decision making (linking Social Impact with conventional valuation and brand valuation) with Professors Palmer, Harrow and Bruce. He is a non-executive director of the Centre for Public Scrutiny.

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# Definitions of Terms

The following definitions apply throughout this document, unless the context requires, otherwise: Centre for Social Justice

Term	Definition
<b>WLL</b>	West Lothian Leisure Ltd
<b>Management</b>	The Board of Directors of West Lothian Leisure Ltd
<b>GVA</b>	Gross Value Added (a measure of economic productivity)
<b>WLC</b>	West Lothian Council
<b>GP</b>	General Practitioner
<b>Management Fee</b>	An agreed level of financial support provided each year to WLL from WLC
<b>Xcite Membership</b>	WLL's membership scheme
<b>WLL Management</b>	General Manager and the Senior Management Team
<b>CMO</b>	Chief Medical Officer
<b>CSJ</b>	Centre for Social Justice
<b>SROI Team</b>	General Manager, representatives of each of the projects and West Lothian Council's Sport and Outdoor Education Co-ordinator and Community Regeneration Officer
<b>SROI</b>	Social Return on Investment

# 1. Executive Summary and Key Findings

## Background to this report

- 1.1 West Lothian Leisure Ltd (“WLL”) was formed in 1998. It is a social enterprise with charitable status, providing sports, leisure and learning opportunities that enhance the quality of life and improve the health of the community it serves. WLL currently employs 243 members of staff with total revenue of £8.7m in 2010/11. WLL is partly funded by West Lothian Council (“WLC”) and works in partnership with WLC to service the communities’ requirements.
- 1.2 There are a range of publications / assessments (see Appendix D) which indicate that regular participation in exercise and sport has benefits for both public services (including the NHS) and the wider economy (in terms of productivity and effectiveness at work). WLL widely promotes participation in physical activity in West Lothian by way of a number of programmes and schemes, including the Xcite membership programme which we understand to be widely recognised for its success in attracting members and providing a value added service in first class modern sporting facilities.
- 1.3 WLL primarily provides its services to the population of West Lothian. The region of West Lothian has a population of c172,080 (2010, National Records of Scotland) and covers an area of 397km<sup>2</sup>. West Lothian is the youngest and fastest growing population in Scotland. Recent large-scale investment in the area has resulted in new employment, new housing and ultimately a growing population. Life expectancy in Scotland is one of the lowest in Western Europe. Life expectancy at birth is 78.6 years in males and 82.6 years in females in England, compared with 75.9 years and 80.4 years in Scotland. While the West Lothian life expectancy figures are slightly higher than the Scottish average they are lower than the figures for Edinburgh, for example. The differences in life expectancy and other measures of health and wellbeing that are observed across the UK are explained in part by differences in smoking, diet and physical activity that in turn have a direct impact on obesity, cardiovascular disease, cancer and many other conditions. Physical fitness and participation in exercise is an important way to reduce the burden of ill health. Scottish Government, the NHS, local authorities and community planning partners work together to tackle health inequalities, address the broader determinants of health (e.g. housing, education, employment and the environment) and help people live a healthier lifestyle.
- 1.4 WLL provides its services from nine purpose built venues situated throughout the region of West Lothian. In 2010 around 1.8 million visits were made to WLL with around 13,000 people signed up as regular members (through the Xcite membership). With innovative health and exercise programmes, quality staff and purpose-built facilities, WLL sees itself as not just an efficient and effective deliverer of quality leisure services, but also a leading agent for change for a wide range of the population in West Lothian.
- 1.5 This report charts how much change WLL effects, and how it does that, sharing the burden and the gain with other Third and Public Sector agencies in West Lothian and Scotland.
- 1.6 The purpose of this report is to evaluate the benefits to key stakeholder groups (including but not limited to WLC and NHS Lothian) within the local area from a number of activities and sites, including:
  - ▶ Health and wider economic benefits;
  - ▶ The Swimming programmes;
  - ▶ The NHS referrals programme;
  - ▶ Ageing Well programmes; and
  - ▶ The Xcite membership scheme.



- 1.7 We have worked with the SROI Team of WLL and WLC staff, including representatives of each of the projects and the General Manager, using Action Research (see Appendix B) as a methodology for gathering and testing data and assumptions. All field work for the report was undertaken through June to September 2011 with finalisation of the content in November.
- 1.8 This report includes:
- ▶ An overview of social impact and other key methodologies used in this work;
  - ▶ An analysis of the activities and outcomes of the above programmes and centres;
  - ▶ An overview of how those outcomes may be measured using financial proxies;
  - ▶ An overview of the results of the evaluation; and
  - ▶ A detailed presentation of the models and assumptions used in the evaluation.
- 1.9 To the greatest extent possible, Baker Tilly has obtained evidence to support inputs and assumptions used in the evaluation models. Where no evidence was available, the SROI Team has used assumptions that they believe to be reasonable as inputs to the model, and Baker Tilly has reviewed and challenged those assumptions during the course of the research.
- 1.10 WLL Management has reviewed the contents of this report and the models and has agreed that, to the best of their knowledge and belief, the assumptions used for the purposes of this report are accurate and / or reasonable for the purposes of this SROI Project.

## Results of the evaluations

- 1.11 In this exercise, a smaller number of key assumptions have been identified. We have worked with the project representatives to develop a prudent result at a high level. It has been considered important to present a more defensible, prudent analysis than one which is overly complicated and risks overstatement – the aim to deliver an “at least” figure.
- 1.12 Detailed models and commentary thereon are included as Appendix D to this report. The overall findings by project are summarised below:

Project	Calculated benefits (£'000)
Savings to NHS and the wider economy (all sites)	9,824
NHS referral programme	2,448
Ageing well programme	311
Swimming activity programme	1,685
Xcite membership	2,656
<b>Total</b>	<b>16,923</b>

- 1.13 This evaluation therefore does not extend to specific funded projects other than those noted in the report, which include NHS referrals, Ageing Well Programmes, Swimming Activity Programmes and Xcite membership. It does include the evaluated benefits from all, or the majority of, generally funded activities i.e. general use of the sporting facilities by the members / users thereof.
- 1.14 These benefits take reasonable account of the key areas of deduction required in SROI evaluations (three standard areas plus risk, which is also needed). These are:
- ▶ Deadweight - gains that would have happened anyway;
  - ▶ Alternative attribution - where part of the gain is more reasonably attributable to a partner or third party; and

- Displacement - where the gain is tempered by a lesser dis-benefit.

- 1.15 Based on the SROI Project scope and the specific areas of WLL activities / services provided, the table above highlights that WLL in the past year generated benefits of some £16.92 million.
- 1.16 In the financial year ended 31 March 2011 WLL's total revenue was £8.66 million, including £2.17 million from WLC in the form of a management fee. Included in the management fee is funding for specific projects such as free swimming for West Lothian residents over 60 and under 5 years of age, and free swimming for under 16 year olds during school holidays and on Friday afternoons.
- 1.17 On this basis, the impact of the benefits evaluated exceeds WLL's total revenue for the financial year ended 31 March 2011 by at least £8.26 million and its funding from WLC by £14.75 million (or put another way the social and economic benefits generated by WLL were nearly 8 times the level of public funding it received). This scale of impact compares favourably with other UK leisure trusts who have undertaken similar studies.
- 1.18 It should be noted that the total monetary value of the social and economic benefits generated by individual leisure trusts identified through SROI studies will vary from organisation to organisation, with variations in the following impacting on the results achieved:
- population demographics;
  - demand levels; and
  - the selection of projects.
- 1.19 In addition to the above, the SROI teams of the individual leisure trusts will also apply their expertise and knowledge of the area which they serve to reflect the disparities and divergences between each area and the needs of the community which will lead to variations on judgments or estimates in relation to deadweight, alternative attribution and displacement (as defined in section 1.14).
- 1.20 Throughout this study assumptions have been made in the course of preparing the analysis and the detailed tables of calculations in Appendix D. Some relate to estimates made by the SROI Team in coming to the views of outcomes, and some relate to the interpretation of information arising from other research work and statistical analysis referenced in this work.
- 1.21 In order to assess the extent to which these assumptions are material, potentially key assumptions have been identified. Each assumption has been subject to sensitivity analysis within what appears to be a reasonable range, and the effect on the total valued outcomes under the study has been recast. The resulting analysis is presented below.

Sensitivity Analysis (£'000)	Savings to NHS and the wider economy (all sites)	NHS referral programme	Ageing well programme	Swimming activity programme	Xcite membership	Total
Base case - Appendix D	9,824	2,448	311	1,685	2,656	16,923
1) Decrease in the number of members who would not use an alternative facility or another form of exercise from 8,066 to 6,752	9,360	2,448	311	1,685	2,278	16,081
2) 10% Increase in all assumptions relating to alternative attribution	7,938	2,007	251	1,569	2,278	14,044
3) 20% Reduction in all assumed NHS savings per patient/member	8,172	2,014	311	1,685	2,656	14,838

- 1.22 The conclusion from the sensitivity analysis is that even if certain key assumptions are subjected to a material change, the overall conclusion from this study (i.e. that the social return generated by the evaluated projects is significantly greater than their cost) would not be subject to alteration. This is highlighted under sensitivity scenario 2 which shows that the social and economic benefit generated exceeds the funding provided by West Lothian Council in 2010/11 by circa £11.9 million.
- 1.23 WLL estimates that the specific areas of WLL activities / services selected for the SROI Project accounts for some 66% of its total activities.
- 1.24 We also note that, in common with most SROI evaluations, it is not practicable or cost-effective to evaluate every aspect of the effect of the projects. This relates often to the wider well-being and less proximate benefits from WLL's work. Hence the projects shown above may not reflect full evaluations of benefits including:
- ▶ Personal satisfaction and better social life (apart from participants in the Ageing Well Programme);
  - ▶ Improved educational outcomes;
  - ▶ Crime reduction;
  - ▶ Social inclusion;
  - ▶ Safety aspects of improved swimming confidence;
  - ▶ Wider tourism / hospitality aspects of events that WLL run and organise;
  - ▶ Brand value of WLL;
  - ▶ All the aspects of youth lifestyle inclusion and positive aspects of change;
  - ▶ Enhancing the environment; and
  - ▶ Development of professional sportspeople (including sport specific coaching) may encourage wider participation.
- 1.25 Where specific evidence exists, the SROI Team has sought to evaluate these benefits as noted in the report (e.g. social benefit, reduced healthcare costs). However, many of these outcomes which could be considered as attributable to WLL were perceived to be either too remote or subject to uncertainties to be evaluated reliably, and as such have not been included.
- 1.26 As this evaluation does not seek to measure the benefits from the further benefits listed at 1.24, the value of these outcomes would be incremental to the value shown above. Hence the evaluations shown above are lower than the full value of the outcomes potentially generated by WLL.

## Conclusions from the evaluations

- 1.27 In the words of New Philanthropy Capital in their recent positioning statement on SROI, it is an “incredibly useful tool.” This is apparent here as a significant financial value, based on sound and researched third party data, emerges, even with only part of the specifically funded project work being evaluated.
- 1.28 The totals of £16.92 million per annum of economic and social gain compared against total revenue and public funding from WLC in 2010/11 of £2.17 million is striking. These comparisons provide a fascinating insight into the wider social impact of leisure facilities in an area, and draw the reader into wanting to know how it is done: what is WLL doing that it achieves so much?
- 1.29 That enquiry not only tells us more about its activities, but also highlights that this is only a partial evaluation of the wider gains from WLL’s work. These wider gains (New Philanthropy Capital describe several of these as “social wellbeing”) are nonetheless of significant social value, and should not be disregarded for their lacking financial measures. It is evident that physical exercise and its impact on improved health is a key component in a person’s well being. The services provided by WLL are adapted to meet the needs of the community and structured to make exercise affordable to the community as a whole to ensure that participation rates are high. The work conducted by WLL in promoting exercise as part of a healthy lifestyle for families will also impact future generations which should lead to a future reduction in NHS costs in relation to obesity and other medical conditions caused through lack of exercise.
- 1.30 This review highlights the huge importance of independent charities like WLL to what the Coalition Government are terming “the Big Society”. WLL takes that local and regional responsibility seriously, and is leading the way in using Public Sector-owned leisure facilities to support social and welfare change and inclusion.
- 1.31 This evaluation also recognises the importance of the quality / range of the facilities throughout West Lothian, promotional activities by WLL (to encourage use of the facilities) and the commitment and dedication of staff and management to deliver a service that users wish to use and are content to pay a commercial sum for that use. Additionally WLL is not the only provider in the West Lothian area and surrounding geographies and therefore it should take credit for delivering an attractive proposition for current and prospective users.

## 2. Introduction

### Overview of West Lothian Leisure

- 2.1 WLL is a social enterprise with charitable status, providing sports, physical activity, leisure and learning opportunities that enhance the quality of life and improve the health of the community it serves. WLL currently employs 243 members of staff with total revenue of £8.66 million in financial year ended 31 March 2011. WLL is partly funded by West Lothian Council (“WLC”) and NHS Lothian, and works in partnership with WLC, NHS Lothian, **sportscotland** and others to service the communities’ requirements.
- 2.2 WLL operates under the “Xcite” branding and operates nine venues throughout West Lothian that include Swimming Pools, Sports Centres and Health & Fitness Centres. Further detail of the facilities at each site is shown at Appendix A.

### The impact of sport and exercise

#### Economic damage from physical inactivity

- 2.3 The importance of physical activity is increasingly being stressed by Local and National Government bodies and other agencies, including, most recently, the ‘Take life on, one step at a time’<sup>A</sup>. This is clearly an issue for Scotland and West Lothian, which was found to be on or around the Scottish average of NHS regions in Scotland with the highest obesity rates<sup>B</sup>.
- 2.4 The charts below which are extracted from “Obesity in Scotland – An Epidemiology Briefing, 2007” starkly illustrate the issues that Scotland, as a country, has to deal with regarding the increasing levels of obesity and the levels of obesity in comparison to other OECD countries.

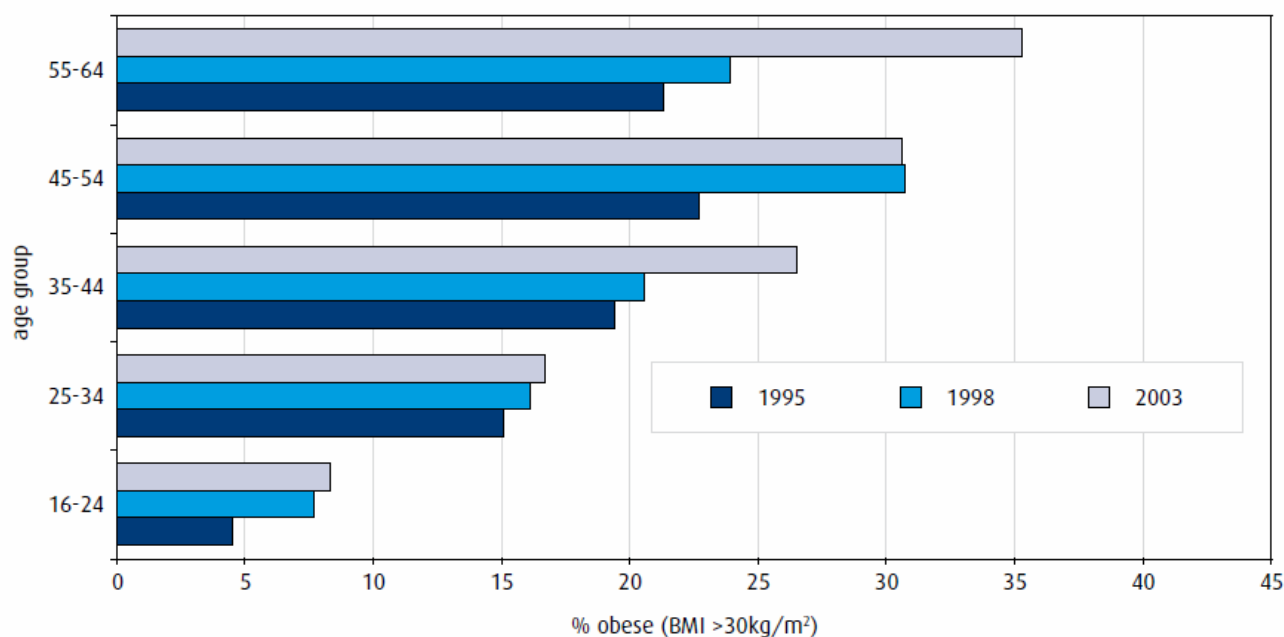
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<sup>A</sup> Source: [www.takelifeon.co.uk](http://www.takelifeon.co.uk)

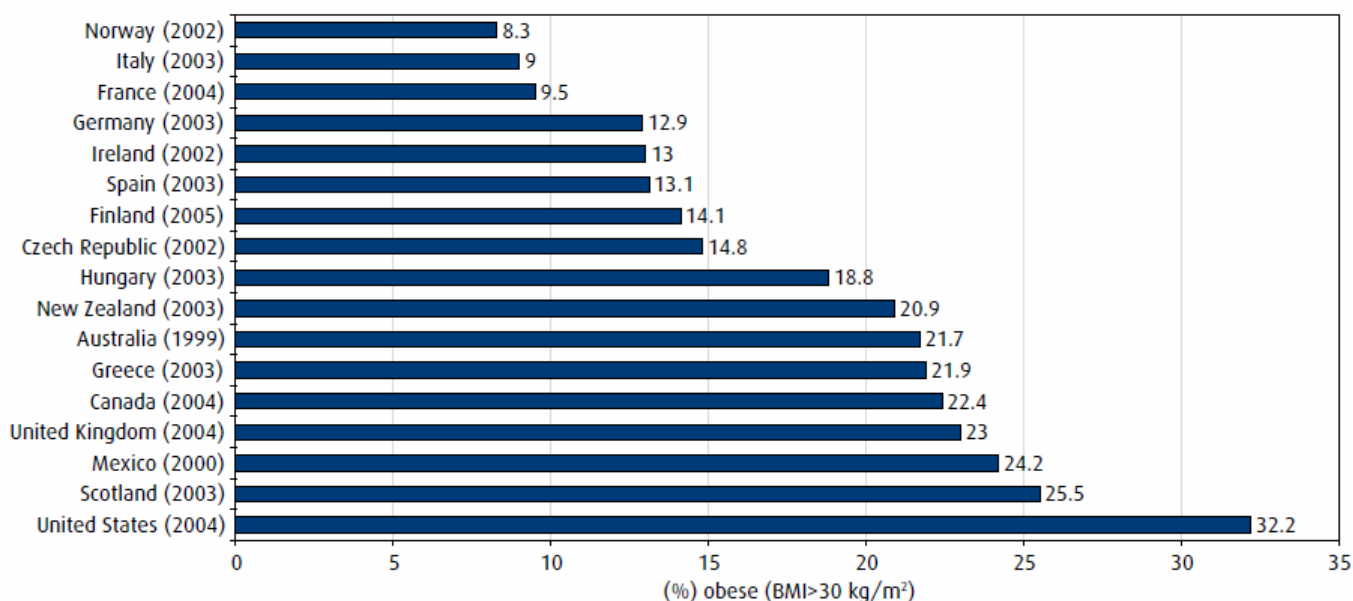
<sup>B</sup> Source: Obesity in Scotland – An Epidemiology Briefing 2007



**Chart 5.9 Trends in obesity (BMI>30 kg/m<sup>2</sup>) among men aged 16-64 years, Scotland, 1995, 1998 and 2003** (Source: SHS 2003)



**Chart 5.21 Obesity in OECD countries, percentage of adult population, aged from 15 years and over, with a BMI>30kg/m<sup>2</sup>** (Source: OECD Health data, 2006)<sup>25</sup>



- 2.5 The Chief Medical Officer's ("CMO") 2009 Annual Report<sup>C</sup> suggests that the direct costs of inactivity equate to £5m per annum per Primary Care Trust in England, and estimates the total annual cost to the NHS of inactivity and obesity combined at some £5 billion to £6 billion. Indeed the Foresight report concludes that the cost (including a proportion of the costs of treating obesity-related diseases) amounts to some £7.5 billion<sup>D</sup>. The CMO's report also highlights that 61% of men and 71% of women aged over 16 years fail to meet the minimum recommendation for physical activity (2009, p.22).
- 2.6 The Scottish Government reports that the direct cost to the NHS in Scotland of obesity was in excess of £175 million, and infers that the cost to the NHS of people being overweight could add a further £137

<sup>C</sup> Source: '2009 Annual Report of the Chief Medical Officer', Department of Health, 2009, p.22

<sup>D</sup> Source: Foresight – Tackling Obesity: Future Choices – Project Report', 2<sup>nd</sup> Ed., Government Office for Science, 2007, p.40

million to this<sup>E</sup>. In addition, the report suggests that some 2.6 million work days are lost in the Scottish economy as a result of obesity, with people that have a Body Mass Index greater than 30 having 51% more short and long term sickness absence than those in the normal weight range<sup>E</sup>.

- 2.7 The British Heart Foundation published a document in February 2010 – Costs of Physical Inactivity fact sheet which noted the following statistics:
- ▶ The economic costs of sickness absence and worklessness associated with working age ill health are over £100 billion per year – greater than the current annual budget for the entire NHS, and
  - ▶ The chronic diseases associated with physical inactivity contribute to sickness absence quite significantly: in 1998, there were over 18 million days of medically certified sickness absence attributable to obesity.
- 2.8 According to [www.patient.co.uk](http://www.patient.co.uk), two in five adults in the UK are overweight and a further one in five are obese. It has been found that 65.1% of adults in Scotland are overweight (including 26.8% who are obese)<sup>E</sup>.
- 2.9 In August 2011 the Lancet ([www.lancet.com](http://www.lancet.com)) published a range of papers outlining some of the issues and highlighting the concerns of “The Future Challenge of Obesity”. This is to set part of the scene and play a significant role in advance of a UN High Level Meeting on Non-communicable Diseases in New York in September 2011 and in further national and international policy programmes. These papers make reference to a wide range of studies throughout the world – the broad summary from these papers is that without action obesity related diseases will cost the UK an increasingly high cost through the next decades. The Lancet advocates that research and action should therefore be undertaken to avoid what could develop into a massive problem, not just for the UK but globally. Amongst other statistics highlighted the view is that if the UK trends for 1993 to 2008 continue, the prevalence of obesity will rise from 26% to 35-48% by 2030, depending on the sex considered, and that the costs (undefined in term) will increase by £2billion per year. A range of options are clearly available to seek to minimise future growth of “costs” relating to obesity / potentially avoidable illness which may include policy interventions to improve the environments that promote poor dietary intake and physical inactivity.

## The benefits of physical activity

- 2.10 This summary of work defining the damage caused to the economy by physical inactivity shows that the benefits of exercising include reduced costs to the NHS and increased productivity. A number of studies have concluded that, aside from higher sickness absence, being overweight is likely to lead to reduced productivity when in the workplace.
- 2.11 In August 2011 the Lancet ([www.lancet.com](http://www.lancet.com)) highlights a study “Minimum amount of physical activity for reduced mortality and extended life expectancy” which in broad summary supports the assertion that “a small amount of leisure time physical activity reduces total mortality, mortality from cardiovascular disease and mortality from cancer”. This further supports the link between higher levels of physical activity and lower cost of healthcare and that these lower costs can be over a long period of time and potentially extend the lifetime of participants.
- 2.12 The Government’s current recommendation is that adults should take 30 minutes of moderate exercise at least five times a week. However, it has been found that there is a strong link between socioeconomic status and participation rates for physical activity: for example, the rate of walking as a leisure time activity among men of social class I is some 38% higher than men of social class VF.

<sup>E</sup> Source: RR Donnelley, ‘Preventing Overweight and Obesity in Scotland - A Route Map Towards Healthy Weight’, The Scottish Government, 2010, p.33

<sup>F</sup> Source: ‘At Least Five A Week – evidence on the impact of physical activity and its relationship to health, a report from the Chief Medical Officer’, Department of Health, 2004, P.13

- 2.13 The Cabinet Office's 2002 report<sup>G</sup> highlights the wider benefits of sport, including:
- ▶ Personal satisfaction and better social life;
  - ▶ Improved health (both physical and mental)
  - ▶ Improved educational outcomes;
  - ▶ Crime reduction;
  - ▶ Social inclusion; and
  - ▶ Enhancing the environment.
- 2.14 None of the above studies consider the effect of obesity on wider family members, notably the effect on children and the elderly when the prime carer is distracted from their prime carer role due to illness through their own obesity. This then affects education and development for the children, as well as potentially encouraging lifestyles that tend towards obesity in the next generation.

### **WLL's role in promoting physical activity**

- 2.15 WLL works to promote exercise and sport in its local community through the provision of reduced cost access to high quality facilities (in comparison to privately owned operators), combined with a number of programmes aimed at improving participation rates.
- 2.16 We understand from the SROI Team that the Xcite membership scheme is recognised as one of the most successful schemes of its type in Scotland, with around 13,000 members (see Appendix D). Around 1.8 million visits to WLL's facilities are made each year.

### **Scope and purpose of this report**

- 2.17 Baker Tilly has been engaged by WLL to investigate the social impact of activities relating to five programmes. These programmes, which are considered to be representative of the spread and depth of WLL's activities, are:
- ▶ Health and wider economic benefits;
  - ▶ The Swimming programmes;
  - ▶ The NHS referrals programme;
  - ▶ Ageing Well programmes; and
  - ▶ The Xcite membership scheme.
- 2.18 The SROI Team was established by WLL and WLC to oversee the evaluation. The SROI Team included representatives of each project, WLC's Sport and Outdoor Education Manager, and Community Regeneration Officer and WLL's General Manager, Robin Strang ("the SROI Team"). The SROI Team were supported by Baker Tilly who applied an Action Research methodology for gathering information on the projects incorporated within the scope of this evaluation and for testing data assumptions. Action research has been used as it:
- a. Enables the research to stay close to the data;
  - b. Enables the theory – that is the answer to the research – to emerge from the data as it is gathered;

<sup>G</sup> 'Source: Game Plan: A strategy for delivering Government's sport and physical activity objectives', Cabinet Office, 2002, p.44

- c. Promotes a cyclical re-visiting of the data through the research process which promotes internal validity and triangulation of the results: that is the data gathered and the conclusions drawn are better tested;
- d. Through encouraging the organisation itself to learn from the process of the research, its staff are better able to embed the results and benefit from them in developing future strategy: the work can be more useful.

2.19 Through the process of Action Research, the SROI Team and Baker Tilly have produced:

- ▶ An overview of social impact and other methodologies used in this work;
- ▶ An analysis of the activities and outcomes of the above programmes/areas;
- ▶ An overview of how those outcomes may be measured using financial proxies;
- ▶ An overview of the results of the evaluation; and
- ▶ A detailed presentation of the models and assumptions used in the evaluation.

### **Reliance on work by WLL**

2.20 During the course of our work with WLL, we have relied on information and explanations provided by them and the SROI Team including:

- ▶ The nature, outcomes and beneficiaries of their activities; and
- ▶ The assumptions used in evaluating the impact of their services.

2.21 Where possible, assumptions from the SROI Team have been validated based on independent data or data extracted from WLL's management information systems. Nevertheless, WLL is responsible for making the assumptions used in this report, and has confirmed that they are, to the best of their knowledge and belief, accurate and reasonable.

### **Aim of this report**

2.22 The aim of this report is to evaluate the benefits generated by the services set out above, and, where possible, to provide guidance on the use of these models and results to measure the social impact of WLL's remaining activities.

2.23 The following sections of this report cover:

- ▶ Section 3: An overview of the concepts and methodologies used in this study;
- ▶ Section 4: An overview of the evaluated activities and projects and their associated outcomes and beneficiaries;
- ▶ Section 5: An overview of the evaluation and modelling approach used to evaluate the economic and social impact of the activities and projects included in this study; and
- ▶ Section 6: Conclusion.

2.24 A detailed analysis of the evaluation models used and the assumptions and inputs to them is included as Appendix D to this report, with sensitivity analysis included at Appendix E.

### 3. Concepts and methodologies used

#### Social Return on Investment (“SROI”)

- 3.1 The SROI methodology has been developed in order to help organisations to “[measure and quantify] the benefits they are generating” (per Lawlor, Neizert & Nicholls writing in the SROI guide, 2008<sup>H</sup>). This approach was piloted in the UK through the Measuring What Matters programme during 2002 and has evolved since then as further work has been done to develop the framework around it.
- 3.2 It is increasingly being seen as an “incredibly useful tool”<sup>I</sup> by a number of organisations and key commentators within the Third and Public sectors in the push to measure and evaluate social impact.
- 3.3 There are three ‘bottom line’ aspects of social return:
- ▶ *Economic*: the financial and other effects on the economy, either macro or micro;
  - ▶ *Social*: the effects in individuals’ or communities’ lives that affect their relationships with each other; and
  - ▶ *Environmental*: the effects on the physical environment, both short and long term.
- 3.4 For this study the primary focus has been on economic and social benefits, rather than environmental benefits, as any environmental benefits generated would appear, for WLL, to be too far removed from the intended purpose of the original services provided and appear to be too difficult to measure reliably. Where environmental benefits arise from the work of WLL, the nature of the benefit has been noted, and recorded as an unmeasured additional benefit.
- 3.5 The benefits of using SROI include:
- ▶ *Accountability*: organisations are able to give both the numbers and the story that supports them;
  - ▶ *Planning*: SROI provides a change management tool to assist in the direction of resources towards the most effective services and to assess the viability of potential additional services;
  - ▶ *Cost and time effectiveness*: the measures produce an analysis of the most cost and time effective activities; and
  - ▶ *Simplicity*: impacts can be reduced to a simple comparison of the cost of funding WLL and the benefits that flow from its core activities to facilitate analysis and give a clear indicator of types and ranges of success.
- 3.6 SROI takes total measurable outcomes, discounted to present value where the benefits occur in the future or are recurring over a period of time, and deducts:
- ▶ *Deadweight*: Outcomes that would have occurred regardless of the intervention;
  - ▶ *Alternative attribution*: Outcomes that arise as a result of intervention by others; and
  - ▶ *Displacement*: Outcomes that are negated or compromised by disadvantages arising elsewhere either in terms of social, economic or environmental damage.

<sup>H</sup> Source: Lawlor, Neitzer & Nicholls. Measuring Value: A guide to Social Return on Investment.

<sup>I</sup> Source: Copps, J. and Heady, L. 2010. *Social Return on Investment: Position Paper, April 2010*. London. NPC. From [www.philanthropycapital.org](http://www.philanthropycapital.org)



- 3.7 A review of academic work and practical examples of SROI in use by the Third Sector suggests that the measures fall into three patterns, which have been used in this work:
- a. *Economic benefit created*: where there is an impact on earning capacity or productivity;
  - b. *Costs saved or not wasted*: where the intervention results in a saving, either in the cost of another intervention or in a consequential cost (e.g. introducing prevention to save on the cost of a cure). This may be seen in either removing the need for or increasing the effectiveness of an alternative intervention; and
  - c. *Alternative or cheaper sourcing*: where one intervention directly replaces another more expensive one.
- 3.8 In identifying these benefits, a key underlying requirement is to consider not only the positive contribution that WLL makes, but also the economic damage that is avoided by having it in place. Much of our report involves the quantification of the damage to stakeholders that would result based on these implications. By avoiding this damage, WLL contributes to the economy just as meaningfully as where the effect is an incremental benefit.

## The case for political support for SROI

- 3.9 Further support for SROI's adoption by the Third Sector has been seen in the recent report 'Outcome-Based Government', published by the Centre for Social Justice ("CSJ")<sup>J</sup>. This report considers the need to link funding of interventions with the expected outcomes (and their associated value). It suggests that funding should be focused on those interventions that are likely to achieve the highest value outcome: "Improving life outcomes should be the ultimate goal of a government's social policy: if policy makers can better identify failing initiatives, and shift spending toward programmes that effectively deliver sustainable, long-term outcomes, the social and financial returns to society and the public sector will be very great indeed."
- 3.10 CSJ strongly advocates a shift towards evidence-based government, in which funding decisions are based on clear, high quality evidence of impact value, with SROI cited as a "more rigorous approach to performance management while attempting to capture the social and environmental impacts of public spending."
- 3.11 The rationale for adopting SROI may be applied equally strongly to employers, who may rightly expect organisations such as WLL to demonstrate that their support is delivering real value to the local community and society as a whole.

## Addressing issues concerning the use of SROI

- 3.12 Overall, it is felt that SROI is a vital tool to provide the Third Sector funded bodies such as WLL with a means to evaluate its wider contribution to Society. However, there are several issues to consider when applying this, that are worthy of mention:
- a. SROI, as it is typically presented, tends to ignore the risks associated with the benefits generated. In the course of our work with WLL, the project representatives were encouraged to consider the achievable benefit created, and to build in reductions to assumptions to account for risks, where necessary;
  - b. A robust SROI analysis must consider the proximity of the benefit created to the actions of the organisation that is seeking to claim ownership of that benefit. The project representatives were

<sup>J</sup> Source: Brien, S., 2011, Outcome-Based Government, London, Centre for Social Justice

encouraged to focus only on outcomes that are directly attributable to their activities and, where necessary, obtained evidence of the link between the outcome and WLL's activities;

- c. SROI is typically presented as a ratio of the value of the benefits achieved per pound spent to achieve those benefits. This may be useful internally to each organisation as a measure of performance relative to prior periods. However, the use of this ratio to compare organisations is inherently flawed due to sector and organisation-specific factors that reduce the level of comparability between organisations. Hence, the results of this report are not presented in the form of a ratio;
- d. There is a danger that organisations seeking to evaluate their impact using SROI may create calculations that are extremely granular to the extent that they become open to accusations of 'spurious accuracy'. In this exercise, a smaller number of key assumptions have been identified by the project representatives during discussions facilitated by Baker Tilly to develop a prudent result at a high level. It is considered important to present a more defensible, and prudent analysis than one which is overly complicated and risks overstatement; and
- e. SROI does not take account of the interrelationship of Social Impact and brand value. By creating greater Social Impact, the recognition and perceived quality of an organisation's brand is likely to improve, thus increasing the value of that brand. In turn an entity with a stronger brand may use that to enhance the social impact of its project work. It is noted that WLL believe that it has a strong, well-recognised brand in the area it serves, which augments its ability to deliver positive outcomes.

## Research methodologies

- 3.13 We have worked with the SROI Team from WLL to carry out an Action Research process (see Appendix B). An initial meeting was held with the SROI Team to determine the key services that the relevant WLL projects and centres provide, the outcomes of these services and the beneficiaries. Three further meetings were held, interspersed with the SROI Team testing out the conclusions from each interview by practical application in their work, then reporting the results back to the next meeting.
- 3.14 Based on this research, the SROI Team was consulted on potential means of evaluating the impact of these services by substituting financial measures (proxies) for the outcomes described. We have relied on the data and assumptions provided by staff at WLL in our analysis; Baker Tilly has acted to facilitate WLL's understanding of the methodologies used to evaluate the impact, however, we are not responsible for the assumptions used in the evaluations shown in this report.

## 4. Overview of evaluated activities

### Understanding the services

- 4.1 For the purposes of this report, we have not set out to evaluate the impact of all services provided by WLL. Rather, focus has been on the key projects and outcomes that WLL believe to be representative of the majority of its work.
- 4.2 As part of this study, the benefits to the local NHS and the wider economy resulting from increased participation in regular exercise have been evaluated. In so doing, the data used has been extended to cover the user base of WLL as a whole rather than focusing only on a number of the centres that WLL operates.
- 4.3 This evaluation therefore does not extend to specific funded projects other than those noted in the report, together with swimming, NHS referrals, Ageing Well programmes and Xcite membership. It does include the evaluated benefits from all, or the majority of, generally funded activities i.e. general use of the sporting facilities by the members / users thereof.
- 4.4 For each project and centre, discussions were held with the SROI Team in relation to:
- a. The nature of the service(s) provided;
  - b. The identification of the direct and indirect beneficiaries;
  - c. The nature of the benefits derived from the service;
  - d. Where relevant, the identification of other agencies or companies that could provide a similar service; and
  - e. The likely cost of providing equivalent services through alternative sources.
- 4.5 This discussion was developed to consider how financial measures can be substituted into the place of service outcomes, so that they can be measured. The results of this discussion are shown below for each project and the three centres.
- 4.6 For the purposes of mapping outcomes in this study, they have been defined as 'primary' and 'secondary' outcomes. These represent:
- ▶ **Primary outcomes:** the outcomes that directly and immediately result from the intervention in question; and
  - ▶ **Secondary outcomes:** the long term results that flow from primary outcomes.
- 4.7 This study does not include outcomes further removed from the activity than 'secondary' outcomes, as to do so would be to lose proximity to the intervention that is being measured. Taking the example above, increased productivity is likely to flow into the State either by way of taxes on personal or corporate income. That increased tax revenue may then be put to use to increase other State interventions, which in turn would create value to society. Whilst undoubtedly valuable, such outcomes are not sufficiently proximate to the original intervention for a meaningful evaluation to be carried out. This is consistent with the seven principles of SROI evaluation "do not over-claim".

## Overview of evaluated services

### Swimming programme

- 4.8 The swimming programme is broken down into three key projects:
- a. Swimming lessons for schools;
  - b. Private swimming lessons; and
  - c. Free swimming for under 16's during school holidays and on Friday afternoons (after school).

#### Swimming Lessons for schools

- 4.9 WLL provides swimming lessons for 72 primary schools within West Lothian during the school year. School children of P4 - P7 age participate within this programme of which 67,000 visits were recorded during 2010/11. All swimming lessons are provided in WLL's six pools.

#### Private swimming lessons

- 4.10 WLL has been delivering swimming lessons within it's swimming pools for over a decade and have been tried, tested and trusted by thousands of parents and children alike with a superb track record in promoting quality, consistency, flexibility and most of all a safe and fun environment for children and adults to learn such a vital life skill. The swimming lesson programme operates 50 weeks a year providing lessons for all age groups.

#### Free swimming for under 16's during school holidays and on Friday afternoons (after school).

- 4.11 Free swimming is delivered in all of West Lothian Leisure swimming pools over school holiday periods including Friday afternoons (during school term), for all WLL resident children under the age of 16 years old, funded by WLC. The number of visits recorded in 2010/11 was 122,355.
- 4.12 An overview of these projects and their outcomes is shown below on the following page.

Project/programme	Primary outcomes	Secondary (long-term) outcomes	Beneficiaries
<b>Swimming lessons for schools:</b> Daytime swimming lessons are run for schools during term time, using qualified instructors provided by WLL.	Improved health through taking part in exercise through swimming.  Schools that would otherwise pay commercial rates achieve a saving (as WLL rates are lower than commercial providers).	Encourage a life long healthy lifestyle through participating in exercise through swimming.  Better use of West Lothian council funds by efficiently using existing swimming pools rather than building new pools specifically for individual schools.	Participants  NHS  Government and West Lothian council
<b>Private swimming lessons:</b> Weekly swimming lessons are provided to users of all ages and abilities.	Discounted rates generate savings for those users that would otherwise learn at a commercial provider.	Local NHS costs will reduce (if the participants incorporate swimming as part of their regular exercise programme) as their health improves reducing the need for healthcare interventions.	Participants  NHS
<b>School holiday programme and after school free swimming:</b> Free of charge access is provided to children under age of 16 during certain holiday periods and certain Friday's during school term. During 2010/11 c67,000 visits were made to WLL swimming venues.	Young people are encouraged to participate in sports outside school PE lessons.  Parents are able to save on some holiday childcare costs without taking time off work.	Continued encouragement for children to adopt a healthy lifestyle through regular exercise.  The Government through ensuring that the GVA reduction through parents taking time off work to provide child care is kept to a minimum.	Children  Government and West Lothian council  Parents

4.13 WLL takes referrals from GPs and other NHS professionals in relation to pre and post operative/treatment exercise regimes, including conditions such as:

- ▶ Pulmonary rehabilitation;
- ▶ Cancer rehabilitation;
- ▶ Cystic fibrosis;
- ▶ Autism;
- ▶ Diabetes;



- ▶ Obesity;
  - ▶ Neurological disorders;
  - ▶ Smoking related conditions; and
  - ▶ Mental health problems.
- 4.14 WLL in partnership with NHS Lothian and a number of other agencies operate an exercise referral scheme. The programmes within this are designed to give medical staff the opportunity to refer patients who could benefit from a prescribed Physical Activity Intervention. Through the “First Steps Programme” referred patients, after an initial consultation with WLL’s trained fitness instructors to assess their needs, are given a structured 12 week fitness programme. The referred patients are provided this service and use of WLL’s facilities at discounted prices.
- 4.15 Patients that require further assistance are placed on the “Further Steps Programme” which continues the structured exercise programme with regular reviews by WLL’s staff throughout the programme. Programmes can extend beyond a year with patients being reviewed typically at weeks 4, 12, 26, 52 & 64.
- 4.16 In addition, to the general exercise programme WLL provides specialist exercise programmes for conditions such as pulmonary and cancer rehab. In many cases these specialist exercise programmes are delivered direct to the community by WLL’s Health and Well being consultants through outreach programmes. Examples of outreach programmes include:
- ▶ Cancer rehab classes in partnership with McMillan Cancer;
  - ▶ Pulmonary rehab classes at Bathgate Primary Care centre;
  - ▶ Fitness instruction at St John’s hospital for acute mental health patients.
- 4.17 An overview of the key projects and outcomes is shown on the following page.

Project/programme	Primary outcomes	Secondary (long-term) outcomes	Beneficiaries
<b>Specialist medical Referrals (incorporating outreach programme):</b> Patients with acute conditions receive tailored exercise programmes and guidance provided by WLL's Health and Wellbeing consultants (in many cases through outreach programmes).	The patients receive reduced price access to WLL's facilities and receive tailored exercise programmes specific to their conditions.	The long term health of patients is improved which results in a reduction in NHS costs through reduced medical interventions.  Exercise regimes promote faster recovery, therefore helping patients back to work earlier. This benefits the economy	Patients  NHS  Economy benefits through the quicker return of patients to employment.
<b>Exercise Referrals:</b> Patients that are at risk of suffering from health problems as a result of family history or lifestyle are referred for an initial 12 week period which can be extended if necessary. Referred patients receive reduced fees and personal guidance and advice from WLL's qualified staff.	Patients received discounted access to WLL's facilities promoting physical activity with the associated health benefits.	Adoption of regular exercise as part of the patients' lifestyle reduces healthcare costs through a reduction in medical interventions.	Patients  NHS

- 4.18 In addition to the above outcomes, the local NHS benefits from access to high quality facilities that it would otherwise need to fund internally, or cancel the programmes, as most private health clubs lack the specialist staff needed to deliver these programmes.
- 4.19 The NHS programme also includes the work of WLL's Fitness Motivators, who visit schools to encourage increased participation in exercise amongst young people.
- 4.20 In general terms, it is expected that increased participation in physical activity leads to an improvement in users physical and mental health status (both in the present and in the future) which should result in reduction in NHS costs.

### Xcite membership scheme

- 4.21 The Xcite membership scheme which currently has some 13,000 members, offers a flexible range of packages to accommodate the requirements of its diverse customer base. Customers can enjoy access to WLL managed facilities and classes by paying a monthly or annual fee. The available packages are:
- ▶ Premier (top package includes all activities and fitness classes);
  - ▶ Gold (as premier excluding fitness classes);
  - ▶ Silver (as gold but only available Monday – Friday to 4.30pm);
  - ▶ Prime of Life (60+ membership and offers all activities as per premier package);
  - ▶ NRG (kids package and can be added to an adult membership or be standalone);
  - ▶ XT (Student membership with activities as per gold package); and

- ▶ Corporate (20% discount for all large local government organisations including NHS, Council, Police, Fire etc.).

4.22 WLL believe that the flexible range of packages provided under the Xcite membership scheme has been a key component in encouraging the population of West Lothian to use its facilities and adopt exercise as part of a healthy lifestyle. In addition the membership take up has been successful based on the percentage of the population who are members.

a. An overview of the key projects and outcomes is shown below:

Project/programme	Primary outcomes	Secondary (long-term) outcomes	Beneficiaries
<b>Xcite:</b> Membership scheme provides unlimited access to WLL's facilities.	Users gain access to high quality facilities at a discounted rate compared to equivalent commercial providers.	Users meet their regular exercise needs, thereby improving their health and fitness.  Promotes the adoption of exercise as part of the user's lifestyle which should lead to reduced medical interventions and hence a reduction in NHS costs.	Users  NHS

## Ageing Well Programme

4.23 The Ageing Well Programme offers a wide range of activities which include walking groups, dance classes and tea dances. These programmes are provided primarily by WLL's staff within the community as outreach programmes targeting the over 60s. The programme of activities was conducted throughout the year with c21,000 individuals taking part in the activities. The British Heart Foundation<sup>K</sup> has documented that physical activity for the over 60's has a positive impact on the physical and mental well being of the over 60s and the UK economy. Benefits include:

- ▶ Disease prevention and management;
- ▶ Maintaining independence, improving the quality of life, and 'successful ageing'; and
- ▶ Opportunities for significant savings to health and social care services.

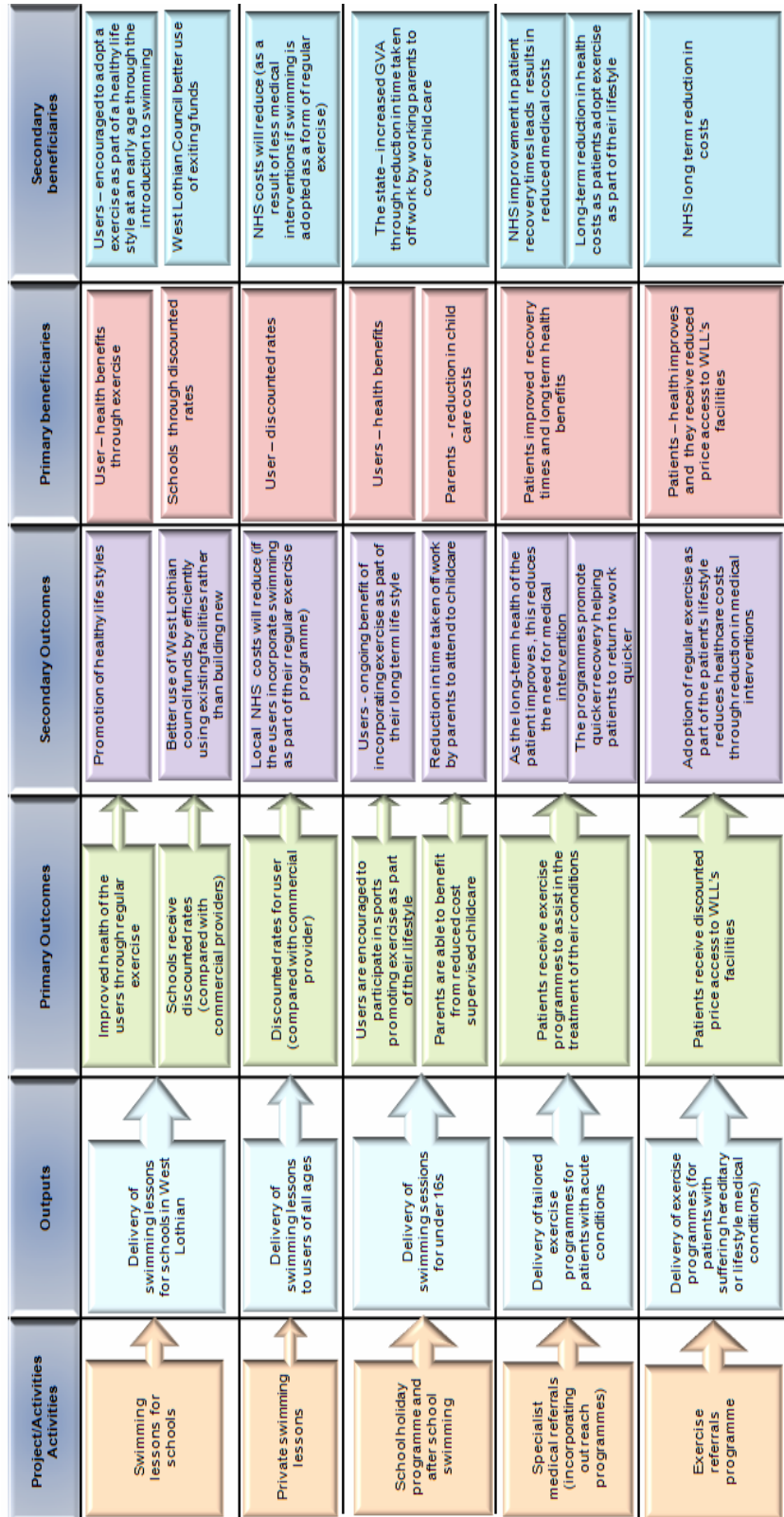
4.24 An overview of the key projects and outcomes is shown on the following page.

<sup>K</sup> Source: British Heart Foundation National Centre – Making the case for physical activity in older people

Project/programme	Primary outcomes	Secondary (long-term) outcomes	Beneficiaries
Ageing Well Programme: <i>A diverse range of activities and events targeted at the over 60s of West Lothian (in many cases provided at venues with in the community).</i>	Users benefit directly in terms of health and mental well being through participating in the activities.  Creates a support circle of friends for the individuals and fosters a sense of community.	NHS and social interventions are reduced by maintaining the physical and mental health of the user and allowing them to retain an independent lifestyle.	Users  NHS and society

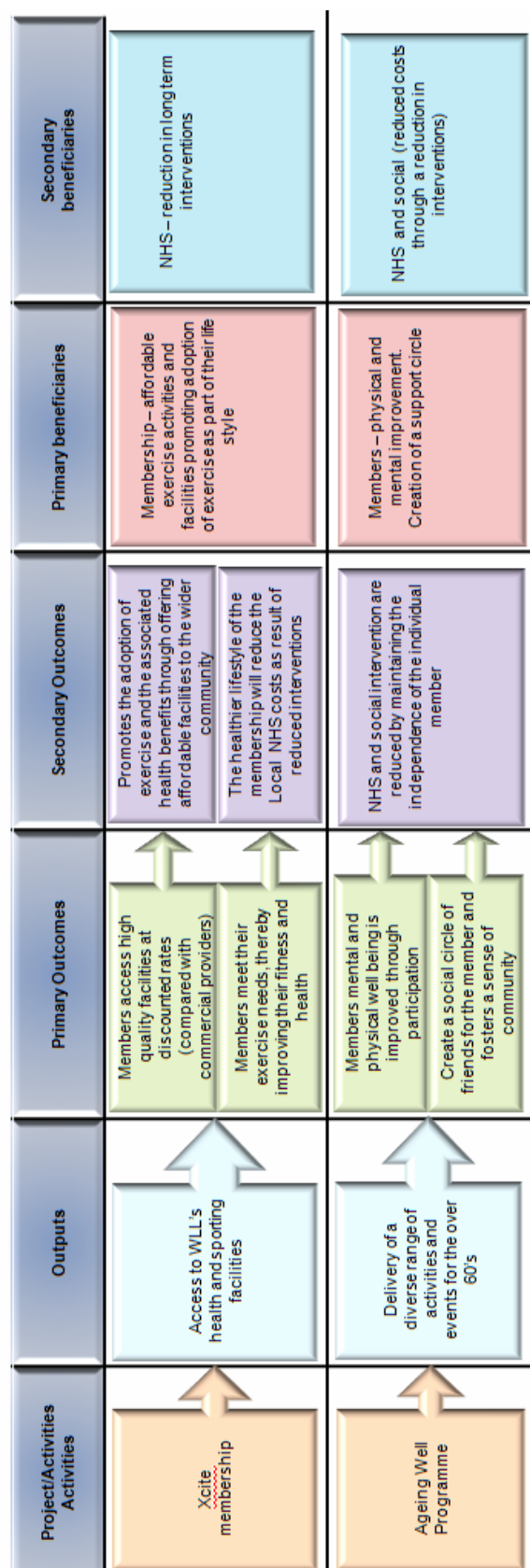
## Summary map of outcomes

4.25 The chart below serves to draw together each of WLL's projects included in this study by highlighting the key activities and outputs together with the primary and secondary outcomes associated with them.





## Summary map of outcomes (cont'd)



- 4.26 Detailed descriptions of the approaches used to evaluate the above outcomes are discussed in detail in section 5.
- 4.27 As noted in section 2.14, the secondary benefits do not include an evaluation of the benefits to the wider family of the principal beneficiary through the services provided by WLL. In particular the following wider benefits have not been evaluated:
- a. the impact on children in terms of discouraging lifestyles that tend towards obesity in the next generation; and
  - b. the impact on the education and development of children caused through obesity or ill health as a result of a lack of physical activity.

### **Rationale for outcomes measurement approaches identified**

- 4.28 Given the primary and secondary outcomes shown above, the following key outcomes have been evaluated, several of which are common to a number of areas of work included in this study:
- 4.29 *Reduced cost of healthcare interventions by the NHS:* Academic research has shown that physical inactivity, being overweight, and obesity increases the cost burden on the NHS. This is particularly evident in Scotland with 65.1%<sup>L</sup> of the population overweight and 26.8% classified as obese. As indicated above, WLL's primary focus is on providing facilities and activities to enable the community of West Lothian to improve its health through physical activity. Therefore reduced healthcare costs are applied throughout all of WLL's projects/activities contained within this study.
- 4.30 *Productivity gains through reduced sickness absence:* The provision of WLL's facilities and activities and the uptake by the community which will lead to improved fitness and therefore health will have positive economic benefits due to a reduction in avoidable sickness absence in the workplace.
- 4.31 *Beneficiary savings due to the discounted access to the facilities:* WLL provides a wide range of activities and facilities to encourage a high level of uptake in the community and to make exercise a key part of the individual resident's ongoing lifestyle. The pricing policy of activities provided has to cater for a wide spread of income levels within the community which means that users obtain discounted prices in comparison to commercial providers. These discounts are reflected in several of the WLL's projects contained within this study.
- 4.32 *Savings in relation to cost interventions by other agencies:* WLL's Ageing Well Programme creates benefits beyond improved health benefits through exercise. With the Ageing Well programme creating a support group for the individuals within the group leading to improved mental and physical health which enables the individual to sustain an independent lifestyle. In addition to the reduction in NHS intervention there is also a reduction in social cost interventions.

<sup>L</sup> Source: Scottish Government – Health Survey 2010, [www.scotland.gov.uk](http://www.scotland.gov.uk)

## 5. Summary of evaluation approaches

- 5.1 This section provides an overview of the outcomes of the projects to be evaluated. In conjunction with the SROI Team, it was considered how these outcomes may be measured using the three key evaluation approaches:
- a. *Economic benefit created*: where there is an impact on earning capacity or productivity;
  - b. *Costs saved or not wasted*: where the intervention results in a saving, either in the cost of another intervention or in a consequential cost (e.g. introducing prevention to save on the cost of a cure). This may be seen in either removing the need for or increasing the effectiveness of an alternative intervention; and
  - c. *Alternative or cheaper sourcing*: where one intervention directly replaces another more expensive one.
- 5.2 As illustrated in section 4, that the evaluated outcomes fall into 4 main categories (subject to minor variations in the nature of project-specific assumptions). These categories are:
- a. Reduced costs of healthcare interventions by the NHS;
  - b. Productivity gains from reduced sickness absence;
  - c. Beneficiary savings due to discounted access to facilities; and
  - d. Savings in the cost of interventions by other agencies.
- 5.3 The table below matches the broad outcome categories described above to the three evaluation approaches set out in section 5.1 and describes, in general terms, the approach that has been taken to evaluate these outcomes. The following should be read in conjunction with the detailed evaluation model analysis, assumptions and external references set out in Appendix D.

Outcome	Model(s) used	Approach
Reduced costs of healthcare interventions for the NHS	Costs saved or not wasted	<p>Academic research has shown that physical inactivity, being overweight, and obesity increases the cost burden on the NHS. This is particularly evident in Scotland with 65.1%<sup>M</sup> of the population overweight and 26.8% classified as obese. Annual cost per patient to the NHS has been estimated at between £400 and £1,575. Detailed reasoning behind the assumptions applied in the models is included in Appendix D</p> <p>The following has been derived from the WLL's management information systems:</p> <ul style="list-style-type: none"> <li>▶ The number of members;</li> <li>▶ The average attendance of members;</li> <li>▶ The age profile of the membership; and</li> <li>▶ The number of non members attending.</li> </ul> <p>The attendance of members was analysed to ensure that they were attending on a regular enough basis to accumulate health benefits. The average attendance was c65 times per year for members. In the absence of attendance details for non members, the SROI Team has assumed that non members attend c49 times per year.</p> <p>The total number of users has been calculated as the number of members together with an implied membership for non members (based on the total number of non member visits divided by the assumed average attendance of 49 times per year).</p> <p><b>Deadweight:</b> A judgment discount (by the SROI Team) has been applied to the number of members to account for the fact that they would use other facilities or another form of exercise. This applied discount ranges from 25% to 50% with the higher discount rates applying to most mobile age group of 16 to 39 years of age. In relation to non members it has been assumed that no deduction has been made to this group as they have made a decision to use the facilities of WLL.</p> <p><b>Users/beneficiaries:</b> After deducting for deadweight the number of beneficiaries amounted to 27,598 ("implied membership"). The age profile of this group has been determined based on the age profile of WLL's membership which splits the user group into 6 cohorts.</p> <p><b>Healthcare benefit per cohort:</b> It has been assumed by the SROI Team that the benefit per user ranges from £250 to £750 (this compares with a research value of £400 to £1,575 per patient as noted above). It has been assumed that benefit increases as the age of the user group increases inline with the increase in NHS interventions as a person gets older.</p> <p><b>Alternative attribution:</b> A judgment deduction of 25% has been made to the calculated benefit to account for benefits attributable to other bodies such as the NHS and sports clubs. It is the judgment of the SROI Team that the provision of the facilities and the trained staff to operate the facilities are the main factors behind the generation of the benefit therefore they have assumed that 75% of the benefit relates to WLL.</p>

<sup>M</sup> Source: Scottish Government – Health Survey 2010, [www.scotland.gov.uk](http://www.scotland.gov.uk)

Outcome	Model(s) used	Approach
Economic benefit increased productivity (due to reduction in avoidable sickness days)	Cost saving or not wasted	<p><b>Displacement:</b> Whilst the local council funding for WLL could be used for other purposes, the cost of funding is not felt to represent displacement, as the benefits of preventing health problems is lower in long term real costs than not addressing health and other problems through exercise. Therefore representing a long term cost saving.</p> <p>In addition to the burden on the NHS through physical inactivity, the economy is also impacted through lost production through avoidable sick days in the work place. The potential damage to the economy of the local community in the absence of access to WLL's facilities for regular exercise in terms of lost productivity due to avoidable sickness days has been evaluated.</p> <p><b>Beneficiaries:</b> Defined as the implied membership after deducting the under 16 years of age cohort and accounting for the economically active profile of percentage of 78% for West Lothian<sup>N</sup>.</p> <p>Economic damage of one day's avoidable sick day has been based the reported annual GVA for West Lothian of £37,500 per annum<sup>O</sup>.</p> <p>Avoidable sick days has been estimated at 2.16<sup>P</sup> days per annum and is supported by research conducted by North Lanarkshire Leisure Limited in relation to a reduction in sick days of its corporate members' employees and discussions with NHS Lanarkshire. This research is elaborated upon in Appendix D.</p> <p><b>Alternative attribution:</b> A judgment deduction of 60% has been made by the SROI Team to account for the role of the NHS and other agencies in promoting healthier lifestyles. The deduction also takes into account the proactive role of employers in promoting healthy lifestyles through exercise.</p>
General NHS referral programme – direct savings to patients	Alternative costs	<p>The programme deals with long term chronic health conditions such as; mental health, back pain and other muscular conditions. The initial programme ("First Step") runs for a period of 12 weeks with further 52 weeks available if required ("Further Steps phase 1 &amp; 2"). Each phase in the Further Steps programme equates to 24 weeks.</p> <p>The following information was derived from WLL's management information system:</p> <ul style="list-style-type: none"> <li>▶ The average number of referrals to First Steps were 1,341;</li> <li>▶ The percentage of referrals continue from First Steps to Further Steps- phase 1 and 2 equated to 30% and then 25%;</li> <li>▶ 24 free sessions are provided to each patient under the First Steps programme; and</li> <li>▶ Further Steps phase 1 &amp; 2 – the average number of visits per month per patient is 5.09</li> </ul>

<sup>N</sup> Source: Nomis July 2008 – June 2009

<sup>O</sup> Source: Nomis July 2008 – June 2009

<sup>P</sup> Source: [www.bakertilly.co.uk/publications/Pages/Social-impact.aspx](http://www.bakertilly.co.uk/publications/Pages/Social-impact.aspx)

Outcome	Model(s) used	Approach
General NHS referral programme – NHS cost savings	Cost savings or not wasted	<p><b>Alternative cost:</b> In providing an alternative cost the SROI Team has compared the actual cost they would charge a normal member for each session, which equates to a cost saving per patient per session of £5 (during the 24 free sessions) and £2.85 (during the Further Steps phase 1 and 2) .</p> <p><b>Deadweight:</b> Given the long term chronic nature of the conditions associated with this programme, the SROI Team felt that it is highly unlikely that patients would be able to achieve an improvement on their own without incurring substantial costs. Hence, the SROI Team believe that no deduction is required in relation to deadweight.</p> <p><b>Displacement:</b> In the judgment of the SROI Team - no deduction is necessary as the provision of the service has no detrimental impact elsewhere in society.</p> <p><b>Number of referrals:</b> Based on entrants into the First Step programme.</p> <p><b>Cost saving per patient:</b> Given the higher degree of medical intervention per patient as a result of the long-term chronic nature of the conditions, it is anticipated that cost saving per patient is significantly higher than £400 to £1,575 per year illustrated under reduced NHS cost intervention. In the absence of conclusive data the SROI Team has estimated a cost of £2,500 per annum per referral. Supporting information in relation to this assumption is detailed in Appendix D.</p> <p><b>Alternative attribution:</b> A judgment deduction (by the SROI team) of 50% has been made to account for the benefits attributable to other bodies such as the NHS. The deduction also illustrates how the programme works in partnership with the NHS and other agencies.</p> <p><b>Deadweight:</b> Given the long term chronic nature of the conditions associated with this programme, the SROI Team felt that it is highly unlikely that patients would be able to achieve an improvement on their own without the combined role of the NHS and WLL in the treatment of their conditions. Hence, the SROI Team believe that no deduction is required in relation to deadweight.</p> <p><b>Displacement:</b> In the judgment of the SROI Team - no deduction is necessary as the provision of the service has no detrimental impact elsewhere in society.</p>
NHS referral programme –acute care	NHS cost savings	<p>The acute care programme deals primarily with post operative conditions such stroke, cardiac and pulmonary rehab (and is incorporated as part of NHS treatment).</p> <p><b>Number of referrals per annum:</b> 270 sourced from WLL's management information system.</p> <p><b>Cost saving per patient:</b> In the absence of conclusive data the cost saving has been estimated at £3,500 per annum per referral. The cost saving takes into account the severity of the conditions being addressed and the considerable cost of medical intervention. Supporting information in relation to this assumption is detailed in Appendix D.</p>



Outcome	Model(s) used	Approach
NHS referral programme – acute care	Economic gains	<p><b>Alternative attribution:</b> A judgment deduction (by the SROI Team) of 50% has been made to account for the benefits attributable to other bodies such as the NHS. The deduction also illustrates how the programme works in partnership with, the NHS and other agencies.</p> <p><b>Deadweight:</b> Given the severity of the conditions being addressed, the SROI Team believe that without their intervention the patient's rehabilitation would be significantly protracted and hence considerably increase NHS costs. Based on the aforementioned the SROI Team believe that no deduction is required in relation to deadweight.</p> <p><b>Displacement:</b> In the judgment of the SROI Team - no deduction is necessary as the provision of the programme has no detrimental impact elsewhere in society</p> <p>A goal of the programme is to hasten the return to employment of each patient.</p> <p><b>Number of beneficiaries:</b> Being the total number of referrals of 270.</p> <p>In the absence of conclusive data, the SROI Team has estimated that, on average, intervention alongside NHS treatment results in each patient returning to employment on average 5 days earlier than without intervention.</p> <p>GVA impact due to the early return to employment: Based on West Lothian's GVA of £37,500 per annum<sup>Q</sup> would equate to £103 per day benefit.</p> <p><b>Alternative attribution:</b> A judgment deduction of 50% (by the SROI Team) has been made to account for the benefits attributable to other bodies such as the NHS.</p> <p><b>Deadweight:</b> Given the severity of the conditions being addressed and therefore the negligible chance of improvement without intervention, the SROI Team believe that no deduction is required in relation to deadweight.</p> <p><b>Displacement:</b> In the judgment of the SROI Team - no deduction is necessary as the provision of the programme has no detrimental impact elsewhere in society.</p>
Outreach Steps to health and well being	NHS cost saving	<p>The outreach programme treats conditions such as mental health and pulmonary rehab. These programmes reduce the requirement for NHS intervention.</p> <p><b>Number of sessions provided:</b> Per annum: 624 (based on data gathered from WLL's management information system).</p> <p><b>Average number of attendees per session:</b> 6 (based on data gathered from WLL's management information system).</p> <p><b>Average cost of delivery per session per patient:</b> Based on the actual delivery for cost for the programme, the estimated cost is per patient is £2.75 compared with an NHS cost of £7.69 (based on the SROI Teams' consultation with the local NHS).</p> <p><b>Alternative attribution:</b> Given that this service is provided by WLL instead of the NHS, in the judgment of the SROI team - no deduction is required for alternative attribution.</p>

<sup>Q</sup> Source: Nomis July 2008 – June 2009

Outcome	Model(s) used	Approach
Ageing Well Programme	Alternative cost	<p><b>Deadweight:</b> Given the conditions being addressed and the necessary requirement for intervention, the SROI Team believe that no deduction is required in relation to deadweight.</p> <p><b>Displacement:</b> In the judgment of the SROI Team - no deduction is necessary as the provision of the programme has no detrimental impact elsewhere in society.</p> <p>The Ageing Well Programme offers a wide range of activities. These activities are provided primarily by WLL's staff within the community as outreach programmes targeting the over 60s.</p> <p><b>Number of users:</b> c21,000 individuals taking part in the activities (based on information held by WLL).</p> <p><b>Cost comparison:</b> The cost of providing the activities equates to circa £17k compared with £89k of cost borne directly by WLL (based on internal analysis by the SROI Team).</p> <p><b>Deadweight:</b> The SROI Team believe that any impact in relation to deadweight would be negligible so no deduction has been made.</p> <p><b>Alternative attribution:</b> Based on the judgment of the SROI Team - no deduction was felt necessary as negligible involvement from other agencies.</p> <p><b>Displacement:</b> In the judgment of the SROI Team - no deduction is necessary as the provision of the service has no detrimental impact elsewhere in society.</p>
Ageing Well Programme - Savings to social and economic costs	Costs saving not wasted	<p>The Ageing Well Programme through physical activity promotes physical and mental well being for its target audience. For the purpose of this study the evaluation of this programme on has been limited to cost savings in relation to reducing interventions from mental health disorders.</p> <p>The social and economic cost of dealing with mental health disorders in Scotland in 2010 was estimated at circa £7.5 billion<sup>R</sup> (after deducting economic output losses, as the members are predominantly retired) with UK incidence of 25%<sup>S</sup> of the population suffering from some form of mental illness. Taking the aforementioned into account together with the over 16 years of age population of Scotland equates to circa £8.8k savings per beneficiary.</p> <p><b>Deadweight:</b> Compensating for the degree of mental health - The saving per beneficiary of £8.8k is based on an average cost which covers the full range of mental problems from moderate to severe. Given the age of the beneficiaries and the heightened prevalence of dementia and other severe mental disorders, it is likely that the cost of treating these disorders would significantly exceed the average. However, the SROI Team has assumed that the average is applicable and have further discounted this by 20% to ensure prudence in their estimated benefit evaluation. The impact of the deduction is to reduce the saving per beneficiary to £7k.</p>

<sup>R</sup> Source: Centre for Mental Health 2010 study on the Social and Economic costs of mental health disorders to Scotland

<sup>S</sup> Source: Mental Health Foundation, Mental Health Statistic (UK)

Outcome	Model(s) used	Approach
		<p><b>Deadweight:</b> As with any mental illness there is always the potential for occurrence regardless of any intervention or not. In light of any supporting evidence in relation to incidence rates, the SROI Team has assumed a further deduction of 50% to the average saving per beneficiary of £8.8k. The impact of the deduction is to reduce the saving per beneficiary to £3.5k.</p> <p><b>Alternative attribution:</b> Although the members spend a relatively limited time within the programme, the SROI Team believe that as well as the benefits of the activities undertaken, the programme also plays a key role in assisting the members to form a circle of friends which act as a support group for each other which continues to reinforce the physical and mental health benefits of the programme beyond the organised group activities. However, the SROI Team recognises the role of other agencies and the group members themselves in the creation of the evaluated benefit and has made a deduction of 60% to account for alternative attribution. Given the aforementioned the SROI Team believe that the reported benefits are prudent and comply with ethos of the study in delivering an “at least” figure for the programme.</p> <p><b>Displacement:</b> In the judgment of the SROI team - no deduction is required as the provision of WLL facilities and service has no detrimental impact elsewhere in society.</p>
School swimming programme – savings to schools	Alternative supplier costs	<p>WLL provides a comprehensive swimming programme for 72 schools within West Lothian. The programme provides reduced price access in comparison to a commercial provider.</p> <p><b>Cost comparative:</b> WLL charges each school £504 for a 12 week session compared to a commercial provider cost of £2,016 (based on research conducted by the SROI Team).</p> <p><b>Number of 12 weeks session taken per each school:</b> 3 (Based the SROI Team’s review of internally sourced data).</p> <p><b>Deadweight:</b> A deduction of 40% has been made to account for schools that could or would use alternative facilities. The SROI Team believe that this assumption is reasonable given the demand levels noted above and the limited capacity within the commercial sector. The aforementioned should also be considered alongside the significant increased cost of West Lothian schools using a commercial provider in comparison with WLL.</p> <p><b>Alternative attribution:</b> In the judgment of the SROI Team - no deduction is required as no other material party is involved in the delivery of the programme.</p> <p><b>Displacement:</b> In the judgment of the SROI Team - no deduction is necessary as the provision of the service has no detrimental impact elsewhere in society.</p>
School swimming programme – diverted teacher time	Cost saved or not wasted	<p>The provision of supervised swimming lessons allows the re-direction of teacher time to other work, compared to the school providing an in house physical education lesson.</p> <p><b>Diverted teacher time per annum per school:</b> The SROI Team has estimated that the total time teacher diverted per school is circa 72 hours (based on 36 weeks year* 2 teachers per session * 1 hour per week).</p>

Outcome	Model(s) used	Approach
Swimming – holiday and after school swimming (free of charge) – child care saving	Cost saved or not wasted	<p><b>Cost of teacher per hour (salary):</b> Estimated at circa £18 per hour.</p> <p><b>Deadweight:</b> Has been accounted through the savings to schools.</p> <p><b>Alternative attribution:</b> Has been accounted through the savings to schools (as shown above).</p> <p><b>Displacement:</b> In the judgment of the SROI Team - no deduction is required in relation to displacement as the identified cost savings would not arise if this service was provided in house by each school.</p> <p>In addition to the above the holiday and after school swimming programme also provides costs saving to the participants.</p> <p>The following information has been collated from WLL's management information systems:</p> <ul style="list-style-type: none"> <li>▶ Number of children using free sessions per annum: Amounts to 5,653. Typical duration per session or visit 2 hours per day.</li> </ul> <p><b>Cost per session:</b> £2 per session based on WLL 's normal charges.</p> <p><b>Deadweight:</b> A judgment deduction (by the SROI Team) of 50% is has been made to account for a potential reduction in participants if a charge was to be applied. The SROI Team believe that deduction is extremely prudent given the service provided and the timing of service to meet the requirements of working parents.</p> <p><b>Alternative attribution:</b> In the judgment of the SROI Team - no deduction for alternative attribution was felt to be needed as no other agencies are involved.</p> <p><b>Displacement:</b> In the judgment of the SROI Team - no deduction is required as the provision of WLL facilities and service has no detrimental impact elsewhere in society.</p>
Swimming lessons	Alternative supplier costs	<p>WLL provides swimming lessons for children and adults from its 6 swimming venues.</p> <p>The following information has been collated from WLL's management information systems:</p> <ul style="list-style-type: none"> <li>▶ Total number of participants amounted to 18,825; and</li> <li>▶ Average number of lessons taken by each participant is 10.</li> </ul> <p><b>Cost comparison:</b> The average WLL cost per lesson is £3.20 compared with £7.00 for a commercial provider (based on research conducted by the SROI Team).</p> <p><b>Deadweight:</b> Has been reflected in the comparison between WLL's cost per lesson and that of a representative commercial provider.</p> <p><b>Alternative attribution:</b> In the judgment of the SROI Team - no deduction for alternative attribution was felt to be needed as no other agencies are involved in the provision of swimming sessions.</p>

Outcome	Model(s) used	Approach
Savings to beneficiaries due to reduced Xcite membership fees	Alternative cost	<p><b>Displacement:</b> In the judgment of the SROI Team - no deduction is required as the provision of the service has no detrimental impact elsewhere in society.</p> <p>The members benefit directly through receiving reduced rates in comparison with the commercial providers (the alternative cost).</p> <p><b>Price comparison:</b> Comparative data provided by the SROI Team indicates that the average commercial providers' monthly membership is £55 compared with £31 for WLL.</p> <p><b>Deadweight:</b> A judgmental average deduction of 39% (by the SROI Team) has been made to the implied membership to account for members who would use alternative facilities or another form of exercise. This deduction takes into account the age profile of the members with the 16 to 39 age group having the highest deduction at 45% to 50% (representing the increased mobility of this group and spending power which would allow them to join other facilities or take part in other forms of exercise) and the lowest deduction being in over 60s at 25%.</p> <p><b>Alternative attribution:</b> In the judgment of the SROI Team - no material intervention by any other party therefore no deduction required.</p> <p><b>Displacement:</b> In the judgment of the SROI Team - no deduction is necessary as the provision of the service has no detrimental impact elsewhere in society.</p>
Savings to beneficiaries due to discounted membership fees	Alternative cost	<p>In addition to the reduced membership fees offered to its members, WLL also provides an enhanced discount scheme for the unemployed. The number of members using this facility was 937 (based on data obtained from WLL's management information system).</p> <p><b>Price comparison:</b> Comparative data compiled by the SROI Team indicates that the average commercial providers' monthly membership is £55 compared with £15.50 for WLL.</p> <p><b>Deadweight:</b> A judgment deduction of 25% (by the SROI Team) has been made to the membership to account for members who could or would use alternative facilities or another form of exercise. The deadweight percentage has decreased in comparison to normal members as it is assumed that due to the limited spending power of this group, the likelihood of them using alternative facilities would decrease.</p> <p><b>Alternative attribution:</b> In the judgment of the SROI Team - no material intervention by any other party therefore no deduction is required.</p> <p><b>Displacement:</b> In the judgment of the SROI Team - no deduction is necessary as the provision of the service has no detrimental impact elsewhere in society.</p>

## Avoidance of double-counting

- 5.4 The economic benefits model has been used several times in this evaluation. The number of visits used in the main model includes visits by users on exercise referrals from the NHS, sports club members and users of swimming lessons which in turn are included separately alongside the main benefits model. In order to avoid double counting, we have excluded from the main economic benefits model:
- ▶ Members on exercise and specialist referrals;
  - ▶ Economic and healthcare benefits derived from swimming users; and
  - ▶ The healthcare benefits calculated for sports clubs.
- 5.5 Given that users either benefit from incremental gains from exercising or, for those that would exercise in any case, from achieving a cost saving compared to alternative, there is a clear interrelationship between the membership cost savings and economic benefits models. We have adjusted the number of beneficiaries in the economic benefits and cost saving models to ensure that the wider economic benefits only relate to those members that would be unlikely to join a commercial alternative if WLL did not exist, and cost savings only relate to those who would join an alternative. This reduces the risk of double-counting or overstating the value of benefits derived.
- 5.6 The broad assumption used is that around 61% of existing users would not participate in regular physical activity in the absence of WLL with the remaining 39% using an alternative sports facilities or participating in other forms of exercise. North Lanarkshire Leisure in its December 2010<sup>T</sup> SROI report indicated that c34% of the wider local population is likely to participate in activities equivalent to walking at least two miles per week (which is believed to be broadly comparable with West Lothian). It should be noted that this level of physical activity (walking two miles a week) is unlikely to meet the Government's five-a-week recommendation. Given the aforementioned, WLL believe that to say that 39% would achieve adequate exercise in the absence of WLL is a prudent assumption for the purpose of this evaluation.

<sup>T</sup> Source: Clifford, J., McCallum, S., and C. Theobald. (2010) North Lanarkshire Leisure – Social Impact Evaluation, , Glasgow, NLL, and Baker Tilly



## 6. Conclusion

### Results of this evaluation

- 6.1 Based on the results of our discussions with WLL, as summarised above, and on the results of the evaluation models (Appendix D), the evaluated benefits of the selected WLL activities may be summarised:

Project	Calculated benefits (£'000)
Savings to NHS and the wider economy (all sites)	9,824
NHS referral programme	2,448
Ageing well programme	311
Swimming activity programme	1,685
Xcite membership	2,656
<b>Total</b>	<b>16,923</b>

- 6.2 The table above shows total benefits from this evaluation to be circa £16.92 million per annum. WLL believe that this represents 66% of its activities. Benefits from other activities, particularly any projects run at sites that were not part of this study, would be incremental to the total shown above.
- 6.3 In the financial year ended 31 March 2011 WLL's total revenue was £8.66 million including £2.17 million from WLC in the form of a management fee and £76k from NHS Lothian for specific projects.
- 6.4 On this basis, the impact of the benefits evaluated exceeds WLL's total revenue for the financial year ended 31 March 2011 by at least £8.26 million and its funding from WLC by £14.75 million.
- 6.5 Note, this only includes the benefits calculated from the relevant areas of WLL as noted in the report therefore if all the areas of WLL were evaluated the benefits would be greater.

### Other outcomes not evaluated

- 6.6 We also note that, in common with most SROI evaluations, it is not practicable or cost-effective to evaluate every aspect of the effect of the projects. This relates often to the wider well-being and less proximate benefits from WLL's work. Hence the projects shown above may not reflect full evaluations of benefits including:
- ▶ Personal satisfaction and better social life (apart from participants in the Ageing Well Programme);
  - ▶ Improved educational outcomes;
  - ▶ Crime reduction;
  - ▶ Social inclusion;
  - ▶ Safety aspects of improved swimming confidence;
  - ▶ Wider tourism / hospitality aspects of events that WLL run and organise;
  - ▶ Brand value of WLL;
  - ▶ All the aspects of youth lifestyle inclusion and positive aspects of change;
  - ▶ Enhancing the environment; and
  - ▶ Development of professional sportspeople (including sport specific coaching) may encourage wider participation.

- 6.7 During the course of our meetings with WLL, it has become clear that a key outcome of its work is an increase in participation in sport and recreational pursuits which in turn aids the advancement of health and improves aspects of social welfare in West Lothian. In addition to the health benefits, there are other, less tangible, benefits that arise from WLL's activities as noted in Section 6.6.

## Sensitivity Analysis

- 6.8 Various assumptions have been made in the course of preparing this analysis and the detailed tables of calculations in Appendix D. Some relate to estimates made by the SROI Team in coming to the views of outcomes, and some relate to the interpretation of information arising from other research work and statistical analysis referenced in this work.
- 6.9 In order to assess the extent to which these assumptions are material, potentially key assumptions have been identified. Each has been subject to sensitivity analysis within what appears to be a reasonable range, and the effect on the total valued outcomes under the study has been re-cast. The resulting analysis is shown at Appendix E.
- 6.10 The conclusion from this analysis is that even if certain key assumptions are subjected to a material change, the overall conclusion from this study (i.e. that the social return generated by the evaluated projects is significantly greater than their cost) would not be subject to alteration.



## Appendices

# A. Activities by site

## 1. Xcite Bathgate Leisure Centre

Area	Description
<b>Reception/Foyer</b>	Large open plan entrance with multiple sales points, including self check in points. Seating and occasional café facilities with a view to the swimming pools.
<b>Rubb Building</b>	Multi Purpose 16 Badminton Court Sports Hall. Four divisional curtains enable the hall to be divided into Four areas. The hall can cater for 5-a-sides, badminton, tennis, athletics and other indoor sports and events.
<b>Team Changing</b>	10 team changing rooms service the external grass and artificial pitches.
<b>Space Bugs</b>	A well equipped children's soft play area. On three levels with parents spectator seating with CCTV coverage. (Up to 24 children accommodated).
<b>Café Area</b>	Open to the public café facilities, located at the entrance and further within the building. Vending machines are located within several locations of the building.
<b>Studios</b>	Two studios, providing group fitness, sport and club type activities.
<b>Bowling Hall</b>	A five lane full size indoor bowling arena (37m x 25m) with viewing gallery.
<b>Seminar Room</b>	The seminar room is located in the upper floor and is used for regular in-house and external training.
<b>Fitness Gym</b>	Refurbished during 2011, this extensive modern CV and strength gym houses the very latest Technogym equipment, accommodating up to 80 customers. We provide customers with keys and access to the Technogym Wellness system.
<b>Main Swimming Pool</b>	A traditional deck level 25m x 12.5m 6-lane pool with large gallery and seating for 250 people. Pool depth ranges from 1.2m at the shallow end to 2m at the deep end. Village style changing facilities, which are fully accessible by all customers.
<b>Teaching pool</b>	An 8.5m x 12.5m Teaching Pool.
<b>Hairdresser</b>	Commercial let, providing a full hairdresser service.
<b>Sports Pitch Provision</b>	Four 5-a-side 3G floodlight football pitches and a full size 3G floodlight pitch. Four full size grass pitches and areas marked for 7-a-side games.
<b>Park</b>	Centre is set within a park area, including walks, picnic areas and large children's play area, including traditional and innovate play equipment.
<b>Golf Course</b>	A challenging nine-hole par 3 golf course.
<b>BMX Track</b>	There is a BMX track within the grounds of the Centre.



## 2. Xcite Armadale Swimming Pool

Area	Description
Reception/Foyer	Open plan with pool viewing seating and vending facilities.
Main Swimming Pool	The Main Pool is 25 meters long by 10 metres wide, at the shallow end the depth is 1.1m and then gradually gets deeper going towards the deep end on the pool. At 15m from the shallow end the depth on the pool is to 2m. It then drops sharply to 3.2 meters and stays at this depth to the end of the pool. Access to the pool is directly from the changing village, with 133 lockers and individual and family cubicles.
Baby Teaching pool	The teaching pool is an 'L' shape which is 15m x 8m and 0.6m deep. Access is from the pool side walkway; this will be monitored by the lifeguards on duty.
Fitness Gym	The gym is accessed via the reception area and consists of 21 pieces of Technogym equipment. A number of loose weights and small items of training equipment are also available. We provide customers with keys and access to the Technogym Wellness system.
Health Suite	The Sauna/Steam Rooms are located on the side of the main pool. The Sauna and Steam can only be used if the user is 16 years of age or above and can accommodate up to 22 customers.
Vending Area	This area houses vending machines.
Pool Viewing Gallery	The spectating area is within the foyer area and overlooks the swimming pool.

## 3. Xcite Whitburn Leisure Centre

Area	Description
Reception/Foyer	Open plan entrance with vending café area. The Changing Village is situated at pool level at the west of the pool.
Ice Room	Lounge with seating and monitor feed to the teaching pool.
Main Swimming Pool	The Main Pool is a six lane standard rectangular pool measuring 25m x 12.5m, the depth ranges from 1m at the shallow end to 1.80m at the deep end. The Changing Village is situated at pool level at the west of the pool. It is reached from reception and the main corridor. The viewing gallery runs along the west side of the main pool. It is tiered with bench-style seating for 200 people.
Teaching Pool	The teaching pool is 7.5m x 6.75m and at its deepest is 0.7m.
Health Suite	The Sauna/Steam Rooms are located in the Pool Hall. Maximum user numbers are 22.
Fitness Gym	The Fitness Centre consists of 32 pieces of Technogym cardiovascular equipment, 13 pieces of Technogym fixed strength machines and a small free weight area, accommodating up to 45 customers. We provide customers with keys and access to the Technogym Wellness system.
Studio	Hall providing group fitness, sport and club activities.
Spin Studio	Area comprises 26 Techno-gym spin bikes for group cycling exercise classes.
Space Bugs Soft Play Area	A three level soft play area for tots, toddlers and juniors up to 1.4m. With a vending area, toilets and party room, this is the perfect place to take the kids.

## 4. Xcite Broxburn Swimming Pool

Area	Description
Reception/Foyer	Open plan with vending and seating. The Changing Areas consist of male, female and family and all accessible from poolside.
Main Pool	The Main Pool is a conventional rectangular shape measuring 25m x 12m, and has 6 lanes. The pool has a depth of 1m at each end graduating to 1.75m in the middle.
Health Suite	The Health suite is situated on pool side at the far end of the pool hall, this consists of a sauna, steam and pool side cold shower, fresh drinking water is available within the relaxation area.
Space Bugs Soft	The area is for the use of children 7 years and under and consists of an enclosed play area

<b>Play Area</b>	with padded stairs and steps on two levels, a padded chute and various soft shapes, also a self contained children's seated area for parties.
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## 5. Xcite Broxburn Sports Centre

Area	Description
<b>Reception/Foyer</b>	An open area with vending and seating area. Changing Rooms: The male change area is divided into two parts with communal showers. The female change area is a two roomed area with three individual shower cubicles. Both facilities have seats for the use by disabled persons.
<b>Main Hall</b>	A multi-purpose four badminton court sports hall with a semi sprung wooden floor. The main hall can cater for 5-a-sides, badminton, volleyball, basketball and a host of other indoor sports and leisure activities.
<b>Fitness Gym</b>	The gym consists of 54 pieces of Technogym equipment along with a full range of dumbbells, bars, benches and other free weight equipment. We provide customers with keys and access to the Technogym Wellness system.
<b>Group Fitness Studio</b>	Sprung Wooden floored, mirrored on one wall with sound system fixed, access to store through electronically controlled door.
<b>Easyline Room</b>	A self contained mirrored room which pre-dominantly holds the Easyline fitness equipment. The room can be used for other purposes such as meetings and a venue for parties.
<b>Group Fitness Studio 2</b>	Wooden floored, mirrored on one wall. Fixed sound system. Studio can be used for exercise classes, martial arts, parties and meetings.
<b>Therapy Suite</b>	Space provided for hire to physiotherapy and sports massage.
<b>Sports Pitch Provision</b>	There are three astro turf pitches, situated at the rear of the building, and two new 3G grass pitches situated above the play park at the front of the facility. The astro turf pitches have dual football and tennis markings and are floodlit. The two new 3G pitches have recess 5-a-side football goals and floodlighting.

## 6. Xcite Craigswood Sports Centre

Area	Description
<b>Reception/Foyer</b>	Entrance/Exit through In/Out Non-automated Doors. Reception Counter with one complete workstation and two computer terminals. Foyer with two Tables, four Chairs, Cold Drinks Vending Machine & Snack Vending Machine and a coffee machine. There are two indoor changing rooms, one female/male and four team changing in the main building with a further eight downstairs in the new changing extension and two additional flexible changing upstairs.
<b>Main Hall</b>	A multi-purpose four badminton court sports hall with a semi sprung wooden floor. The main hall can cater for 5-a-sides, badminton, volleyball, basketball and a host of other indoor sports and leisure activities.
<b>Fitness Gym</b>	The Xcite Health & Fitness Centre is fully equipped with 30 pieces of Technogym Equipment. There is also a small free weights area which consists of 16 sets of free weights which range from 1kg-22kgs. Facility can accommodate up to 25 customers.
<b>Group Fitness Studio</b>	The studio is situated upstairs to the left of the centre foyer and can be accessed by stairs only. The studio has four air conditioning units to regulate the temperature for various different activities (recommend temp 16-18c). Studio numbers for each class depend on equipment usage and space required (see individual risk assessments for activities). The studio is also used for children's parties and martial arts training. The studio is mirrored on one wall and has a wooden sprung floor.
<b>Space Bugs Soft Play Area</b>	The Space bugs area is for children between the ages of 18 months – 7 years with both supervised times and unsupervised sessions available throughout the week. Opening times are Mon-Fri 9am-8pm, Sat & Sun 10am-8pm. A maximum number of 20 children at one time are allowed into the soft play.
<b>Squash courts</b>	Three squash courts There are two squash courts within the facility with a viewing window on each door leading into the courts.
<b>Therapy room</b>	Space provided for hire to physiotherapy and sports massage.
<b>Sports Pitch Provision</b>	Four 3G synthetic pitches outside to the rear of the sports centre within the site compound which is multi turf, with floodlights. Goal area, posts, penalty, centre spots and corner area. Twelve Grass 11-a-side football pitches, plus areas marked for 7-a-side football.
<b>Athletics</b>	The athletics pavilion houses a main meeting room, male and female toilets, a kitchen area



and a general purpose room. The track and field facilities include a 400 meter running track and various field facilities. Throwing facilities include a cage structure capable of housing hammer and discuss, and a shot putt area. In addition there are facilities for long jump, with two sand pit areas and high jump. The area has been completed with a standing only spectator area at the finish line.

## 7. Xcite East Calder Sports Centre

Area	Description
<b>Reception/Foyer</b>	An open plan area with vending and limited seating area. There are two changing rooms, one female/male. Facilities in the female changing area include 66 lockers, shower cubicles, a vanity area with hairdryers (also hairdryers for hire at reception), toilets and disabled shower and toilet.
<b>Main Hall</b>	A multi purpose four badminton court sports hall with a semi sprung wooden floor. The main hall can cater for 5-a-sides, badminton, volleyball, basketball and a host of other indoor sports and leisure activities.
<b>Fitness Gym</b>	The Xcite Health & Fitness Centre is fully equipped with 21 pieces of Technogym Equipment. There is also a small free weights area which consists of eight sets of free weights which range from 4kg-18kg.
<b>Therapy room</b>	Space provided for hire to physiotherapy, beauty therapies and sports massage.
<b>Sports Pitch Provision</b>	Two 3G synthetic pitches outside to the rear of the sports centre within the site compound which is multi turf, with floodlights. Goal area, posts, penalty, centre spots and corner area.

## 8. Xcite Livingston Leisure Centre

Area	Description
<b>Reception/Foyer</b>	Open plan area, adjacent to café area with seating and view to all pool areas. The Changing Village is situated at pool level and can be accessed via the ramp to the right of the reception area.
<b>Leisure Pool</b>	The main Pool is a free form pool, with depths varying from 0.9 to 1.2 metres. The main section of the pool is up to 1.0m deep going to 1.2m at the river run.
<b>Café Area</b>	The café area is located to the rear of the reception area. The café is operated by a franchise called Albacore.
<b>Teaching Pool</b>	The teaching pool is a square shape 8.75m x 7.00m and 0.9m deep. Access is from the pool side walkway. The teaching pool is primarily used for lessons and Aqua Fit.
<b>Splash Pool</b>	The splash pool is a free form shape with varying depths up to 0.2metres. Within the pool are a range of fun and interactive children's play features.
<b>Spa Pool</b>	The spa pool is circular and is located at the plant room end of the main pool. It is accessed from the poolside walkway or via the Health Suite.
<b>Health Suite</b>	The Sauna/Steam Rooms are located at the plant room end of the main pool. The Health suite is an adult only environment and can only be used if the user is 16 years of age or above. This will be controlled firstly at reception and will also be closely monitored by the lifeguards on pool duty. Maximum user numbers are 22.
<b>Flumes</b>	Two water flumes located in the main pool. There is a staircase located to the right of the teaching pool which allows access to the flumes.
<b>Fitness Gym</b>	The Fitness Centre consists of 33 pieces of Technogym cardiovascular equipment, 14 pieces of Technogym fixed strength machines and a small free weight area, accommodating up to 45 customers. We provide customers with keys and access to the Technogym Wellness system.
<b>Fitness Studio</b>	Studio providing group fitness, dance, sport and club activities.
<b>Therapy rooms</b>	Rooms provided for hire to physiotherapy, beauty therapies and sports massage.

## 9. Xcite Linlithgow Leisure Centre

Area	Description
<b>Reception/Foyer</b>	Open plan area, adjacent to café area with seating and view to all pool areas. The Changing Village is situated at pool level and can be accessed via the ramp to the right of the reception area.
<b>Main Pool</b>	The Main Pool is a conventional shaped pool, 20m x 10m with an additional irregular entry area 6m x 5m, however the main tank has an unusual shallow side, 0.9m sloping gently to the

	deep side 1.4m. The pool has various water features that are operated during peak time sessions.
<b>Splash Pool</b>	The splash pool is a free form shape which is 0.3m at it's deepest. Within the pool, there are the following water and air features and a chute.
<b>Health Suite</b>	The Sauna/Steam Rooms are located in the pool hall. The Health suite is an adult only environment and can only be used if the user is 16 years of age or above.
<b>Café Area</b>	The café area is located to the rear of the reception area. The café is operated by a franchise called Albacore.
<b>Fitness Gym</b>	The Fitness Centre consists of 34 pieces of Technogym cardiovascular equipment, 14 pieces of Technogym fixed strength machines and a small free weight area, accommodating up to 55 customers. We provide customers with keys and access to the Technogym Wellness system.
<b>Main Hall</b>	A multi purpose four badminton court sports hall with a semi sprung wooden floor. The main hall can cater for 5-a-sides, badminton, volleyball, basketball and a host of other indoor sports and leisure activities.
<b>Fitness Studio</b>	Studio providing group fitness, dance, sport and club activities.
<b>Space Bugs Soft Play Area</b>	The soft play consists of two alternative levels. The first level has two ball pools area dimension of the first ball pool area; length 3 meters, height 37 cm, width 2.4 meters, depth of ball pool is 37cm.
<b>Therapy room</b>	Rooms provided for hire to physiotherapy, beauty therapies and sports massage.
<b>Sports Pitch Provision</b>	Two 3G synthetic pitches outside to the rear of the sports centre which are multi turf, with floodlights. Goal area, posts, penalty, centre spots and corner area. One Astro turf 5-a-side/tennis court. Three 11-a-side grass pitches and one Rugby pitch, plus areas marked for 7-a-side football.

## B. Notes on Action Research

Action Research, or Action Science as some, including Gummerson<sup>U</sup> prefer to call it, is a recognised and respected research approach originating in the social sciences arena, which involves the researcher and the researched jointly learning in and investigating the research area. Whilst primarily a qualitative methodology, it can be constructed in such a way as to gather and test data with levels of validity that would constitute scientific research (as opposed to casual enquiry) whilst retaining the proximity to that data that best comes from working with those who are involved with it.

The researcher works with the researched jointly to investigate an issue of common interest. Together they gather data, test and validate it, and draw interpretations and conclusions from it.

Action research is hence an iterative research methodology that is intended to bridge the gap between theoretical research and the practical realities of the real world. As Gustavsen puts it:

*“The point is to understand the world as it is by confronting it directly; by trying to grasp the phenomena as they really are.”<sup>V</sup>*

Reason and Bradbury (2001) define Action Research as *“a participatory, democratic process concerned with developing practical knowing in the pursuit of worthwhile human purposes, grounded in a participatory worldview... It seeks to bring together action and reflection, theory and practice, in participation with others, in the pursuit of practical solutions to issues of pressing concern to people, and more generally the flourishing of individual persons and their communities.”* (2001, p.1).

In simplistic terms, Action Research is collectively learning from experience by sharing that experience with others and taking action to bring about change by building on that experience.

In our work with WLL, it has been vital that we gained an understanding, not just of how its activities could *theoretically* be benefiting the local area, but of how it creates benefit in practice. Theoretical research on SROI methodologies gives us a view on where the benefits may lie, but only through an iterative process of discussing, developing and refining our understanding can we get a true picture of where the benefits of WLL’s activities actually lie.

The process of conducting Action Research may be summarised using the diagram shown on the following page.

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<sup>U</sup> Gummerson, E. 2000, *Qualitative Methods in Management Research*. 2<sup>nd</sup> Ed. Thousand Oaks, Ca. Sage Publications

<sup>V</sup> ‘New Forms of Knowledge Production and the Role of Action Research’, Bjorn Gustavsen, *Action Research* 2003; volume 1 at p.153



The diagram shows an iterative five stage approach to Action Research. We describe below how our approach fits with this model:

1. **Observation:** from our initial discussions with WLL, it is clear that a lack of understanding of its Social Impact may weaken their position when negotiating with funders, thus damaging their ability to continue their work. However, it is also clear that by improving awareness of the extent of their impact on the local area, WLL can further improve its brand recognition, and therefore, potentially, its user base;
2. **Reflection:** by using Social Impact measurement tools such as SROI, we believe it is possible to begin to increase understanding of the benefits WLL generates;
3. **Data gathering:** we have discussed the services that WLL provides with a team of project representatives, and the outcomes these services produce and identified the key beneficiaries. We have discussed a range of possible methods of evaluating these services using the three models discussed at 3.7 of this report to cover the concept of value from the perspective of all key stakeholders;
4. **Test claims and conclude:** many of the assumptions used in the evaluation models (Appendix D) are based on data gathered by WLL's management information systems. We have obtained copies of the supporting records for such data. Where, an assumption was required, we have encouraged WLL to be prudent in order to avoid overstating benefits. In some cases, assumptions have been informed by data from external sources combined with the use of judgment. We have obtained copies or records of any research;
5. **Monitor improvements:** it is hoped that this work will result in improved awareness of WLL's activities among stakeholders (including funders), and therefore address the risks identified at stage 1 of the process.

Having reached a stage where an improvement is expected, the iterative nature of Action Research allows for further studies to be carried out in future to build on the work presented in this report, including the ongoing measurement of benefits and the use of similar methodologies to assess proposed future projects.

Clearly, wherever data already exists to quantify a benefit, they are to be used. However, the absence of observed data, Action Research allows us to gain an accurate perspective on the real benefits that are generated.

In some cases it will be impossible to observe the impact, as to do so would require a comparison between a world in which WLL exists and one in which it does not, all other factors being equal. Clearly such comparison will never be possible, and so we must rely on the common-sense and judgment of WLL, based on their real-world experience.

Where data may be, but is not currently, observed, our work allows us to refine the list of useful data that may be gathered in future as a basis for refining the measurement of the economic benefit that is generated. This project may therefore act as a platform for identifying further Action Research projects that will develop detailed measurement tools.

Any outline of a research methodology would be incomplete without looking at broader criticisms of it in management science circles. Criticisms of action research are several, but most emanate from proponents of statistical sampling and questionnaire-based research methodologies. In brief, these tend to surround the following areas, each of which is shown with a brief response related both to theory and to this research in particular.

### **How can you assert validity when all the data is of internal origin?**

By passing the theoretical debates about the validity of different data sources and the extent to which all are, to some degree, partly objective and partly partisan, the key point here is that the data is not all of internal origin.

Many of the measurement criteria within the financial proxies are:

- ▶ from publically available data sources, often validated Government data;
- ▶ from appropriately structured pilot studies;
- ▶ from research appropriately undertaken by the subjects' own research team; or
- ▶ separately sense-checked or reviewed by the research team.

### **It is not true research because the researcher influences, and is involved in the outcome.**

It is true that the researcher is involved in the sense that "the action researcher... may help clients make more sense of their practical knowledge and experience..."<sup>W</sup>.

This is consistent with the second of the seven principles of SROI: Measurement with people.


If the researcher facilitates the better collection and interpretation of data from the researched and leaves them with an understanding and knowledge to enable them to embed that in future action, then this active involvement must be seen as a virtue and not a weakness. It improves the understanding of data gathered and at the same time, seeks to embed the results in the organisations (the final stage of the SROI process).

Berg<sup>X</sup> summarises the strengths of action research in these fields as follows:

- ▶ "a highly rigorous, yet reflective or interpretative, approach to empirical research;
- ▶ the active engagement of individuals...in the research enterprise;
- ▶ the integration of some practical outcomes related to the actual lives of participants in this research project;
- ▶ a spiralling of steps..."

<sup>W</sup> Gill, J. And Johnson, P. 2002. *Research Methods for Managers*. 3<sup>rd</sup> Ed. London, Sage. p.92.

<sup>X</sup> Berg, B. 2009. *Qualitative Research Methods for the Social Sciences*. 7<sup>th</sup> Ed. Upper Saddle River, NJ. Pearson. .248.



We have found, in this study and other ones, that Action Research provides an ideal foundation approach for developing a Social Impact Evaluation and embedding it in the organisation.

## C. Detailed notes on evaluated activities

The SROI Team has provided the following summaries of the activities evaluated in this report.

### **Swimming 2010/11**

The opportunities for West Lothian residents to participate in swimming are extremely high, with all major towns within the demographic area, serviced by a local WLL swimming pool. All of which, are in easy travelling distance for residents, reducing barriers to participation. Accessibility is excellent within the area with 262,858 swim session visits recorded in 2010/11. The following information will further underpin the success of the swimming programme.

#### **WLL Learn to Swim Programme**

WLL has been delivering Swimming Lessons within its swimming pools for over a decade and have been tried, tested and trusted by thousands of parents and children alike with a superb track record in promoting quality, consistency, flexibility and most of all a safe and fun environment for children and adults to learn such a vital life skill.

Currently, the Scottish Swimming “Learn to Swim Programme” is delivered within our 6 swimming pools across the district, comprising of the following classes:

- ▶ Parent and Child (Baby, Toddler, Child, Youngster)
- ▶ Levels 1-8;
- ▶ Adult; and
- ▶ 1-2-1 classes (Adult and children).

The programme operates 50 weeks of the year consisting of five, 10 week blocks and has grown significantly year on year with nearly 4,000 children going through swimming lessons on a weekly basis.

Participants can progress from Level 8 onto our very own programme “Club Class”. These sessions target children who perhaps do not wish to move into competitive swimming through the local clubs, but wish to still continue to swim. Children over 8 years of age can also participate in Rookie Lifeguard Courses (life saving skills and first aid) as an additional option.

Pathways have been created from West Lothian Leisure’s Learn to Swim Programme to local Swimming Clubs and are actively encouraged to do so. West Lothian Leisure is a key partner within “The West Lothian Swimming Development Pathway” (2010-2013) promoting the development of swimming alongside all local clubs, WLC and Scottish Swimming.

#### **Curricular Swimming Lessons**

Curricular Swimming Lessons are delivered within WLL pools over school term time. Sixty-six primary schools along with six ASN Schools receive swimming lessons over the curricular year, delivered by West Lothian Council staff. The NSA (National Swim Award) is delivered to school children comprising of Levels A – E.

Classes can vary from single figures up to maximums of 34 children and take place over a 30 minute period. School children of P4 - P7 age participate within this programme of which 67,000 visits were recorded (2010/11).

The Curricular swimming programme will end in June 2011 and will be replaced by The LTS Plus Scheme. This scheme has been designed to target every P5 Child on an annual basis, identifying any children who are Non-Swimmers. These children will then be targeted to receive a block of swimming lessons over a school holiday period, free of charge. The key partners delivering this scheme will include West Lothian Leisure, West Lothian Council and Swim West Lothian commencing Summer 2011.



## Free Swimming

Free swimming is delivered in all of West Lothian Leisure swimming pools over school holiday periods including Friday afternoons, for all WLL resident children under the age of 16 years old, funded by WLC. There were 122,355 visits recorded in 2010/11. The opportunities for West Lothian residents to participate in swimming are great, further highlighting the focus and great work being done within this area.

## Xcite Membership

The original membership scheme was launched back in 1999 to coincide with the opening of the first gym at Bathgate Sports Centre. Since those early days the membership has been branded Xcite in line with the core brand areas, Xcite Health & Fitness, Xcite Swim, Xcite Sports and Xcite Kids. The Xcite Membership package was devised to offer customers a large choice of activities which help create value for money membership as well as providing choice for customers to become active more. In addition to access to the fitness centre (for adults), membership also provided members with access to the following sporting activities:

- |                |                     |
|----------------|---------------------|
| ▶ Swimming     | ▶ Tennis            |
| ▶ Short Tennis | ▶ Squash            |
| ▶ Golf         | ▶ Indoor bowling    |
| ▶ Badminton    | ▶ Socially isolated |

In addition to the above there are a number of packages designed for junior members aged between 4 months old to 11 years of age. Together with specific members for teenagers aged between 11 and 15.

Xcite membership offers a number of different packages with different price points and designed towards the requirements of its diverse customer base. In addition to the above packages a Corporate membership package is also offered to public service workers and this is going from strength to strength. This scheme provides a 20% reduction on the normal monthly fees and retention rates should be higher for this group also as they are less likely to move to the competition due to the difference in the monthly fee.

The scheme has grown from strength to strength with over 13,000 members paying a monthly direct debit. This growth has been evident every year since membership was introduced and this is attributed to a number of factors some of which are listed below;

- ▶ Price of membership;
- ▶ Choice of activities within the membership;
- ▶ Quality facilities which have received substantial investment over the years; and
- ▶ Various incentivised campaigns to recruit new members.

The membership scheme offers something for everyone no matter what age they are. It offers a lot of flexibility in that 2 people can join as a couple and benefit from having a training partner. Kids can have a membership on their own or with any other family member. The scheme is very well utilised and valued by all who use it.

## NHS referral programme

The Exercise Referral Programme is designed to give Medical Staff the avenue of referral for exercise for Patients who could benefit from a prescribed Physical Activity Intervention.

The Medical Professional has the opportunity to provide a 12 weeks Structured Targeted Exercise Programme (STEP's) to a patient free of charge. The Patient's referral is passed to the Xcite Health & Wellbeing Team who process the referral and contact the Patient and make a booking with a GP Referral Qualified Instructor at the selected Facility.

At the initial consultation, the Instructor discusses the Patient's needs and agrees an Activity Plan with them. In addition the Patient has their BP, BMI, Girth Measurement, & Peak Flow taken and completes HAD's, GHQ12 and Physical Activity Questionnaires.

Patients are then encouraged to follow their Activity Plan with formal consultations with their Instructor at weeks 4 & 12 when measures & questionnaires are repeated. Additional sessions are available upon request & free of charge.

This is the First STEP's Programme.

Beyond 12 weeks, Referred Patients have the opportunity to continue on a reduced price Membership (£22.50 as opposed to £37.00). They can also continue on a Pay as you go basis (concessions scheme rates if eligible).

On continuation, Patients have formal consultations at week 26 & 52, with a week 64 appointment with measures & questionnaires, to discharge them from the programme. Additional appointments are encouraged on a 6 weekly basis.

Other referrals have been agreed to start at the reduced rate membership stage. These come from the following: Acute Care (Physiotherapy), Stop Smoking Services, Activity Works, Ingeus, SPIRE, Keep Well – Lanarkshire, Stress Control, Scottish Adult Cystic Fibrosis Service, Moving into Health & Autism Outreach.

Patients referred this way have the same initial consultations as First STEP's Patients however; payment is made from the outset. Formal consultations still occur at weeks 4, 12, 26, 52 & 64.

This is the Further STEP's Programme.

Some of the Exercise Referral work that is conducted takes place out with WLL Buildings and is delivered by Xcite Health & Wellbeing Consultants.

Pulmonary Rehab - 5 hours a day, 2 days per week of Fitness Instruction in Strathbrock Partnership Centre & Bathgate Primary Care Centre. This is in partnership with Physiotherapy Services.

St John's Hospital Ward 17 (Acute Mental Health) - 10 hours per week of Fitness Instruction in the Easyline Gym on the Ward.

Cancer Rehab Classes - 2 hours per week with 2 Fitness Instructors in Partnership with McMillan Cancer.

Healthy Working Lives Spin - 2 hours per week in Strathbrock Partnership Centre.

Delivery of Fitness Tests & Blood Pressure Tests as part of Health Improvement Events i.e. Men's Health Week, Blood Pressure Week, Mental Health Week, Pamper Yourself Day for the Homeless, National No Smoking Day.

## **Ageing Well Programme**

The aim of the programme is to improve and maintain the health of older people in West Lothian. The programme also aims to improve the general quality of life of older people, improving mental health and wellbeing by alleviating physical disability, chronic pain and social isolation. It also aims to challenge stereotypes and increase the expectation of good health in later years. The programme seeks to include all older people and actively targets the inclusion of:

- |                                     |   |
|-------------------------------------|---|
| ▶ Frail/Housebound                  | ▶ Older people at risk (community safety etc) |
| ▶ Older Carer's                     | ▶ Individuals living in residential settings  |
| ▶ Minority ethnic elders            | ▶ People who live alone                       |
| ▶ Individuals on low incomes        | ▶ Socially isolated                           |
| ▶ People with physical disabilities | ▶ Mental health issues and/or dementia        |

In 2010/11, c21,000 visits were made to the programme's varied events and activities. A snapshot of the activities and events are shown below.

- ▶ Walking Groups
- ▶ Tea Dances
- ▶ Line Dances
- ▶ Gentle Exercise Classes
- ▶ Sing & Swing Groups
- ▶ Tai Chi Sessions

The ageing well programme is primarily delivered direct to the community through outreach programmes utilising venues within the community.

## D. Detailed evaluation models used

### Detailed summary of model results

The table below shows a detailed summary of the results of the models used, together with page references for each model within this appendix:

Project	Calculated benefits (£)	Appendix D ref.
<b>General benefits</b>		
Healthcare savings	8,260,198	Page 57
Economic productivity gains from reduced absence	1,563,723	Page 60
<b>Total general benefits</b>	<b>9,823,922</b>	
<b>NHS referral programme</b>		
General referral programme	1,901,599	Page 63
Acute care referral programme	526,592	Page 65
Outreach Steps to health & Wellbeing	19,440	Page 66
<b>Total NHS referral programmes</b>	<b>2,447,632</b>	
<b>Ageing well programme</b>		
Costs savings	72,000	Page 67
NHS saving - relation to mental health	239,117	Page 67
<b>Total Ageing well programme</b>	<b>311,117</b>	
<b>Swimming activity programme</b>		
Savings to local schools	290,900	Page 69
Savings to swimming lesson users	715,350	Page 70
Free after school and holiday sessions for children	678,360	Page 71
<b>Total swimming activity programme benefits</b>	<b>1,684,610</b>	
<b>Xcite membership</b>		
Cost saving for members	2,656,011	Page 72
<b>Total Xcite membership benefits</b>	<b>2,656,011</b>	
<b>Total evaluated benefits</b>	<b>16,923,291</b>	

In the evaluation of the above projects and activities the SROI Team has applied their judgment in relation to estimates for deadweight, alternative attribution and displacement. The SROI Team's rationale for the applied estimates together with external supporting data and information (where available) is documented on the following pages.

It should be noted that the calculations used in the models within this report have been undertaken using computer spreadsheet technology that frequently undertakes calculations to many decimal places before rounding them for presentation in the report. On occasions this may give rise to apparent rounding differences between the total figure and its constituent parts.

## General benefits – healthcare and economic savings

Two evaluation models have been used to consider the impact of increasing participation rates of physical activity on the economy:

- ▶ Value of avoided costs to the NHS and damage to the wider economy; and
- ▶ Value of lost productivity through increased sickness absence.

These two models are analysed below:

### Healthcare savings

Health benefits (all sites)	Assumption	Calculation	Benefits (£)
<b>Cohort 1 - Health benefits (under 16):</b>			
Proportion of non-Xcite visitors in this cohort	17%		
Number of users		5,013	
Annual saving per beneficiary (£)		250	
<b>Total annual saving</b>			<b>1,253,222</b>
<b>Cohort 2 - Health benefits (16 to 29):</b>			
Proportion of non-Xcite visitors in this cohort	28%		
Number of users		7,404	
Annual saving per beneficiary (£)		275	
<b>Total annual saving</b>			<b>2,036,106</b>
<b>Cohort 3 - Health benefits (30 to 39)</b>			
Proportion of non-Xcite visitors in this cohort	18%		
Number of users		4,724	
Annual saving per beneficiary (£)		350	
<b>Total annual saving</b>			<b>1,653,431</b>
<b>Cohort 4 - Health benefits (40 to 49)</b>			
Proportion of non-Xcite visitors in this cohort	16%		
Number of users		4,629	
Annual saving per beneficiary (£)		450	
<b>Total annual saving</b>			<b>2,083,054</b>
<b>Cohort 5 - Health benefits (50 to 59)</b>			
Proportion of non-Xcite visitors in this cohort	9%		
Number of users		2,552	
Annual saving per beneficiary (£)		600	
<b>Total annual saving</b>			<b>1,531,424</b>
<b>Cohort 6 - Health benefits (over 60)</b>			
Proportion of non-Xcite visitors in this cohort	11%		
Number of users in cohort 6		3,275	
Annual saving per beneficiary (£)		750	
<b>Total annual saving</b>			<b>2,456,361</b>
<b>Total saving (before benefit attributable to other agencies)</b>			<b>11,013,598</b>
Alternative attribution: Benefit attributable to other bodies (NHS etc)	25%		(2,753,399)
<b>Total health benefits (excluding members that would join an alternative)</b>			<b>8,260,198</b>

The above table highlights that circa £8.3 million of health care savings or benefits are generated from the WLL's projects and activities contained within this study. The key assumptions applied with this evaluation model are set out on the following page.

**Key assumptions:**

- **Number of beneficiaries:** The table below sets out the key assumptions used in defining the population of beneficiaries.

Number of users	Assumption	Calculation
<b>Non members</b>		
Number of visits per annum (excluding NHS referrals)	952,179	
Assumed average of visits per member	49	
<b>Number of non member beneficiaries</b>		<b>19,532</b>
<b>Xcite members aged under 16</b>		
Proportion of total Xcite membership	17%	
Number of members	2,292	
Proportion of Xcite members who not access alternate facilities	70%	
<b>Number of members who would not access alternate facilities</b>		<b>1,604</b>
<b>Xcite members aged 16 to 29</b>		
Proportion of total Xcite membership	28%	
Number of members	3,726	
Proportion of Xcite members who not access alternate facilities	50%	
<b>Number of members who would not access alternate facilities</b>		<b>1,863</b>
<b>Xcite members aged 30 to 39</b>		
Proportion of total Xcite membership	18%	
Number of members	2,319	
Proportion of Xcite members who not access alternate facilities	55%	
<b>Number of members who would not access alternate facilities</b>		<b>1,275</b>
<b>Xcite members aged 40 to 49</b>		
Proportion of total Xcite membership	16%	
Number of members	2,166	
Proportion of Xcite members who not access alternate facilities	65%	
<b>Number of members who would not access alternate facilities</b>		<b>1,408</b>
<b>Xcite members aged 50 to 59</b>		
Proportion of total Xcite membership	9%	
Number of members	1,167	
Proportion of Xcite members who not access alternate facilities	70%	
<b>Number of members who would not access alternate facilities</b>		<b>817</b>
<b>Xcite members aged 60+</b>		
Proportion of total Xcite membership	11%	
Number of members	1,464	
Proportion of Xcite members who not access alternate facilities	75%	
<b>Number of members who would not access alternate facilities</b>		<b>1,098</b>
<b>Total number of Xcite members that who not access alternate facilities</b>		<b>8,066</b>
<b>Total number of Xcite members who would not use alternate facilities ("implied membership")</b>		<b>27,598</b>

The total number of Xcite members is 13,134. The total number of visits by non-members in 2010/11 was 0.95 million. It has been assumed that non members use WLL's facilities less frequently than members. For the purpose of the evaluation it has been assumed that non members make c49 visits to WLL's facilities per annum

(compared with 65 for members), implying that there are around 19,532 non-member beneficiaries making regular use of WLL's facilities.

*Deadweight in relation to Xcite members:* Deadweight has been removed by estimating those members who would access other alternative facilities or would use another form of exercise. The estimated percentage of members using alternative facilities has been profiled based on the age analysis of the membership with 45% to 50% being deducted from the 16 - 39 age group reflecting their increased mobility and spending power compared with say the over 60s (with a deduction of 25%). Taking into account the spread across the 6 cohorts in total c39% of Xcite members would participate in other activities in the absence of WLL. North Lanarkshire Leisure in its December 2010<sup>Y</sup>, SROI report indicated that c34% of the wider local population is likely to participate in activities equivalent to walking at least two miles per week (which is believed to be broadly comparable with West Lothian).

*Deadweight in relation to non member beneficiaries:* No deduction has been made in relation to the number of non member beneficiaries as it has been assumed that they are unlikely to travel out of the area to access similar facilities.

Taking into the account deadweight in relation to Xcite members and non member visits, this would result in an implied membership of 27,958 (being 19,352 non members and 8,066 Xcite members).

*Annual saving per beneficiary:* The annual saving per beneficiary ranges from £250 to £750 across the 6 cohorts with the highest saving of £750 being in the over 60s cohort, reducing to £250 in the under 16 years of age cohort. The increased saving in the over 60s representing the anticipated additional cost burden on the NHS as a person gets older through an increased interventions.

#### *Supporting evidence:*

The annual cost per overweight or obese person to both the NHS and the wider economy, for the UK as a whole, may be estimated as follows:

- ▶ Population of the UK (2008): 61.4 million<sup>Z</sup>.
- ▶ Population of Scotland (2008): 5.2 million<sup>AA</sup>
- ▶ £15.8 billion total cost to the NHS (derived from the Foresight report<sup>BB</sup> as at 2007 which uses seven times direct NHS costs of £2.3 billion) divided 60% of the population who are overweight or obese<sup>CC</sup> (i.e. 36.84 million) = £429 average additional annual costs per overweight or obese person for the UK as a whole.

Applying the 'seven times direct costs' approach, used by the Foresight report to convert direct NHS costs to total economic costs, the direct NHS costs for Scotland of £312 million may be converted to total annual costs of £2.2 billion. Based on 65.1%<sup>DD</sup> of the population of Scotland (i.e. 3.4 million people) being overweight, this equates to an annual cost per person of £647 (i.e. total cost to the NHS and the wider economy).

We also note that the Scottish Economic Report: February 2003<sup>EE</sup> considers the impact on NHS costs in relation to the cost per inpatient episode of £1,575 per annum. The National Institute for Clinical Excellence states that the annual cost of a typical anti-obesity drug (excluding the cost of other interventions) is estimated at £537 per patient<sup>FF</sup>.

<sup>Y</sup> Source: North Lanarkshire Leisure – Social Impact Evaluation, December 2010

<sup>Z</sup> Source: [www.statistics.gov.uk](http://www.statistics.gov.uk)

<sup>AA</sup> Source: [www.statistics.gov.uk](http://www.statistics.gov.uk)

<sup>BB</sup> 'Foresight – Tackling Obesity: Future Choices – Project Report', 2<sup>nd</sup> Ed., Government Office for Science, 2007, p.40

<sup>CC</sup> Source: [www.patient.co.uk](http://www.patient.co.uk)

<sup>DD</sup> Source: Scottish Government – Health Survey 2010, [www.scotland.gov.uk/News/Releases/2011/09/27102058](http://www.scotland.gov.uk/News/Releases/2011/09/27102058)

<sup>EE</sup> G, Gillespie & D. Melly, 'Scottish Economic Report': February 2003, Section C

<sup>FF</sup> Press Release NICE 2001/010 Issued 9 March 2001



On the basis of the above, the cost of being overweight and obesity appears to fall in the range of £400 to £1,575 per annum per patient, depending on the severity of the case. This compares to a savings range of £250 to £750 per annum per patient applied within WLL's evaluation model which indicates that a prudent approach has been adopted.

*Alternative attribution:* In recognition of the role played by other bodies such as the NHS a deduction of 25% has been made to the total benefit/savings generated.

## Economic productivity gained from reduced absence

Academic research has shown that physical inactivity, being overweight, and obesity not only increases the cost burden on the NHS but also effects economic productivity through lost working days through avoidable sickness. The potential damage to the economy of the local community in the absence of access to WLL's facilities for regular exercise in terms of lost productivity due to avoidable sickness days is evaluated below.

The benefits/savings generated from the aforementioned when applied to the implied memberships (after deducting the under 16 years of age cohort) is presented below:

Economic benefit through a reduction in avoidable sickness absence	Assumptions	Calculation	Benefits (£)
Total users (excluding under 16 years of age)	22,585		
Proportion of users that are economically active	78.0%		
Number of economically active beneficiaries		17,616	
Average GVA per employee per annum (£)	37,500		
Number of days sickness avoided per user per annum	2.16		
Economic damage of one day of sickness absence (£)		103	
<b>Annual saving to local economy from improved health</b>			<b>3,909,308</b>
Alternative attribution: Benefit attributable to other bodies	60%		(2,345,585)
<b>Annual saving to local economy from avoided sickness absence</b>			<b>1,563,723</b>

The above table highlights that circa £1.6 million of benefits or savings are generated from the WLL's projects and activities contained within this study.

It should be noted that the above evaluation does not take into account "presenteeism", defined as the loss in productivity that occurs when employees come to work even when unwell and consequently function at less than full capacity. It is reasonable to assume that physical activity and the resultant health benefits would reduce the impact of presenteeism in the workplace. The Centre for Mental Health's 2010<sup>GG</sup> report indicated that the annual cost to Scottish employers in relation to presenteeism through mental health problems was circa £1.97 million, highlighting the extent of the problem. It should be noted that this evaluation does not take into account other medical conditions which it is believed would significantly increase the cost of presenteeism to Scottish employers. The key assumptions applied with this evaluation model are set out below:

*Economically active:* Population statistics highlight that 78.0%<sup>HH</sup> of the population in West Lothian are economically active.

*Economic damage of one day of sickness absence:* The GVA for West Lothian is West Lothian is circa £37,500<sup>II</sup>, which equates to £103 per day per person.

<sup>GG</sup> Scottish Association for Mental Health – Whats it worth now (2010) produced by the Centre for Mental Health - [www.centreformentalhealth.org.uk/pdfs/what's\\_it\\_worth\\_now\\_report.pdf](http://www.centreformentalhealth.org.uk/pdfs/what's_it_worth_now_report.pdf)

<sup>HH</sup> Source: Nomis July 2008 – June 2009

<sup>II</sup> Source: ABI (data compiled by the Scottish Executive)

*Number of sick days avoided:* It has been assumed that the number of avoidable sickness will reduce by on average 2.16 days per annum which equates to a 1% increase in sickness absence without exercise (i.e. 2.16 days out of 235 working days per annum). Recent feedback from employers using North Lanarkshire Leisure Limited's (as reported in their December 2010 SROI study<sup>JJ</sup>) corporate membership scheme and evidence from NHS Lanarkshire has indicated that a 2% reduction is not unreasonable.

*Alternative attribution:* In recognition of the role played by other bodies such as the NHS a deduction of 60% has been made to the total benefit/savings generated.

*Deadweight:* Deadweight has been accounted for through profiling of the Xcite members and non member visits to derive an implied membership (as detailed in above) and taking into account the percentage of people economically active in West Lothian.

## Annual saving per user compared to research findings

The following table shows the combined saving generated per beneficiary for health and economic benefit (avoidable sickness days reduction) compared with published research findings.

Annual saving (excluding dead weight)	
Total health benefits (after deductions) (£)	8,260,198
Users (excluding those that would access alternatives)	27,598
<b>Average saving per user (£)</b>	<b>299</b>
Total saving to local economy (through avoided sickness absence) (£)	1,563,723
Economically active users (excluding those that would access alternatives)	17,616
<b>Average saving per user (£)</b>	<b>89</b>
<b>Total saving per user</b>	<b>388</b>

After deductions for alternative attribution, the annual saving due to WLL falls to £388 per beneficiary. This is at the low end of the range calculated above of £400 to £1,500. Before deductions (for deadweight), total benefits generated amounted to circa £15 million resulting in an average saving per beneficiary of £621. This is inline with the average cost per overweight person in Scotland of some £647 per annum (see above). Hence, the SROI Team believe that these results represent reasonable evaluations.

<sup>JJ</sup> Source: North Lanarkshire Leisure – Social Impact study, released December 2010

## NHS referral programme

WLL works alongside the Local NHS to improve the health of the community by providing exercise programs to reduce the risk of existing conditions worsening or taking the necessary preventative steps to reduce the likelihood of more costly medical intervention. The programme is based on referrals from NHS practitioners which incorporate pre and post operative care. WLL provides the following NHS referral programmes:

Programme	Comment	Example conditions
General referral programme	Dealing with long term chronic health conditions	Mental health, back pain and other muscular conditions
Acute care	Primarily post operative conditions (and incorporated as part of NHS treatment)	Stroke, cardiac and pulmonary rehab
Outreach Steps to health and well being	Programmes delivered at St John's Hospital (Mental Health), Strathbrock Partnership Centre and Bathgate Primary Care Centre (Pulmonary rehab).	Mental health and pulmonary rehab

## Evaluating the benefits of NHS programme

After discussion and debate with the SROI Team four models have been used which are considered to adequately encapsulate and evaluate the benefits of the NHS programme:

- ▶ The savings to the participants as a result of receiving discounted price access to WLL's facilities and having direct supervision and assistance from WLL's qualified staff;
- ▶ The saving achieved by the NHS from free access to WLL's facilities compared to alternatives;
- ▶ The healthcare benefits arising from improving fitness levels; and
- ▶ The saving to the economy from earlier return to work from WLL's post operative rehabilitation programmes.

The results of and key assumptions to the models are shown on the following page.

## Evaluating the impact of the general referral programme

The results of the model are shown below:

NHS - General referral programme	Assumptions	Calculation	Benefits (£)
Cost savings to patients:			
First Step's programme (12 week programme):			
Number of referrals per annum	1,341		
Number of free sessions per referral	24		
Typical cost per session for non-member (£)	5		
Saving per referral (£)		120	
<b>Total cost saving</b>			<b>160,920</b>
Further Steps programme - Phase 1			
Percentage of referrals continuing from First steps	30%		
Number of referrals		402	
Average visits per month per referee	5.09		
Total visits per month		2,048	
Duration (months)	6		
Referee saving per visit (£)	2.85		
<b>Total cost saving (Phase 1)</b>			<b>35,016</b>
Further Steps programme - Phase 2			
Percentage of referrals continuing from phase 1	84%		
Number of referrals		338	
Average visits per month per referee	5.09		
Total visits per month		1,720	
Duration (months)	6		
Referee saving per visit (£)	2.85		
<b>Total cost saving (phase 2)</b>			<b>29,413</b>
<b>Total cost savings to patients</b>			<b>225,349</b>
Healthcare cost saving :			
Number of referrals per annum	1,341		
Saving per referral (£)	2,500		
Total healthcare cost saving from exercise referrals (£)		3,352,500	
Alternative attribution: Benefit attributable to NHS	50%		
<b>Total healthcare cost saving</b>			<b>1,676,250</b>
<b>Total benefit attributable to WLL</b>			<b>1,901,599</b>

The above table highlights that circa £1.9 million of benefits or savings are generated from the general referral programme.

## Key assumptions

### *General referral program*

The general referral programme has two components. These components being:

- ▶ First Steps Programme – being an initial 12 week programme which is free of charge to the patient; and
- ▶ Further Steps programme – at the end of the First Steps programme the patient's condition is re-assessed. If they require further support they are placed on the Further Steps programme.

WLL management information shows that:

- ▶ First Step's programme received 1,341 referrals during 2010 with each patient receiving 24 free sessions (the typical cost of non patients being £5 per session);
- ▶ Further Step's – of the 1,341 First Step's referrals c402 remained on the programme for another 6 months (phase 1) with 338 remaining for a full 12 months (phase 2). The saving to patients was circa £2.85 per session attended.

The savings to the economy are calculated using the methodology outlined above under economic benefits of exercise. However, given that these referrals are made for patients with long-term chronic conditions, the SROI Team feel that it is reasonable to use a higher assumed saving per person of £2,500. This is in line with the cost of two inpatient episodes per annum (at £1,575 per patient per episode in accordance with the Scottish Economic Report: February 2003<sup>KK</sup>).

*Alternative attribution:* Given that the NHS plays a role in identifying the patient's needs and making the referral, a deduction of 50% is made to account for the benefit that is attributable to them.

*Displacement:* No public funding is diverted to this project, hence there does not appear to be any displacement.

*Deadweight:* In the absence of this scheme, it is felt to be highly unlikely that patients would be able to achieve an improvement on their own without incurring substantial costs. Hence, the SROI team believe that there is no deadweight.

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<sup>KK</sup> Source: G, Gillespie & D. Melly, 'Scottish Economic Report': February 2003, Section C

## Evaluating the impact of acute referrals programme

The results of the model are shown below:

NHS referrals - Acute care programme	Assumptions	Calculation	Benefits (£)
Healthcare cost saving from specialist exercise referrals:			
Number of referrals per annum	270		
Saving per referral (£)	3,500		
<b>Total benefit (before benefit attributable to other agencies)</b>			<b>945,000</b>
Alternative attribution: Benefit attributable to NHS intervention	50%		(472,500)
<b>Total benefit/savings attributable to WLL</b>			<b>472,500</b>
Productivity gains from accelerated rehabilitation and reduced sick leave:			
Number of referrals per annum	270		
Proportion of users that are economically active	78.0%		
Number of referrals per annum (after accounting for economically active)		211	
Average GVA per day per worker (£)	103		
No. of days earlier return to work	5		
Saving per referral (£)		514	
<b>Total benefit (before benefit attributable to other agencies)</b>			<b>108,185</b>
Alternative attribution: Benefit attributable to NHS and other agencies	50%		(54,092)
<b>Total benefit/savings attributable to WLL</b>			<b>54,092</b>
<b>Total benefit</b>			<b>526,592</b>

The above table highlights that circa £0.53 million of benefits or savings are generated from the acute referral programme.

### Key assumptions – health care savings

The acute care referral programme deals with pre-diagnosed medical conditions such as pulmonary, heart and stroke conditions which are well documented as being conditions which incur a high level of NHS costs per patient. Given that conditions such as stroke and heart problems incur significant NHS costs, the SROI Team believe that it is not unreasonable to assume a higher cost saving for these referrals at £3,500 per patient (compared with £2,500 per general referral). This assumption does not appear to be unreasonable, given:

- ▶ The high risk nature of these patients' conditions;
- ▶ Accelerated rehabilitation is likely to reduce the need for and the frequency of NHS post-operative interventions during the referral period and in future; and
- ▶ The context of the costs of patient rehabilitation (e.g. stroke victim rehabilitation costs are estimated at circa £30,000 over five years)<sup>LL</sup>.

*Alternative attribution:* As with the general referral programme, the NHS plays a role in identifying the patient's needs and makes the referral, a deduction of 50% is made to account for the benefit that is attributable to them.

*Displacement:* In the absence of this scheme, it is felt to be highly unlikely that patients would be able to achieve an improvement on their own without incurring substantial costs. Hence, the SROI Team believe that there is no deadweight.

<sup>LL</sup> Source: Pharmaco Economics Volume 21, authors: Youman1; Wilson; Harraf; Kalra .



## Key assumptions: - Economic gain in productivity

The combined impact of the specialist referral programme and the continued NHS treatment should result in the patient making an accelerated return to employment and hence contributing to the West Lothian's GVA.

The SROI Team has assumed that patients will return to employment by at least 5 days quicker than without their intervention alongside the NHS. The savings to the economy are calculated using the methodology outlined in above. A deduction of 50% has been applied to any benefit gained to account for the significant contribution of the NHS. It has been assumed that patients return to active employment is in line with the economically active percentage of 78% for West Lothian.

## Evaluating the impact of Outreach Step's to health and wellbeing

The results of the model are shown below:

Outreach Steps to Health & Wellbeing Sessions (Pulmonary Rehab, Acute Mental Health):			
	Assumptions	Calculation	Benefits (£)
Number of sessions	624		
Average number of attendees per session	6		
Total number of attendees		3,931	
Annual cost of delivery (£)	10,800		
Cost per visit per attendee (£)	2.75		
NHS cost per visit (£)	7.69		
Saving to NHS		4.95	
<b>Total benefit from Outreach Steps to Health &amp; Wellbeing</b>			<b>19,440</b>

The above table highlights that circa £19k of benefits or savings are generated from the Outreach Step's to health and wellbeing programme.

## Key assumptions

WLL management information shows that:

- ▶ Total number of sessions in a year amounted to 624 (with an average of six attendees per session)
- ▶ The costs of delivering the service is £10,800 per annum; and
- ▶ The average WLL cost per attendee is £2.75 per session compared with a NHS cost of £7.69 per session (comparable NHS costs are based on the SROI Team's consultation with the local NHS).

In addition to the above mentioned outreach services WLL also provides community based health programmes such as; blood pressure testing and anti-smoking sessions. These additional services have not been reflected through the SROI evaluation.

## Ageing Well Programme

The Ageing Well Programme offers a wide range of activities which include walking groups, dance classes and tea dances. These programmes are provided primarily by WLL's staff within the community as outreach programmes targeting the over 60s. The programme of activities was conducted throughout the year with c21,000 individuals taking part in the activities. The British Heart Foundation has documented that physical activity for the over 60's has a positive impact on the physical and mental well being of the over 60s and the UK economy. Benefits include:

- ▶ Disease prevention and management, psychosocial benefits and complications of immobility; and
- ▶ Maintaining independence, improving the quality of life, and 'successful ageing'.

The Ageing Well Programme provides opportunities for significant savings to health and social care services after discussion and debate with the SROI Team at WLL two models have been used to evaluate the benefits of the programme. These being:

- ▶ The savings generated from provisions of the programme by using WLL's qualified in comparison to using an alternative commercial provider; and
- ▶ The reduced social and economic costs through reduced intervention in relation to mental health disorders.

## Evaluating the impact of Ageing Well Programme

The results of the model are shown below:

Ageing Well Programme	Assumption	Calculation	Benefit (£)
<b>Cost saving:</b>			
Funding provided (£)	17,000		
Cost of providing activities by external commercial provider (£)	89,000		
<b>Total benefit</b>			<b>72,000</b>
<b>Social and economic costs - Mental health:</b>			
Estimated numbers of regular users	684		
UK mental health occurrence rate:	25%		
Potential number of users could be affected by mental health problems		171	
Potential saving per user		8,740	
Deadweight: Deduction in relation to severity of mental health problem	20%		
Deadweight: Being the likelihood of mental health problems in occurring regardless	50%		
NHS saving per user (after deductions)		3,496	
<b>Total saving</b>			<b>597,792</b>
Alternative attribution - Benefit attributable to other bodies	60%		(358,675)
<b>Annual saving - attributable to WLL</b>			<b>239,117</b>
<b>Total benefit- Ageing Well Programme</b>			<b>311,117</b>

The above table highlights that circa £0.3 million of benefits or savings are generated from the Ageing Well Programme.

## Key assumptions –cost savings

WLL management information shows that:

- ▶ The total funding provided for the programme is £17,000 compared with WLL's internal cost for providing the programme of £89,000 (based on analysis conducted by the SROI Team); and
- ▶ It is estimated that 684 users use the programme on regular basis (in excess of 10 times per annum).

## Key assumptions – Social and Economic cost savings in relation to mental health problems

**Estimated number of beneficiaries:** The overall population of users using the Ageing Well Programme is c21,000 with 684 defined regular users representing c3% of the total users. The SROI Team believe that the number of users using the programme on a regular enough basis in order to gain the social and economic benefit is well in excess of 684 and therefore they have been prudent in determining the overall benefit gained. It is estimated that 25%<sup>MM</sup> of the UK population has mental health problems which applied to the total 684 defined frequent users would equate to 171 members with potential mental health problems.

<sup>MM</sup> Source: Mental Health Foundation, Mental Health Statistics (UK)

*Potential saving per beneficiary:* The social and economic costs of mental health problems in Scotland in 2010 was estimated at £7.5 billion<sup>NN</sup> (excluding economic outputs losses) which equates circa £8.8k savings per beneficiary (taking into account of the over 16 years of age population of Scotland and the UK incidence rate of mental health problems).

*Compensating for the degree of mental health:* The saving per beneficiary of £8.8k is based on an average cost which covers the full range of mental problems from moderate to severe. Given the age of the beneficiaries and the heightened prevalence of dementia and other severe mental disorders, it is likely that the cost of treating these disorders would significantly exceed the average. However, the SROI Team has assumed that the average is applicable and has further discounted this by 20% to ensure prudence in their estimated benefit evaluation.

*Deadweight deduction:* As with any mental illness there is always the potential for occurrence regardless of intervention or not. In light of any supporting evidence in relation to incidence rates, the SROI Team has assumed that the average cost saving is further reduced by 50% equating to a saving of £3.5k (compared with the pre-deduction saving of £8.8k per beneficiary).

*Alternative attribution:* Although the members spend a relatively limited time within the programme, the SROI Team believe that as well as the benefits of the activities undertaken, the programme also plays a key role in assisting the members to form a circle of friends which act as a support group for each other which continues to reinforce the physical and mental health benefits of the programme beyond the organised group activities. However, the SROI Team recognises the role of other agencies and the group members themselves in the creation of the evaluated benefit and therefore has made a deduction of 60% to account for alternative attribution.

It should be noted that the evaluation of the social and economic benefits has been limited to mental health disorders and therefore does not consider physical and other health benefits generated by the programme and the resultant savings. Given the aforementioned the SROI Team believe that the reported benefits are prudent and comply with ethos of the study in delivering an “at least” figure for the Ageing Well Programme.

*Displacement:* In the judgment of the SROI team - no deduction is required as the provision of programme has no detrimental impact elsewhere in society.

## Swimming programme

WLL provides a comprehensive swimming programme from its six venues with swimming pools. In addition to WLL's swimming programmes for the public it also provides reduced cost access to its pools for a number of West Lothian schools for P.E. lessons. The health benefit of access to WLL's swimming and other sports facilities is included in general health benefits. The main components of the swimming programme are evaluated below.

### Results of the models

After discussion and debate with the SROI Team four models have been used which are considered to adequately encapsulate and value the benefits of the swimming programme:

- ▶ Savings to local schools due to reduced price access to facilities and the re-direction of teacher time to other work, compared to an in-school physical education lesson.
- ▶ Cost savings to swimming lesson users due to reduced price teaching;
- ▶ Savings in holiday childcare and other costs resulting from free access to facilities for children aged 5 to 12; and
- ▶ Cost saving to the participants as a result of utilising the free after school sessions rather than paid sessions.

The results of and key assumptions to these models are shown below.

<sup>NN</sup> Source: Centre for Mental Health 2010 study on the Social and Economic costs of mental health disorders to Scotland

## Evaluating savings to schools

The results of the model are shown below:

Swimming programme - saving to schools	Assumptions	Calculation	Benefits (£)
Saving for schools:			
Number of schools using WLL facilities	72		
Number of 12 week sessions taken per school (class of 21)	3		
Cost of a 12 week session at WLL (£)	504		
Equivalent cost of alternative provider (£)	2,016		
Saving per 12 week session		1,512	
Total annual saving to school (3 sessions per school)			326,592
Deadweight deduction: Proportion of schools that would use alternatives	40%		(130,637)
<b>Total annual saving to schools</b>			<b>195,955</b>
Value of teacher time diverted to other work:			
Number of schools using WLL facilities	72		
Number of hours per week at WLL facilities	1.0		
Number of teachers	2.0		
Number of weeks	36		
Cost of teacher per hour (salary) (£)	18		
Value of rediverted resource per school		1,319	
<b>Total saving</b>			<b>94,945</b>
<b>Total savings to local schools</b>			<b>290,900</b>

The above table highlights that circa £0.29 million of benefits or savings are generated from the schools swimming programme.

## Key assumptions

WLL management information shows that:

72 schools benefited from the use of WLL's swimming facilities with each school taking on average 3 twelve week session during 2010. The cost of a 12 week session at WLL averaged £504 compared with £2,016 for an equivalent alternative supplier, representing a substantial saving per session.

Deadweight: A 40% deduction has been made to account for schools that may use other providers. The SROI Team believe that this assumption is prudent as many schools would not be financially able to use a commercial provider due to the additional cost.

Given that teachers tend to take the opportunity to carry out other work while the children are in the care of trained WLL staff, the SROI Team has used an hourly salary rate as a proxy to put a value on that time (children are supervised by WLL staff for 1 hour per visit). Assuming a teacher salary of £18.00 per hour (including all costs of employment), the value of teacher time re-directed to other work (including lesson preparation and marking) would be £94,945. This benefit would not occur if schools delivered swimming lessons in-house. A teacher's salary is used as a proxy for the value of their time, given that the alternative work done during WLL sessions would otherwise be completed outside working hours.

*Alternative Attribution:* No deductions were felt to be required for alternative attribution in the cost saving models, as no other agencies are involved in this provision.

## Evaluating savings to swimming lesson users

Swimming lessons provide the participant with a healthy activity that can be continued for a lifetime. Swimming lessons for children also promote the early adoption of physical exercise with the associated health benefits. This in turn should encourage participants to make swimming a continued part of their exercise programme throughout their life. WLL by providing discounted price lessons promotes swimming and its benefits to a wider social and economic graphic than the private sector who would charge higher costs. In addition, it can be argued that there is insufficient capacity within the private sector to meet the requirements of the West Lothian public.

The results of the model are shown below:

Swimming programme - swimming lessons	Assumptions	Calculation	Benefits (£)
Cost savings to swimming lesson users:			
Total number of participants	18,825		
Average number of lessons taken by participants	10		
Total number of lessons (per annum)		188,250	
Cost per lesson at WLL (£)	3.20		
Cost per lesson at alternative provider (£)	7.00		
Saving per lesson (£)		3.80	
<b>Total saving from reduced swimming lesson costs</b>			<b>715,350</b>

The above table highlights that circa £0.7 million of benefits or savings are generated from swimming lessons

## Key assumptions

WLL management information shows that:

- ▶ 18,825 participants undertook swimming lessons during 2010/11;
- ▶ the average participant took a block of 10 lessons; and
- ▶ WLL charges £3.20 per lesson.

A review of commercial swimming lesson prices by WLL shows that lessons would otherwise cost users around £7.00 per hour, compared to £3.20 at WLL.

## Evaluating benefits of holiday and after school swimming sessions

Historically, WLL has provided free swimming sessions during main holiday periods and on Friday afternoons during certain periods of the school term (with schools in West Lothian closing at 12.30 pm on Fridays). Two models have been used to measure the potential benefits from this programme. These being:

- ▶ Saving to the participant of having free access to swimming rather than paid; and
- ▶ The cost to parents of finding childcare providers for the children, less a deduction to allow for childcare provided by non-economically active family members.

The extended holiday periods for school children combined with the early closing of primary schools in West Lothian at 12.30pm each Friday and the legal requirement for supervised care, means that WLL provides a valuable service to working parents in terms of supervised care whilst they are working. The most likely alternatives would be:

- ▶ A parent would need to take time off work; or
- ▶ The children would be left in the care of a childminder, estimated at circa £7.50 per hour.

The results of the model are shown below:

Swimming - holiday and after school swimming (free of charge)	Assumptions	Calculation	Benefits (£)
Child care saving:			
Number of children using free sessions	5,653		
Typical duration of visit (hours per day)	2.0		
Average cost of childcare (£ per hour)	7.50		
Saving per session		84,795	
Number of free session days per annum		12	
Alternative Attribution: Proportion of children that would not be in childcare	40%		
<b>Total childcare cost saving</b>			<b>610,524</b>
Saving to participants:			
Number of children using free sessions	5,653		
Alternative Attribution: Proportion of children that only under take the swimming sessions if free	50%		
Cost per session (£)	2		
Saving per session		5,653	
Number of free session days per annum		12	
<b>Total saving from free swimming lessons</b>			<b>67,836</b>
<b>Total benefits from swimming lessons</b>			<b>678,360</b>

The above table highlights that circa £0.68 million of benefits or savings are generated from the holiday and after school swimming programme.

## Key assumptions

**Average cost of childcare:** The estimated cost saving of £7.50 per hour represents the saving of the childcare cost which is significantly lower than the potential cost to the local economy of a parent taking time off work. Based on West Lothian's annual GVA per day of £103, the economic loss to the local community would equate to £15 per hour.

**Deadweight:** A deduction of 40% has been made to account for the parents who are unemployed and don't require external child care and allowing for children to be left in the care of family members. This does not appear to be unreasonable in the context of the local economic activity rate of 78%.

**Cost saving participants:** The cost saving of £2 per session (being the average normal price for paid for swimming) is significantly lower than comparable other forms of supervised entertainment or activity clubs. A deadweight deduction of 50% has been made to account for a potential decline in attendance if WLL was to charge for these sessions.

## Xcite membership

WLL through its Xcite membership scheme offers users reduced price access, compared to local alternative commercial providers allowing the member to achieve a cost saving. Alongside the standard Xcite memberships



WLL provides discounted memberships to the long term unemployed. The results of and key assumptions to the model are shown below.

## Evaluating membership cost savings

Xcite - membership fee savings	Assumptions	Calculation	Benefits (£)
Savings due to reduced membership fees:			
Number of members	13,134		
Proportion that would not join an alternative	61%		
Total number of members who would not join an alternative		8,066	
Average cost of membership (£ per annum)	372		
Average cost of alternative membership (£ per annum)	660		
Annual saving per member that would join alternative (£)		288	
<b>Annual membership saving</b>			<b>2,322,907</b>
Savings due to discounted memberships:			
Number of members	937		
Proportion that would not join an alternative	75%		
Total number of members who would not join an alternative		703	
Average cost of membership (£ per annum)	186		
Average cost of alternative membership (£ per annum)	660		
Annual saving per member that would join alternative (£)		474	
<b>Annual membership saving</b>			<b>333,104</b>
<b>Total savings from Xcite membership</b>			<b>2,656,011</b>

The above table highlights that circa £2.66 million of benefits or savings are generated from the WLL's membership schemes.

## Key assumptions – Xcite membership

*Deadweight:* As noted in the general benefits evaluation shown above the number of members that would join an alternative facility has been estimated at 39% of the total membership.

*Number of beneficiaries:* Amounts to 8,066 (being the total membership data compiled from WLL's management information system after deducting for deadweight).

*Cost comparison:* The average cost of WLL's membership is £31 per month compared with an alternate commercial provider of £55 per month (based on research conducted by the SROI Team) resulting in an annual saving of £288 per year per beneficiary.

## Key assumptions – discounted membership

*Deadweight:* A deduction of 25% has been applied in relation for those members that would join an alternative facility. It is assumed that the majority of discounted members would not join an alternative, as these members tend to have lower incomes, and as such would be unlikely to be in a position to afford a commercial gym membership.

*Number of beneficiaries:* Amounts to 937 (being the total membership data compiled from WLL's management information system after deducting for deadweight).

*Cost comparison:* The average cost of WLL's membership is £15.50 per month compared with an alternate commercial provider of £55 per month (based on research conducted by the SROI Team) resulting in an annual saving of £474 per year per beneficiary.

## E. Sensitivity Analysis

Various assumptions have been made in the course of preparing this analysis and the detailed tables of calculations in Appendix D. Some relate to estimates made by the SROI Team in coming to the views of outcomes, and some relate to the interpretation of information arising from other research work and statistical analysis referenced in this work.

In order to assess the extent to which these assumptions are material, the potentially key assumptions have been identified. Each has been subject to sensitivity analysis within what appears to be a reasonable range, and the effect on the total valued outcomes under the study has been re-cast. The resulting analysis is shown below:[update].

Sensitivity Analysis (£'000)	Savings to NHS and the wider economy (all sites)	NHS referral programme	Ageing well programme	Swimming activity programme	Xcite membership	Total
Base case - Appendix D	9,824	2,448	311	1,685	2,656	16,923
1) Decrease in the number of members who would not use an alternative facility or another form of exercise from 8,066 to 6,752	9,360	2,448	311	1,685	2,278	16,081
2) 10% Increase in all assumptions relating to alternative attribution	7,938	2,007	251	1,569	2,278	14,044
3) 20% Reduction in all assumed NHS savings per patient/member	8,172	2,014	311	1,685	2,656	14,838

The table above highlights the results of sensitising down the identified key assumptions. The analysis shows that under each sensitivity scenario the study still generates an economic and social benefit well in excess of the funding of £2.17 million provided by West Lothian Council in 2010/11. This is highlighted under sensitivity scenario 2 which shows that the social and economic benefit generated exceeds is the funding provided by West Lothian Council in 2010/11 by circa £11.9 million.

