



LANCASHIRE VOLUNTEER PARTNERSHIP

Appendix A: A Programme Evaluation

01 September 2018

1. APPENDIX A SOCIAL IMPACT

Older Clients

Respite

Respite	Assumption	Calculation	FY 16/17	FY 17/18
Number of clients			152	223
Number of clients with carers			57	83
Number of carers			60	83
<u>Mental Wellbeing of Carer</u>				
Total cost of Depression (Service costs)	£1,680,000,000			
Number of people suffering from Depression	1,240,000			
Cost of service due to Depression per person		£1,354.84		
Assumed proportion of depression sufferers	46%			
Total cost of Anxiety (Service Costs)	£1,240,000,000			
Number of people suffering from Anxiety	2,280,000			
Cost of service due to Anxiety per person		£543.86		
Assumed proportion of anxiety sufferers	78%			
Weighted average costs for anxiety and depression		£1,047.44		
Percentage of carers affected by no respite	84%			
Cases avoided per annum			50	70
Value of mental health problems avoided for carers per annum			£52,790.79	£73,027.26

Respite	Assumption	Calculation	FY 16/17	FY 17/18
Mental Wellbeing of Cared-for				
Health and social care	£ 21,300,000,000			
Human costs	£ 53,600,000,000			
UK Population	63,200,000			
UK Population affected	16%	10,112,000		
Cost per incident		£ 7,407		
Value to the individual of the support provided				
	5%	£ 370		
Social Value of increased mental health wellbeing for cared for, per annum				
			£ 21,110.07	£ 30,739.22
Total Social value created by carer respite per annum				
			£ 73,901	£ 103,766
Total Social value created by carer respite per month				
			£ 6,158.40	£ 8,647.21
Social Value of carer respite				
			£55,426	£103,766
Dead Weight	17%		-£9,238	-£17,294
Alternative Attribution	66%		-£36,581	-£68,486
Total Gain due to carer respite			£9,607	£17,986

Key Assumptions:

- **Total Cost of Depression (Service Costs):** Figures have been taken from: McCrone, P., Dhanasiri, S., Patel, A., Knapp, M. and Lawton- Smith, S. (2008). The Cost of Mental Health Care in England to 2026. *The Kings Fund*. [online] Available at: https://www.kingsfund.org.uk/sites/files/kf/Paying-the-Price-the-cost-of-mental-health-care-England-2026-McCrone-Dhanasiri-Patel-Knapp-Lawton-Smith-Kings-Fund-May-2008_0.pdf [Accessed 11 Jul. 2017].
- **Assumed proportion of Depression sufferers:** Figures have been taken from: Kirby, J. (2017). Lack of respite sees many long-term carers without a day off in five years. [online] Careappointments.co.uk. Available at: <http://www.careappointments.co.uk/care-news/england/item/42095-lack-of-respite-sees-many-long-term-carers-without-a-day-off-in-five-years> [Accessed 11 Jul. 2017].

- **Total Cost of Anxiety (Service Costs):** Figures have been taken from: McCrone, P., Dhanasiri, S., Patel, A., Knapp, M. and Lawton- Smith, S. (2008). The Cost of Mental Health Care in England to 2026. *The Kings Fund*. [online] Available at: https://www.kingsfund.org.uk/sites/files/kf/Paying-the-Price-the-cost-of-mental-health-care-England-2026-McCrone-Dhanasiri-Patel-Knapp-Lawton-Smith-Kings-Fund-May-2008_0.pdf [Accessed 11 Jul. 2017].
- **Assumed proportion of Anxiety sufferers:** Figures have been taken from: Kirby, J. (2017). Lack of respite sees many long-term carers without a day off in five years. [online] Careappointments.co.uk. Available at: <http://www.careappointments.co.uk/care-news/england/item/42095-lack-of-respite-sees-many-long-term-carers-without-a-day-off-in-five-years> [Accessed 11 Jul. 2017].
- **Percentage of carers affected by no respite:** Figures have been taken from: State of Caring. (2017). [online] Available at: <http://www.carersuk.org/for-professionals/policy/policy-library/state-of-caring-report-2017> [Accessed 11 Jul. 2017].
- **Mental Wellbeing of Cared For:** Figures have been taken from:
 - Prime life. (2017) The Benefits of Respite Care | Prime Life. [online] Available at: <http://www.prime-life.co.uk/2014/08/benefits-respite-care/http://www.prime-life.co.uk/2014/08/benefits-respite-care/> [Accessed 11 Jul. 2017].
 - Chida, Y. and Steptoe, A. (2008). Positive Psychological Well-Being and Mortality: A Quantitative Review of Prospective Observational Studies. *Psychosomatic Medicine*, 70(7), pp.741-756.
 - Centre for mental health. (2017). The economic and social costs of mental health problems. [online] Available at: <https://www.centreformentalhealth.org.uk/Handlers/Download.ashx?IDMF=6a98a6da-b9f5-4a07-b88a-067976a0bf5b> [Accessed 11 Jul. 2017].
- **UK Population:** Figures taken from: 2011 Census data
- **UK Population affected Anxiety or Depression:** Figures taken from: Weich, S., Nazroo, J., Sproston, K., Mcmanus, S., Blanchard, M., Erens, B., Karlsen, S., King, M., Lloyd, K., Stansfeld, S. and Tyrer, P. (2004). Common mental disorders and ethnicity in England: The Empiric Study. *Psychological Medicine*, 34(08), p.1543.
- **Alternative Attribution:** The assumption that there are other organisations or individuals that are also responsible for providing carers the opportunity for respite
- **Deadweight:** The assumption that there is a likelihood of a carer being able to get respite if LVP were not available to provide this service

Tackling Loneliness

Tackling Loneliness	Assumption	Calculations	FY 16/17	FY 17/18
Number of clients			152	223

Tackling Loneliness	Assumption	Calculations	FY 16/17	FY 17/18
Number of clients who feel isolated/socially excluded/lonely			152	223
Cost of GP Visits per use	£25			
Increased GP visits	6	£150		
Cost of A & E visits per use	£108			
Increased A and E visits	0.25	£27.00		
Cost of unplanned admissions per use	£800			
Increased emergency admissions	0.07	£56		
Cost of Depression	£4,700			
Increased likelihood of depression attributed to loneliness	46%	£2,162		
Cost of Dementia	£107,000			
Increased risk of dementia attributed to loneliness	7%	£7,490		
Total social value per annum			£1,502,520	£2,204,355
Total social value per month			£125,210	£183,696
Total Cost of Loneliness of Clients			£ 1,126,890	£ 2,204,355
Dead Weight	17%		-£187,815	-£367,393
Alternative Attribution	66%		-£743,747	-£1,454,874

Tackling Loneliness	Assumption	Calculations	FY 16/17	FY 17/18
Total Gain			£195,328	£382,088

Key Assumptions:

- **Tackling Loneliness:** Outcomes taken from: Social Impact Bonds (2015) [online]: Investing to Tackle Loneliness, Available at: http://www.socialfinance.org.uk/wp-content/uploads/2015/06/Investing_to_Tackle_Loneliness.pdf [Accessed 11 Jul 2017]
- **Cost of GP visits per use:** Figures have been taken from: Curtis, L (2010) [online]: Available at: <http://www.pssru.ac.uk/archive/pdf/uc/uc2010/uc2010.pdf> [Accessed 11 Jul 2017]
- **Increased GP visits:** Figures taken from: Ellaway et al (1999): "Someone to talk to? The role of loneliness as a factor in the frequency of GP consultations." British Journal of General Practice
- **Cost of A & E visits per use:** Figures taken from: NHS Monitor (2012) Reference Costs 2012-13, [Online], Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/261154/nhs_reference_costs_2012-13_acc.pdf [Accessed 11 Jul 2017]
- **Increased A & E use:** Figures taken from: Geller et al (1999) Loneliness as a predictor of hospital emergency department use, Journal of Family Practice
- **Cost of unplanned admissions per use:** Figures taken from: Social Impact Bonds (2015) [online]: Investing to Tackle Loneliness, Available at: http://www.socialfinance.org.uk/wp-content/uploads/2015/06/Investing_to_Tackle_Loneliness.pdf [Accessed 11 Jul 2017]
- **Increased emergency admissions:** Figures taken from: Molloy et al. (2010) Loneliness and Emergency and Planned Hospitalizations in a Community Sample of Older Adults, Journal of the American Geriatrics Society.
- **Cost of Depression:** Figures taken from: NHS Monitor (2012) Reference Costs 2012-13, [Online], Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/261154/nhs_reference_costs_2012-13_acc.pdf [Accessed 11 Jul 2017]
- **Increased risk of depression attributed to loneliness:** Figures taken from: Heikkinen et al (2003), Depressive symptoms in late life: a 10-year follow up, Finnish Research Centre for Interdisciplinary Gerontology
- **Cost of dementia:** Figures taken from: NHS Monitor (2012) Reference Costs 2012-13, [Online], Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/261154/nhs_reference_costs_2012-13_acc.pdf [Accessed 11 Jul 2017]
- **Increased risk of dementia attributed to loneliness:** Figures taken from: Wilson et al (2007), Loneliness and Risk of Alzheimer Disease, Archives of General Psychiatry

- **Alternative Attribution:** This is the assumption that there are other organisations that are also responsible for providing company to the clients
- **Deadweight:** This is the likelihood of the client tackling loneliness if LVP were not available to provide this

Increased Physical Activity

Increased Physical Activity	Assumption	Calculations	FY 16/17	FY 17/18
Number of clients who have increased physical activity with volunteers			152	223
Cost for the NHS for heart treatment	£ 18,900,000,000			
Physical inactivity causing coronary heart disease	10.5%			
Cost to the UK for physical inactivity related heart disease		£ 1,984,500,000		
Cost to NHS for Diabetes	£ 13,000,000,000			
Physical inactivity causing diabetes	13%			
Cost to the UK for physical inactivity related diabetes		£1,690,000,000		
Cost to NHS for Premature death	£ 107,000,000			
Physical inactivity causing premature all - cause mortality	16.9%			
Cost to the UK for physical inactivity related premature death		£18,083,000		
Total cost to the NHS for cost of cancer	£ 1,100,000,000			
Physical inactivity related colon cancer	18.7%			
Cost to the UK for physical inactivity related colon cancer		£ 205,700,000		

Increased Physical Activity	Assumption	Calculations	FY 16/17	FY 17/18
Total national cost		£3,898,283,000		
Physically active population:				
Men	40%			
Women	28%			
Men in UK	32,377,674			
Women in UK	33,270,380			
Total inactive people		43,381,278		
Cost saved per inactive person		£90		
Cost saved for clients per annum			£13,658.86	£20,038.99
Cost saved for clients per month			1,138	1,670
Present Value gained from active clients			£10,244	£20,039
Alternative Attribution	66%		-£6,761	-£13,226
Deadweight	17%		-£1,707	-£3,340
Total Gain			£1,776	£3,473

Key Assumptions:

- **Costs to the NHS for heart treatment:** Figures taken from: Townsend N, Wickramasinghe K, Bhatnagar P, Smolina K, Nichols M, Leal J, et al. (2012) Coronary heart disease statistics: A compendium of health statistics edition. London, England: British Heart Foundation and Oxford, England: University of Oxford"
- **Physical Inactivity causing coronary heart disease:** Figures taken from: BHF National Centre (2013), Economic costs of physical inactivity, [Online], Available at: <http://www.ssehsactive.org.uk/userfiles/Documents/economiccosts.pdf>, [Accessed 11 Jul 2017]
- **Cost to NHS for Diabetes:** Figures taken from: Hex N, Bartlett C, Wright D, Taylor M, Varley D. (2012) Estimating the current and future costs of type 1 and type 2 diabetes in the United

Kingdom, including direct health costs and indirect societal and productivity cost. *Diabetes Med*; 29(7):855-62

- **Physical Inactivity causing Diabetes:** Figures taken from: BHF National Centre (2013), *Economic costs of physical inactivity*, [Online], Available at: <http://www.ssehsactive.org.uk/userfiles/Documents/economiccosts.pdf>, [Accessed 11 Jul 2017]
- **Cost to the NHS for Premature Death:** Figures taken from: Chief Medical Officers (2011), *Start Active, Stay Active: A report on physical activity for health from the four home countries*, [Online], Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/216370/dh_128210.pdf, [Accessed 11 Jul 2017]
- **Physical Inactivity causing premature all-cause mortality:** Figures taken from: BHF National Centre, (2013) *Economic costs of physical inactivity*, [Online], Available at: <http://www.ssehsactive.org.uk/userfiles/Documents/economiccosts.pdf>, [Accessed 11 Jul 2017]
- **Total cost to the NHS for the cost of cancer:** Figures taken from: McCormick, B. and Stone, I. (2007). *Economic costs of obesity and the case for government intervention*. *Obesity Reviews*, 8(s1), pp.161-164.
- **Physical inactivity related colon cancer:** Figures taken from:
 - Trueman P, Chilcott J, Tappenden P, Lowson K, Pilgrim H, Bending M. (2007) *Bowel cancer services: Costs and benefits*. Report to the Department of Health. York and Sheffield: York Health Economics Consortium and the School of Health and Related Research (University of Sheffield)
 - BHF National Centre, (2013) *Economic costs of physical inactivity*, [Online], Available at: <http://www.ssehsactive.org.uk/userfiles/Documents/economiccosts.pdf>, [Accessed 11 Jul 2017]
- **Physically active population:** Figures taken from:
 - NHS Digital (2017), *Statistics on Obesity, Physical Activity and Diet*[Online], Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/613532/obes-phys-acti-diet-eng-2017-rep.pdf, [Accessed at 11 Jul 2017]
 - Sustrans, (2017). *Physical activity and health- facts and figures* [online] Available at: <http://www.sustrans.org.uk/policy-evidence/the-impact-of-our-work/related-academic-research-and-statistics/physical-activity> [Accessed 11 Jul. 2017].
- **Population of UK:** Figures taken from: Office for National Statistics, (2017). *Population Estimates for UK, England and Wales, Scotland and Northern Ireland: mid 2016* [online] Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/bulletins/annualmidyearpopulationestimates/mid2016> [Accessed 11 Jul. 2017].
- **Alternative Attribution:** This is the assumption that there are other organisations/individuals that are responsible for keeping clients physically active

Mental Health

Tackling Loneliness

Tackling Loneliness	Assumption	Calculation	FY 16/17	FY 17/18
Number of clients			25	37
Number of clients who feel isolated/socially excluded/lonely			25	37
Cost of GP Visits per use	£25			
Increased GP visits	6	£150		
Cost of A & E visits per use	£108			
Increased A and E visits	0.25	£27.00		
Cost of unplanned admissions per use	£800			
Increased emergency admissions	0.07	£56		
Cost of Depression	£4,700			
Increased likelihood of depression attributed to loneliness	46%	£2,162		
Cost of Dementia	£107,000			
Increased risk of dementia attributed to loneliness	7%	£7,490		
Social cost per annum			£247,125	£365,745
Social cost per month			£20,594	£30,479
Total Cost of loneliness of Clients			£ 185,344	£ 365,745
Dead Weight	17%		-£30,891	-£60,958
Alternative Attribution	66%		-£122,327	-£241,392
Total Gain			£32,126	£63,396

Key Assumptions:

- **Tackling Loneliness:** Outcomes taken from: Social Impact Bonds (2015) [online]: Investing to Tackle Loneliness, Available at: http://www.socialfinance.org.uk/wp-content/uploads/2015/06/Investing_to_Tackle_Loneliness.pdf [Accessed 11 Jul 2017]
- **Cost of GP visits per use:** Figures have been taken from: Curtis, L (2010) [online]: Available at: <http://www.pssru.ac.uk/archive/pdf/uc/uc2010/uc2010.pdf> [Accessed 11 Jul 2017]
- **Increased GP visits:** Figures taken from: Ellaway et al (1999): "Someone to talk to? The role of loneliness as a factor in the frequency of GP consultations." *British Journal of General Practice*
- **Cost of A & E visits per use:** Figures taken from: NHS Monitor (2012) Reference Costs 2012-13, [Online], Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/261154/nhs_reference_costs_2012-13_acc.pdf [Accessed 11 Jul 2017]
- **Increased A & E use:** Figures taken from: Geller et al (1999) Loneliness as a predictor of hospital emergency department use, *Journal of Family Practice*
- **Cost of unplanned admissions per use:** Figures taken from: Social Impact Bonds (2015) [online]: Investing to Tackle Loneliness, Available at: http://www.socialfinance.org.uk/wp-content/uploads/2015/06/Investing_to_Tackle_Loneliness.pdf [Accessed 11 Jul 2017]
- **Increased emergency admissions:** Figures taken from: Molloy et al. (2010) Loneliness and Emergency and Planned Hospitalizations in a Community Sample of Older Adults, *Journal of the American Geriatrics Society*.
- **Cost of Depression:** Figures taken from: NHS Monitor (2012) Reference Costs 2012-13, [Online], Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/261154/nhs_reference_costs_2012-13_acc.pdf [Accessed 11 Jul 2017]
- **Increased risk of depression attributed to loneliness:** Figures taken from: Heikkinen et al (2003), Depressive symptoms in late life: a 10-year follow up, *Finnish Research Centre for Interdisciplinary Gerontology*
- **Cost of dementia:** Figures taken from: NHS Monitor (2012) Reference Costs 2012-13, [Online], Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/261154/nhs_reference_costs_2012-13_acc.pdf [Accessed 11 Jul 2017]
- **Increased risk of dementia attributed to loneliness:** Figures taken from: Wilson et al (2007), Loneliness and Risk of Alzheimer Disease, *Archives of General Psychiatry*
- **Alternative Attribution:** This is the assumption that there are other organisations that are also responsible for providing company to the clients
- **Deadweight:** This is the likelihood of the client tackling loneliness if LVP were not available to provide this

Increased Physical Activity

Increased Physical Activity	Assumption	Calculations	FY 16/17	FY 17/18
Number of clients with mental health problems			25	37
Cost for the NHS for heart treatment	£18,900,000,000			
Physical inactivity causing coronary heart disease	10.5%			
Cost to the UK for physical inactivity related heart disease		£1,984,500,000		
Cost to NHS for Diabetes	£13,000,000,000			
Physical inactivity causing diabetes	13%			
Cost to the UK for physical inactivity related diabetes		£1,690,000,000		
Cost to NHS for Premature death	£107,000,000			
Physical inactivity causing premature all - cause mortality	16.9%			
Cost to the UK for physical inactivity related premature death		£ 18,083,000		
Total cost to the NHS for cost of cancer	£1,100,000,000			
Physical inactivity related colon cancer	18.7%			
Cost to the UK for physical inactivity related colon cancer		£205,700,000		
Total national cost		£3,898,283,000		
Physically active population:				

Increased Physical Activity	Assumption	Calculations	FY 16/17	FY 17/18
Men	40%			
Women	28%			
Men in UK	32,377,674			
Women in UK	33,270,380			
Total inactive people		43,381,278		
Cost saved per inactive person		£90		
Cost saved for clients per annum			£2,246.52	£3,324.86
Cost saved for clients per month			£187	£277
Present Value gained from active clients			£1,685	£3,325
Dead weight	17%		-£281	-£554
Alternative Attribution	66%		-£1,112	-£2,194
Total Gain			£292	£576

Key Assumptions:

- **Costs to the NHS for heart treatment:** Figures taken from: Townsend N, Wickramasinghe K, Bhatnagar P, Smolina K, Nichols M, Leal J, et al. (2012) Coronary heart disease statistics: A compendium of health statistics edition. London, England: British Heart Foundation and Oxford, England: University of Oxford"
- **Physical Inactivity causing coronary heart disease:** Figures taken from: BHF National Centre (2013), Economic costs of physical inactivity, [Online], Available at: <http://www.ssehsactive.org.uk/userfiles/Documents/economiccosts.pdf>, [Accessed 11 Jul 2017]
- **Cost to NHS for Diabetes:** Figures taken from: Hex N, Bartlett C, Wright D, Taylor M, Varley D. (2012) Estimating the current and future costs of type 1 and type 2 diabetes in the United Kingdom, including direct health costs and indirect societal and productivity cost. Diabetes Med; 29(7):855-62

- **Physical Inactivity causing Diabetes:** Figures taken from: BHF National Centre (2013), Economic costs of physical inactivity, [Online], Available at: <http://www.ssehsactive.org.uk/userfiles/Documents/economiccosts.pdf>, [Accessed 11 Jul 2017]
- **Cost to the NHS for Premature Death:** Figures taken from: Chief Medical Officers (2011), Start Active, Stay Active: A report on physical activity for health from the four home countries, [Online], Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/216370/dh_128210.pdf, [Accessed 11 Jul 2017]
- **Physical Inactivity causing premature all-cause mortality:** Figures taken from: BHF National Centre, (2013) Economic costs of physical inactivity, [Online], Available at: <http://www.ssehsactive.org.uk/userfiles/Documents/economiccosts.pdf>, [Accessed 11 Jul 2017]
- **Total cost to the NHS for the cost of cancer:** Figures taken from: McCormick, B. and Stone, I. (2007). Economic costs of obesity and the case for government intervention. Obesity Reviews, 8(s1), pp.161-164.
- **Physical inactivity related colon cancer:** Figures taken from:
 - Trueman P, Chilcott J, Tappenden P, Lowson K, Pilgrim H, Bending M. (2007) Bowel cancer services: Costs and benefits. Report to the Department of Health. York and Sheffield: York Health Economics Consortium and the School of Health and Related Research (University of Sheffield)
 - BHF National Centre, (2013) Economic costs of physical inactivity, [Online], Available at: <http://www.ssehsactive.org.uk/userfiles/Documents/economiccosts.pdf>, [Accessed 11 Jul 2017]
- **Physically active population:** Figures taken from:
 - NHS Digital (2017), Statistics on Obesity, Physical Activity and Diet[Online], Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/613532/obes-phys-acti-diet-eng-2017-rep.pdf, [Accessed at 11 Jul 2017]
 - Sustrans, (2017). Physical activity and health- facts and figures [online] Available at: <http://www.sustrans.org.uk/policy-evidence/the-impact-of-our-work/related-academic-research-and-statistics/physical-activity> [Accessed 11 Jul. 2017].
- **Population of UK:** Figures taken from: Office for National Statistics, (2017). Population Estimates for UK, England and Wales, Scotland and Northern Ireland: mid 2016 [online] Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/bulletins/annualmidyearpopulationestimates/mid2016> [Accessed 11 Jul. 2017].
- **Alternative Attribution:** This is the assumption that there are other organisations/individuals that are responsible for keeping clients physically active

Benefits of reducing depression and anxiety-co-morbidity

Benefits of reducing depression and anxiety- co-morbidity	Assumption	Calculations	FY 16/17	FY 17/18
Number of clients			25	37
Unit cost of mental health problems				
Total cost of Depression (Service costs)	£1,680,000,000			
Number of people suffering from Depression	1,240,000			
Cost of service due to Depression per person		£1,355		
Assumed proportion of depression sufferers	50%			
Number of clients suffering			13	19
Total cost of Anxiety (Service Costs)	£1,240,000,000			
Number of people suffering from Anxiety	2,280,000			
Cost of service due to Anxiety per person		£544		
Assumed proportion of anxiety sufferers	29%			
Number of clients suffering			7	11
Weighted average costs for anxiety and depression per annum			£20,878	£30,900
Weighted average costs for anxiety and depression per month			1,740	2,575
Value of mental health problems avoided			£15,659	£30,900

Benefits of reducing depression and anxiety- co-morbidity	Assumption	Calculations	FY 16/17	FY 17/18
Dead Weight	17%		-£2,610	-£5,150
Alternative Attribution	66%		-£10,335	-£20,394
Attributable gain from avoided mental health problems			£2,714	£5,356

Key Assumptions:

- **Total cost of depression (Service Costs):** Figures taken from: McCrone, P., Dhanasiri, S., Patel, A., Knapp, M. and Lawton- Smith, S. (2008). The Cost of Mental Health Care in England to 2026. The Kings Fund. [online] Available at: https://www.kingsfund.org.uk/sites/files/kf/Paying-the-Price-the-cost-of-mental-health-care-England-2026-McCrone-Dhanasiri-Patel-Knapp-Lawton-Smith-Kings-Fund-May-2008_0.pdf [Accessed 11 Jul. 2017].
- **Assumed proportion of depression sufferers:** Figures taken from: Naylor C., Parsonage M., McDaid D., Knapp M., Fossey M., Galea A., (2012), Long Term conditions and mental health, the cost of co-morbidities, [Online] Accessed at: https://www.kingsfund.org.uk/sites/files/kf/field/field_publication_file/long-term-conditions-mental-health-cost-comorbidities-naylor-feb12.pdf
- **Total cost of anxiety (Service Costs):** Figures taken from: McCrone, P., Dhanasiri, S., Patel, A., Knapp, M. and Lawton- Smith, S. (2008). The Cost of Mental Health Care in England to 2026. The Kings Fund. [online] Available at: https://www.kingsfund.org.uk/sites/files/kf/Paying-the-Price-the-cost-of-mental-health-care-England-2026-McCrone-Dhanasiri-Patel-Knapp-Lawton-Smith-Kings-Fund-May-2008_0.pdf [Accessed 11 Jul. 2017].
- **Assumed proportion of anxiety sufferers:** Cameron, O. G, (2007), Understanding Co-Morbid Depression and Anxiety, [Online] Available at: <http://www.psychiatrytimes.com/articles/understanding-comorbid-depression-and-anxiety>, [Accessed 11 Jul 2017]
- **Alternative Attribution:** This is the assumption that there are other organisations or individuals that are responsible for ensuring that the client does not feel depressed or anxious
- **Dead weight:** This is the likelihood of the client seeking help from another organisation if LVP did not exist

Respite

Respite	Assumption	Calculations	FY 16/17	FY 17/18
Number of clients			23	37
Number of clients with carers			10	15
Number of carers			11	15

Respite	Assumption	Calculations	FY 16/17	FY 17/18
Mental Wellbeing of Carer				
Total cost of Depression (Service costs)	£1,680,000,000			
Number of people suffering from Depression	1,240,000			
Cost of service due to Depression per person		£1,354.84		
Assumed proportion of depression sufferers	46%			
Total cost of Anxiety (Service Costs)	£1,240,000,000			
Number of people suffering from Anxiety	2,280,000			
Cost of service due to Anxiety per person		£543.86		
Assumed proportion of anxiety sufferers	78%			
Weighted average costs for anxiety and depression		£1,047		
Percentage of carers affected by no respite	84%			
Cases avoided per annum			9	13
Value of mental health problems avoided for carers			£9,678	£13,198
Mental Wellbeing of Cared-for				
Health and social care	£21,300,000,000			
Human costs	£53,600,000,000			
UK Population	63,200,000			
UK Population affected	16%	10,112,000		
Cost per incident		£7,407		

Respite	Assumption	Calculations	FY 16/17	FY 17/18
Value to the individual of the support provided	5%	£370.35		
Social Value of increased mental health wellbeing for cared for			£3,704	£5,555
Social value per annum			£13,382	£18,753
Social value per month			£1,115.15	£1,562.75
Social Value of carer respite			£10,036	£18,753
Dead Weight	17%		-£1,673	-£3,125
Alternative Attribution	66%		-£6,624	-£12,377
Total Gain due to carer respite			£1,740	£3,251

Key Assumptions:

- **Total Cost of Depression (Service Costs):** Figures have been taken from: McCrone, P., Dhanasiri, S., Patel, A., Knapp, M. and Lawton- Smith, S. (2008). The Cost of Mental Health Care in England to 2026. *The Kings Fund*. [online] Available at: https://www.kingsfund.org.uk/sites/files/kf/Paying-the-Price-the-cost-of-mental-health-care-England-2026-McCrone-Dhanasiri-Patel-Knapp-Lawton-Smith-Kings-Fund-May-2008_0.pdf [Accessed 11 Jul. 2017].
- **Assumed proportion of Depression sufferers:** Figures have been taken from: Kirby, J. (2017). Lack of respite sees many long-term carers without a day off in five years. [online] Careappointments.co.uk. Available at: <http://www.careappointments.co.uk/care-news/england/item/42095-lack-of-respite-sees-many-long-term-carers-without-a-day-off-in-five-years> [Accessed 11 Jul. 2017].
- **Total Cost of Anxiety (Service Costs):** Figures have been taken from: McCrone, P., Dhanasiri, S., Patel, A., Knapp, M. and Lawton- Smith, S. (2008). The Cost of Mental Health Care in England to 2026. *The Kings Fund*. [online] Available at: https://www.kingsfund.org.uk/sites/files/kf/Paying-the-Price-the-cost-of-mental-health-care-England-2026-McCrone-Dhanasiri-Patel-Knapp-Lawton-Smith-Kings-Fund-May-2008_0.pdf [Accessed 11 Jul. 2017].

- **Assumed proportion of Anxiety sufferers:** Figures have been taken from: Kirby, J. (2017). Lack of respite sees many long-term carers without a day off in five years. [online] Careappointments.co.uk. Available at: <http://www.careappointments.co.uk/care-news/england/item/42095-lack-of-respite-sees-many-long-term-carers-without-a-day-off-in-five-years> [Accessed 11 Jul. 2017].
- **Percentage of carers affected by no respite:** Figures have been taken from: State of Caring. (2017). [online] Available at: <http://www.carersuk.org/for-professionals/policy/policy-library/state-of-caring-report-2017> [Accessed 11 Jul. 2017].
- **Mental Wellbeing of Cared For:** Figures have been taken from:
 - Prime life. (2017) The Benefits of Respite Care | Prime Life. [online] Available at: <http://www.prime-life.co.uk/2014/08/benefits-respite-care/http://www.prime-life.co.uk/2014/08/benefits-respite-care/> [Accessed 11 Jul. 2017].
 - Chida, Y. and Steptoe, A. (2008). Positive Psychological Well-Being and Mortality: A Quantitative Review of Prospective Observational Studies. *Psychosomatic Medicine*, 70(7), pp.741-756.
 - Centre for mental health. (2017). The economic and social costs of mental health problems. [online] Available at: <https://www.centreformentalhealth.org.uk/Handlers/Download.ashx?IDMF=6a98a6da-b9f5-4a07-b88a-067976a0bf5b> [Accessed 11 Jul. 2017].
- **UK Population:** Figures taken from: 2011 Census data
- **UK Population affected Anxiety or Depression:** Figures taken from: Weich, S., Nazroo, J., Sproston, K., Mcmanus, S., Blanchard, M., Erens, B., Karlsen, S., King, M., Lloyd, K., Stansfeld, S. and Tyrer, P. (2004). Common mental disorders and ethnicity in England: The Empiric Study. *Psychological Medicine*, 34(08), p.1543.
- **Alternative Attribution:** The assumption that there are other organisations that are also responsible for providing carers the opportunity for respite
- **Deadweight:** The assumption that there is a likelihood of a carer being able to get respite if LVP were not available to provide this service

Physical Disability

Respite

Respite	Assumption	Calculation	FY 16/17	FY 17/18
Number of clients			39	57
Number of clients with carers			12	18
Number of carers			12	18
Mental Wellbeing of Carer				
Total cost of Depression (Service costs)	£1,680,000,000			
Number of people suffering from Depression	1,240,000			
Cost of service due to Depression per person		£1,354.84		
Assumed proportion of depression sufferers	46%			
Total cost of Anxiety (Service Costs)				
Total cost of Anxiety (Service Costs)	£1,240,000,000			
Number of people suffering from Anxiety	2,280,000			
Cost of service due to Anxiety per person		£543.86		
Assumed proportion of anxiety sufferers	78%			
Weighted average costs for anxiety and depression				
Weighted average costs for anxiety and depression		£1,047		
Percentage of carers affected by no respite	84%			
Cases avoided per annum			10	15

Respite	Assumption	Calculation	FY 16/17	FY 17/18
Value of mental health problems avoided for carers			£10,558.16	£15,837.24
Mental Wellbeing of Cared-for				
Health and social care	£21,300,000,000			
Human costs	£53,600,000,000			
UK Population	63,200,000			
UK Population affected	16%	10,112,000		
Cost per incident		£7,407		
Value to the individual of the support provided	5%	£370.35		
Social Value of increased mental health wellbeing for cared for			£4,444	£6,666
Social value per annum			£15,002	£22,504
Social value per month			£1,250.20	£1,875.30
Social Value of carer respite			£11,252	£22,504
Dead Weight	17%		-£1,875	-£3,751
Alternative Attribution	66%		-£7,426	-£14,852
Total Gain due to carer respite			£1,950	£3,901

Key Assumptions:

- **Total Cost of Depression (Service Costs):** Figures have been taken from: McCrone, P., Dhanasiri, S., Patel, A., Knapp, M. and Lawton- Smith, S. (2008). The Cost of Mental Health Care in England to 2026. *The Kings Fund*. [online] Available at:

https://www.kingsfund.org.uk/sites/files/kf/Paying-the-Price-the-cost-of-mental-health-care-England-2026-McCrone-Dhanasiri-Patel-Knapp-Lawton-Smith-Kings-Fund-May-2008_0.pdf [Accessed 11 Jul. 2017].

- **Assumed proportion of Depression sufferers:** Figures have been taken from: Kirby, J. (2017). Lack of respite sees many long-term carers without a day off in five years. [online] Careappointments.co.uk. Available at: <http://www.careappointments.co.uk/care-news/england/item/42095-lack-of-respite-sees-many-long-term-carers-without-a-day-off-in-five-years> [Accessed 11 Jul. 2017].
- **Total Cost of Anxiety (Service Costs):** Figures have been taken from: McCrone, P., Dhanasiri, S., Patel, A., Knapp, M. and Lawton- Smith, S. (2008). The Cost of Mental Health Care in England to 2026. *The Kings Fund*. [online] Available at: https://www.kingsfund.org.uk/sites/files/kf/Paying-the-Price-the-cost-of-mental-health-care-England-2026-McCrone-Dhanasiri-Patel-Knapp-Lawton-Smith-Kings-Fund-May-2008_0.pdf [Accessed 11 Jul. 2017].
- **Assumed proportion of Anxiety sufferers:** Figures have been taken from: Kirby, J. (2017). Lack of respite sees many long-term carers without a day off in five years. [online] Careappointments.co.uk. Available at: <http://www.careappointments.co.uk/care-news/england/item/42095-lack-of-respite-sees-many-long-term-carers-without-a-day-off-in-five-years> [Accessed 11 Jul. 2017].
- **Percentage of carers affected by no respite:** Figures have been taken from: State of Caring. (2017). [online] Available at: <http://www.carersuk.org/for-professionals/policy/policy-library/state-of-caring-report-2017> [Accessed 11 Jul. 2017].
- **Mental Wellbeing of Cared For:** Figures have been taken from:
 - Prime life. (2017) The Benefits of Respite Care | Prime Life. [online] Available at: <http://www.prime-life.co.uk/2014/08/benefits-respite-care/http://www.prime-life.co.uk/2014/08/benefits-respite-care/> [Accessed 11 Jul. 2017].
 - Chida, Y. and Steptoe, A. (2008). Positive Psychological Well-Being and Mortality: A Quantitative Review of Prospective Observational Studies. *Psychosomatic Medicine*, 70(7), pp.741-756.
 - Centre for mental health. (2017). The economic and social costs of mental health problems. [online] Available at: <https://www.centreformentalhealth.org.uk/Handlers/Download.ashx?IDMF=6a98a6da-b9f5-4a07-b88a-067976a0bf5b> [Accessed 11 Jul. 2017].
- **UK Population:** Figures taken from: 2011 Census data
- **UK Population affected Anxiety or Depression:** Figures taken from: Weich, S., Nazroo, J., Sproston, K., Mcmanus, S., Blanchard, M., Erens, B., Karlsen, S., King, M., Lloyd, K., Stansfeld, S. and Tyrer, P. (2004). Common mental disorders and ethnicity in England: The Empiric Study. *Psychological Medicine*, 34(08), p.1543.

- **Alternative Attribution:** The assumption that there are other organisations that are also responsible for providing carers the opportunity for respite
- **Deadweight:** The assumption that there is a likelihood of a carer being able to get respite if LVP were not available to provide this service

Tackling Loneliness

Tackling Loneliness	Assumption	Calculation	FY 16/17	FY 17/18
Number of clients			39	57
Number of clients who feel isolated/socially excluded/lonely			39	57
Cost of GP Visits per use	£25			
Increased GP visits	6	£150		
Cost of A & E visits per use	£108			
Increased A and E visits	0.25	£27.00		
Cost of unplanned admissions per use	£800			
Increased emergency admissions	0.07	£56		
Cost of Depression	£4,700			
Increased likelihood of depression attributed to loneliness	46%	£2,162		
Cost of Dementia	£107,000			
Increased risk of dementia attributed to loneliness	7%	£7,490		
Social cost per annum			£385,515	£563,445
Social cost per month			£32,126.25	£46,953.75
Total Cost of Loneliness of Clients			£289,136	£563,445
Dead Weight	17%		-£48,189	-£93,908

Tackling Loneliness	Assumption	Calculation	FY 16/17	FY 17/18
Alternative Attribution	66%		-£190,830	-£371,874
Total Gain			£50,117	£97,664

Key Assumptions:

- **Tackling Loneliness:** Outcomes taken from: Social Impact Bonds (2015) [online]: Investing to Tackle Loneliness, Available at: http://www.socialfinance.org.uk/wp-content/uploads/2015/06/Investing_to_Tackle_Loneliness.pdf [Accessed 11 Jul 2017]
- **Cost of GP visits per use:** Figures have been taken from: Curtis, L (2010) [online]: Available at: <http://www.pssru.ac.uk/archive/pdf/uc/uc2010/uc2010.pdf> [Accessed 11 Jul 2017]
- **Increased GP visits:** Figures taken from: Ellaway et al (1999): "Someone to talk to? The role of loneliness as a factor in the frequency of GP consultations." British Journal of General Practice
- **Cost of A & E visits per use:** Figures taken from: NHS Monitor (2012) Reference Costs 2012-13, [Online], Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/261154/nhs_reference_costs_2012-13_acc.pdf [Accessed 11 Jul 2017]
- **Increased A & E use:** Figures taken from: Geller et al (1999) Loneliness as a predictor of hospital emergency department use, Journal of Family Practice
- **Cost of unplanned admissions per use:** Figures taken from: Social Impact Bonds (2015) [online]: Investing to Tackle Loneliness, Available at: http://www.socialfinance.org.uk/wp-content/uploads/2015/06/Investing_to_Tackle_Loneliness.pdf [Accessed 11 Jul 2017]
- **Increased emergency admissions:** Figures taken from: Molloy et al. (2010) Loneliness and Emergency and Planned Hospitalizations in a Community Sample of Older Adults, Journal of the American Geriatrics Society.
- **Cost of Depression:** Figures taken from: NHS Monitor (2012) Reference Costs 2012-13, [Online], Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/261154/nhs_reference_costs_2012-13_acc.pdf [Accessed 11 Jul 2017]
- **Increased risk of depression attributed to loneliness:** Figures taken from: Heikkinen et al (2003), Depressive symptoms in late life: a 10-year follow up, Finnish Research Centre for Interdisciplinary Gerontology
- **Cost of dementia:** Figures taken from: NHS Monitor (2012) Reference Costs 2012-13, [Online], Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/261154/nhs_reference_costs_2012-13_acc.pdf [Accessed 11 Jul 2017]
- **Increased risk of dementia attributed to loneliness:** Figures taken from: Wilson et al (2007), Loneliness and Risk of Alzheimer Disease, Archives of General Psychiatry

- **Alternative Attribution:** This is the assumption that there are other organisations that are also responsible for providing company to the clients

Deadweight: This is the likelihood of the client tackling loneliness if LVP were not available to provide this

Increased Physical Activity

Increased Physical Activity	Assumption	Calculation	FY 16/17	FY 17/18
Number of clients with mental health problems			39	57
Cost for the NHS for heart treatment	£18,900,000,000			
Physical inactivity causing coronary heart disease	10.5%			
Cost to the UK for physical inactivity related heart disease		£1,984,500,000		
Cost to NHS for Diabetes	£13,000,000,000			
Physical inactivity causing diabetes	13%			
Cost to the UK for physical inactivity related diabetes		£1,690,000,000		
Cost to NHS for Premature death	£107,000,000			
Physical inactivity causing premature all - cause mortality	16.9%			
Cost to the UK for physical inactivity related premature death		£18,083,000		
Total cost to the NHS for cost of cancer	£1,100,000,000			
Physical inactivity related colon cancer	18.7%			
Cost to the UK for physical inactivity related colon cancer		£205,700,000		
Total national cost		£3,898,283,000		

Increased Physical Activity	Assumption	Calculation	FY 16/17	FY 17/18
Physically active population:				
Men	40%			
Women	28%			
Men in UK	32,377,674			
Women in UK	33,270,380			
Total inactive people		43,381,278		
Cost saved per inactive person		£89.86		
Cost saved for clients per annum			£3,505	£5,122.07
Cost saved for clients per month			£292.05	£427
Present Value gained from active clients			£2,628	£5,122
Deadweight	17%		-£438	-£854
Alternative Attribution	66%		-£1,735	-£3,381
Total Gain			£456	£888

Key Assumptions:

- **Costs to the NHS for heart treatment:** Figures taken from: Townsend N, Wickramasinghe K, Bhatnagar P, Smolina K, Nichols M, Leal J, et al. (2012) Coronary heart disease statistics: A compendium of health statistics edition. London, England: British Heart Foundation and Oxford, England: University of Oxford"
- **Physical Inactivity causing coronary heart disease:** Figures taken from: BHF National Centre (2013), Economic costs of physical inactivity, [Online], Available at: <http://www.ssehsactive.org.uk/userfiles/Documents/economiccosts.pdf>, [Accessed 11 Jul 2017]
- **Cost to NHS for Diabetes:** Figures taken from: Hex N, Bartlett C, Wright D, Taylor M, Varley D. (2012) Estimating the current and future costs of type 1 and type 2 diabetes in the United Kingdom, including direct health costs and indirect societal and productivity cost. Diabetes Med; 29(7):855-62

- **Physical Inactivity causing Diabetes:** Figures taken from: BHF National Centre (2013), Economic costs of physical inactivity, [Online], Available at: <http://www.ssehsactive.org.uk/userfiles/Documents/economiccosts.pdf>, [Accessed 11 Jul 2017]
- **Cost to the NHS for Premature Death:** Figures taken from: Chief Medical Officers (2011), Start Active, Stay Active: A report on physical activity for health from the four home countries, [Online], Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/216370/dh_128210.pdf, [Accessed 11 Jul 2017]
- **Physical Inactivity causing premature all-cause mortality:** Figures taken from: BHF National Centre, (2013) Economic costs of physical inactivity, [Online], Available at: <http://www.ssehsactive.org.uk/userfiles/Documents/economiccosts.pdf>, [Accessed 11 Jul 2017]
- **Total cost to the NHS for the cost of cancer:** Figures taken from: McCormick, B. and Stone, I. (2007). Economic costs of obesity and the case for government intervention. Obesity Reviews, 8(s1), pp.161-164.
- **Physical inactivity related colon cancer:** Figures taken from:
 - Trueman P, Chilcott J, Tappenden P, Lowson K, Pilgrim H, Bending M. (2007) Bowel cancer services: Costs and benefits. Report to the Department of Health. York and Sheffield: York Health Economics Consortium and the School of Health and Related Research (University of Sheffield)
 - BHF National Centre, (2013) Economic costs of physical inactivity, [Online], Available at: <http://www.ssehsactive.org.uk/userfiles/Documents/economiccosts.pdf>, [Accessed 11 Jul 2017]
- **Physically active population:** Figures taken from:
 - NHS Digital (2017), Statistics on Obesity, Physical Activity and Diet[Online], Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/613532/obes-phys-acti-diet-eng-2017-rep.pdf, [Accessed at 11 Jul 2017]
 - Sustrans, (2017). Physical activity and health- facts and figures [online] Available at: <http://www.sustrans.org.uk/policy-evidence/the-impact-of-our-work/related-academic-research-and-statistics/physical-activity> [Accessed 11 Jul. 2017].
- **Population of UK:** Figures taken from: Office for National Statistics, (2017). Population Estimates for UK, England and Wales, Scotland and Northern Ireland: mid 2016 [online] Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/bulletins/annualmidyearpopulationestimates/mid2016> [Accessed 11 Jul. 2017].
- **Alternative Attribution:** This is the assumption that there are other organisations/individuals that are responsible for keeping clients physically active

Learning Disability

Respite

Respite	Assumption	Calculation	FY 16/17	FY 17/18
Number of clients			29	42
Number of clients with carers			24	35
Number of carers			25	35
<hr/>				
Mental Wellbeing of Carer				
Total cost of Depression (Service costs)	£1,680,000,000			
Number of people suffering from Depression	1,240,000			
Cost of service due to Depression per person		£1,354.84		
Assumed proportion of depression sufferers	46%			
<hr/>				
Total cost of Anxiety (Service Costs)	£1,240,000,000			
Number of people suffering from Anxiety	2,280,000			
Cost of service due to Anxiety per person		£543.86		
Assumed proportion of anxiety sufferers	78%			
<hr/>				
Weighted average costs for anxiety and depression		£1,047		
Percentage of carers affected by no respite	84%			
Cases avoided per annum			21	29
<hr/>				
Value of mental health problems avoided for carers			£21,996.16	£30,794.63
<hr/>				
Mental Wellbeing of Cared-for				

Respite	Assumption	Calculation	FY 16/17	FY 17/18
Health and social care	£21,300,000,000			
Human costs	£53,600,000,000			
UK Population	63,200,000			
UK Population affected	16%	10,112,000		
Cost per incident		£7,407		
Value to the individual of the support provided	5%	£370.35		
Social Value of increased mental health wellbeing for cared for			£8,888	£12,962
Social value per annum			£30,885	£43,757
Social value per month			£2,573.72	£3,646.41
Social Value of carer respite			£23,163	£43,757
Dead Weight	17%		-£3,861	-£7,293
Alternative Attribution	66%		-£15,288	-£28,880
Total Gain due to carer respite			£4,015	£7,585

Key Assumptions:

- **Total Cost of Depression (Service Costs):** Figures have been taken from: McCrone, P., Dhanasiri, S., Patel, A., Knapp, M. and Lawton- Smith, S. (2008). The Cost of Mental Health Care in England to 2026. *The Kings Fund*. [online] Available at: https://www.kingsfund.org.uk/sites/files/kf/Paying-the-Price-the-cost-of-mental-health-care-England-2026-McCrone-Dhanasiri-Patel-Knapp-Lawton-Smith-Kings-Fund-May-2008_0.pdf [Accessed 11 Jul. 2017].
- **Assumed proportion of Depression sufferers:** Figures have been taken from: Kirby, J. (2017). Lack of respite sees many long-term carers without a day off in five years. [online] Careappointments.co.uk. Available at: <http://www.careappointments.co.uk/care-news/england/item/42095-lack-of-respite-sees-many-long-term-carers-without-a-day-off-in-five-years> [Accessed 11 Jul. 2017].
- **Total Cost of Anxiety (Service Costs):** Figures have been taken from: McCrone, P., Dhanasiri, S., Patel, A., Knapp, M. and Lawton- Smith, S. (2008). The Cost of Mental Health

Care in England to 2026. *The Kings Fund*. [online] Available at: https://www.kingsfund.org.uk/sites/files/kf/Paying-the-Price-the-cost-of-mental-health-care-England-2026-McCrone-Dhanasiri-Patel-Knapp-Lawton-Smith-Kings-Fund-May-2008_0.pdf [Accessed 11 Jul. 2017].

- **Assumed proportion of Anxiety sufferers:** Figures have been taken from: Kirby, J. (2017). Lack of respite sees many long-term carers without a day off in five years. [online] Careappointments.co.uk. Available at: <http://www.careappointments.co.uk/care-news/england/item/42095-lack-of-respite-sees-many-long-term-carers-without-a-day-off-in-five-years> [Accessed 11 Jul. 2017].
- **Percentage of carers affected by no respite:** Figures have been taken from: State of Caring. (2017). [online] Available at: <http://www.carersuk.org/for-professionals/policy/policy-library/state-of-caring-report-2017> [Accessed 11 Jul. 2017].
- **Mental Wellbeing of Cared For:** Figures have been taken from:
 - Prime life. (2017) The Benefits of Respite Care | Prime Life. [online] Available at: <http://www.prime-life.co.uk/2014/08/benefits-respite-care/http://www.prime-life.co.uk/2014/08/benefits-respite-care/> [Accessed 11 Jul. 2017].
 - Chida, Y. and Steptoe, A. (2008). Positive Psychological Well-Being and Mortality: A Quantitative Review of Prospective Observational Studies. *Psychosomatic Medicine*, 70(7), pp.741-756.
 - Centre for mental health. (2017). The economic and social costs of mental health problems. [online] Available at: <https://www.centreformentalhealth.org.uk/Handlers/Download.ashx?IDMF=6a98a6da-b9f5-4a07-b88a-067976a0bf5b> [Accessed 11 Jul. 2017].
- **UK Population:** Figures taken from: 2011 Census data
- **UK Population affected Anxiety or Depression:** Figures taken from: Weich, S., Nazroo, J., Sproston, K., Mcmanus, S., Blanchard, M., Erens, B., Karlsen, S., King, M., Lloyd, K., Stansfeld, S. and Tyrer, P. (2004). Common mental disorders and ethnicity in England: The Empiric Study. *Psychological Medicine*, 34(08), p.1543.
- **Alternative Attribution:** The assumption that there are other organisations that are also responsible for providing carers the opportunity for respite
- **Deadweight:** The assumption that there is a likelihood of a carer being able to get respite if LVP were not available to provide this service

Tackling Loneliness

Tackling Loneliness	Assumption	Calculation	FY 16/17	FY 17/18
Number of clients			29	42
Number of clients who feel isolated/socially excluded/lonely			29	42

Tackling Loneliness	Assumption	Calculation	FY 16/17	FY 17/18
Cost of GP Visits per use	£25			
Increased GP visits	6	£150		
Cost of A & E visits per use	£108			
Increased A and E visits	0.25	£27.00		
Cost of unplanned admissions per use	£800			
Increased emergency admissions	0.07	£56		
Cost of Depression	£4,700			
Increased likelihood of depression attributed to loneliness	46%	£2,162		
Cost of Dementia	£107,000			
Increased risk of dementia attributed to loneliness	7%	£7,490		
Social cost per annum			£286,665	£415,170
Social cost per month			£23,888.75	£34,597.50
Total Cost of loneliness of clients			£214,999	£415,170
Dead Weight	17%		-£35,833	-£69,195
Alternative Attribution	66%		-£141,899	-£274,012
Total Gain			£37,266	£71,963

Key Assumptions:

- **Tackling Loneliness:** Outcomes taken from: Social Impact Bonds (2015) [online]: Investing to Tackle Loneliness, Available at: http://www.socialfinance.org.uk/wp-content/uploads/2015/06/Investing_to_Tackle_Loneliness.pdf [Accessed 11 Jul 2017]
- **Cost of GP visits per use:** Figures have been taken from: Curtis, L (2010) [online]: Available at: <http://www.pssru.ac.uk/archive/pdf/uc/uc2010/uc2010.pdf> [Accessed 11 Jul 2017]
- **Increased GP visits:** Figures taken from: Ellaway et al (1999): Someone to talk to? The role of loneliness as a factor in the frequency of GP consultations." British Journal of General Practice

- **Cost of A & E visits per use:** Figures taken from: NHS Monitor (2012) Reference Costs 2012-13, [Online], Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/261154/nhs_reference_costs_2012-13_acc.pdf [Accessed 11 Jul 2017]
- **Increased A & E use:** Figures taken from: Geller et al (1999) Loneliness as a predictor of hospital emergency department use, Journal of Family Practice
- **Cost of unplanned admissions per use:** Figures taken from: Social Impact Bonds (2015) [online]: Investing to Tackle Loneliness, Available at: http://www.socialfinance.org.uk/wp-content/uploads/2015/06/Investing_to_Tackle_Loneliness.pdf [Accessed 11 Jul 2017]
- **Increased emergency admissions:** Figures taken from: Molloy et al. (2010) Loneliness and Emergency and Planned Hospitalizations in a Community Sample of Older Adults, Journal of the American Geriatrics Society.
- **Cost of Depression:** Figures taken from: NHS Monitor (2012) Reference Costs 2012-13, [Online], Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/261154/nhs_reference_costs_2012-13_acc.pdf [Accessed 11 Jul 2017]
- **Increased risk of depression attributed to loneliness:** Figures taken from: Heikkinen et al (2003), Depressive symptoms in late life: a 10-year follow up, Finnish Research Centre for Interdisciplinary Gerontology
- **Cost of dementia:** Figures taken from: NHS Monitor (2012) Reference Costs 2012-13, [Online], Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/261154/nhs_reference_costs_2012-13_acc.pdf [Accessed 11 Jul 2017]
- **Increased risk of dementia attributed to loneliness:** Figures taken from: Wilson et al (2007), Loneliness and Risk of Alzheimer Disease, Archives of General Psychiatry
- **Alternative Attribution:** This is the assumption that there are other organisations that are also responsible for providing company to the clients
- **Deadweight:** This is the likelihood of the client tackling loneliness if LVP were not available to provide this

Increased Physical Activity

Increased Physical Activity	Assumption	Calculation	FY 16/17	FY 17/18
Number of clients with mental health problems			29	42
Cost for the NHS for heart treatment	£18,900,000,000			
Physical inactivity causing coronary heart disease	10.5%			

Increased Physical Activity	Assumption	Calculation	FY 16/17	FY 17/18
Cost to the UK for physical inactivity related heart disease		£1,984,500,000		
Cost to NHS for Diabetes	£13,000,000,000			
Physical inactivity causing diabetes	13%			
Cost to the UK for physical inactivity related diabetes		£1,690,000,000		
Cost to NHS for Premature death	£107,000,000			
Physical inactivity causing premature all - cause mortality	16.9%			
Cost to the UK for physical inactivity related premature death		£18,083,000		
Total cost to the NHS for cost of cancer	£1,100,000,000			
Physical inactivity related colon cancer	18.7%			
Cost to the UK for physical inactivity related colon cancer		£205,700,000		
Total national cost		£3,898,283,000		
Physically active population:				
Men	40%			
Women	28%			
Men in UK	32,377,674			
Women in UK	33,270,380			
Total inactive people		43,381,278		
Cost saved per inactive person		£89.86		
Cost saved for clients per annum			£2,606	£3,774.16
Cost saved for clients per month			£217.16	£315
Present Value gained from active clients			£1,954	£3,774

Increased Physical Activity	Assumption	Calculation	FY 16/17	FY 17/18
Dead Weight	17%		-£326	-£629
Alternative Attribution	66%		-£1,290	-£2,491
Total Gain			£339	£654

Key Assumptions:

- **Costs to the NHS for heart treatment:** Figures taken from: Townsend N, Wickramasinghe K, Bhatnagar P, Smolina K, Nichols M, Leal J, et al. (2012) Coronary heart disease statistics: A compendium of health statistics edition. London, England: British Heart Foundation and Oxford, England: University of Oxford"
- **Physical Inactivity causing coronary heart disease:** Figures taken from: BHF National Centre (2013), Economic costs of physical inactivity, [Online], Available at: <http://www.ssehsactive.org.uk/userfiles/Documents/economiccosts.pdf>, [Accessed 11 Jul 2017]
- **Cost to NHS for Diabetes:** Figures taken from: Hex N, Bartlett C, Wright D, Taylor M, Varley D. (2012) Estimating the current and future costs of type 1 and type 2 diabetes in the United Kingdom, including direct health costs and indirect societal and productivity cost. Diabetes Med; 29(7):855-62
- **Physical Inactivity causing Diabetes:** Figures taken from: BHF National Centre (2013), Economic costs of physical inactivity, [Online], Available at: <http://www.ssehsactive.org.uk/userfiles/Documents/economiccosts.pdf>, [Accessed 11 Jul 2017]
- **Cost to the NHS for Premature Death:** Figures taken from: Chief Medical Officers (2011), Start Active, Stay Active: A report on physical activity for health from the four home countries, [Online], Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/216370/dh_128210.pdf, [Accessed 11 Jul 2017]
- **Physical Inactivity causing premature all-cause mortality:** Figures taken from: BHF National Centre, (2013) Economic costs of physical inactivity, [Online], Available at: <http://www.ssehsactive.org.uk/userfiles/Documents/economiccosts.pdf>, [Accessed 11 Jul 2017]
- **Total cost to the NHS for the cost of cancer:** Figures taken from: McCormick, B. and Stone, I. (2007). Economic costs of obesity and the case for government intervention. Obesity Reviews, 8(s1), pp.161-164.
- **Physical inactivity related colon cancer:** Figures taken from:
 - Trueman P, Chilcott J, Tappenden P, Lowson K, Pilgrim H, Bending M. (2007) Bowel cancer services: Costs and benefits. Report to the Department of Health. York and Sheffield: York Health Economics Consortium and the School of Health and Related Research (University of Sheffield)

– BHF National Centre, (2013) Economic costs of physical inactivity, [Online], Available at: <http://www.ssehsactive.org.uk/userfiles/Documents/economiccosts.pdf>, [Accessed 11 Jul 2017]

- **Physically active population:** Figures taken from:

– NHS Digital (2017), Statistics on Obesity, Physical Activity and Diet[Online], Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/613532/obes-phys-acti-diet-eng-2017-rep.pdf, [Accessed at 11 Jul 2017]

– Sustrans, (2017). Physical activity and health- facts and figures [online] Available at: • <http://www.sustrans.org.uk/policy-evidence/the-impact-of-our-work/related-academic-research-and-statistics/physical-activity> [Accessed 11 Jul. 2017].

- **Population of UK:** Figures taken from: Office for National Statistics, (2017). Population Estimates for UK, England and Wales, Scotland and Northern Ireland: mid 2016 [online] Available at: • <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/bulletins/annualmidyearpopulationestimates/mid2016> [Accessed 11 Jul. 2017].

Alternative Attribution: This is the assumption that there are other organisations/individuals that are responsible for keeping clients physically active

Sensory Impairment

Respite

Respite	Assumption	Calculation	FY 16/17	FY 17/18
Number of clients			11	16
Number of clients with carers			5	7
Number of carers			5	7
Mental Wellbeing of Carer				
Total cost of Depression (Service costs)	£1,680,000,000			
Number of people suffering from Depression	1,240,000			
Cost of service due to Depression per person		£1,354.84		
Assumed proportion of depression sufferers	46%			
Total cost of Anxiety (Service Costs)				
Total cost of Anxiety (Service Costs)	£1,240,000,000			
Number of people suffering from Anxiety	2,280,000			
Cost of service due to Anxiety per person		£543.86		
Assumed proportion of anxiety sufferers	78%			
Weighted average costs for anxiety and depression		£1,047		
Percentage of carers affected by no respite	84%			
Cases avoided per annum			4	6
Value of mental health problems avoided for carers			£4,399.23	£6,158.93
Mental Wellbeing of Cared-for				

Respite	Assumption	Calculation	FY 16/17	FY 17/18
Health and social care	£21,300,000,000			
Human costs	£53,600,000,000			
UK Population	63,200,000			
UK Population affected	16%	10,112,000		
Cost per incident		£7,407		
Value to the individual of the support provided	5%	£370.35		
Social Value of increased mental health wellbeing for cared for			£1,852	£2,592
Social value per annum			£6,251	£8,751
Social value per month			£520.92	£729.28
Social Value of carer respite			£4,688	£8,751
Dead Weight	17%		-£781	-£1,459
Alternative Attribution	66%		-£3,094	-£5,776
Total Gain due to carer respite			£813	£1,517

Key Assumptions:

- **Total Cost of Depression (Service Costs):** Figures have been taken from: McCrone, P., Dhanasiri, S., Patel, A., Knapp, M. and Lawton- Smith, S. (2008). The Cost of Mental Health Care in England to 2026. *The Kings Fund*. [online] Available at: https://www.kingsfund.org.uk/sites/files/kf/Paying-the-Price-the-cost-of-mental-health-care-England-2026-McCrone-Dhanasiri-Patel-Knapp-Lawton-Smith-Kings-Fund-May-2008_0.pdf [Accessed 11 Jul. 2017].
- **Assumed proportion of Depression sufferers:** Figures have been taken from: Kirby, J. (2017). Lack of respite sees many long-term carers without a day off in five years. [online] Careappointments.co.uk. Available at: <http://www.careappointments.co.uk/care-news/england/item/42095-lack-of-respite-sees-many-long-term-carers-without-a-day-off-in-five-years> [Accessed 11 Jul. 2017].

- **Total Cost of Anxiety (Service Costs):** Figures have been taken from: McCrone, P., Dhanasiri, S., Patel, A., Knapp, M. and Lawton- Smith, S. (2008). The Cost of Mental Health Care in England to 2026. *The Kings Fund*. [online] Available at: https://www.kingsfund.org.uk/sites/files/kf/Paying-the-Price-the-cost-of-mental-health-care-England-2026-McCrone-Dhanasiri-Patel-Knapp-Lawton-Smith-Kings-Fund-May-2008_0.pdf [Accessed 11 Jul. 2017].
- **Assumed proportion of Anxiety sufferers:** Figures have been taken from: Kirby, J. (2017). Lack of respite sees many long-term carers without a day off in five years. [online] Careappointments.co.uk. Available at: <http://www.careappointments.co.uk/care-news/england/item/42095-lack-of-respite-sees-many-long-term-carers-without-a-day-off-in-five-years> [Accessed 11 Jul. 2017].
- **Percentage of carers affected by no respite:** Figures have been taken from: State of Caring. (2017). [online] Available at: <http://www.carersuk.org/for-professionals/policy/policy-library/state-of-caring-report-2017> [Accessed 11 Jul. 2017].
- **Mental Wellbeing of Cared For:** Figures have been taken from:
 - Prime life. (2017) The Benefits of Respite Care | Prime Life. [online] Available at: <http://www.prime-life.co.uk/2014/08/benefits-respite-care/http://www.prime-life.co.uk/2014/08/benefits-respite-care/> [Accessed 11 Jul. 2017].
 - Chida, Y. and Steptoe, A. (2008). Positive Psychological Well-Being and Mortality: A Quantitative Review of Prospective Observational Studies. *Psychosomatic Medicine*, 70(7), pp.741-756.
 - Centre for mental health. (2017). The economic and social costs of mental health problems. [online] Available at: <https://www.centreformentalhealth.org.uk/Handlers/Download.ashx?IDMF=6a98a6da-b9f5-4a07-b88a-067976a0bf5b> [Accessed 11 Jul. 2017].
- **UK Population:** Figures taken from: 2011 Census data
- **UK Population affected Anxiety or Depression:** Figures taken from: Weich, S., Nazroo, J., Sproston, K., Mcmanus, S., Blanchard, M., Erens, B., Karlsen, S., King, M., Lloyd, K., Stansfeld, S. and Tyrer, P. (2004). Common mental disorders and ethnicity in England: The Empiric Study. *Psychological Medicine*, 34(08), p.1543.
- **Alternative Attribution:** The assumption that there are other organisations that are also responsible for providing carers the opportunity for respite

Deadweight: The assumption that there is a likelihood of a carer being able to get respite if LVP were not available to provide this service

Tackling Loneliness

Tackling Loneliness	Assumption	Calculation	FY 16/17	FY 17/18
Number of clients			11	16
Number of clients who feel isolated/socially excluded/lonely			11	16
Cost of GP Visits per use	£25			
Increased GP visits	6	£150		
Cost of A & E visits per use	£108			
Increased A and E visits	0.25	£27.00		
Cost of unplanned admissions per use	£800			
Increased emergency admissions	0.07	£56		
Cost of Depression	£4,700			
Increased likelihood of depression attributed to loneliness	46%	£2,162		
Cost of Dementia	£107,000			
Increased risk of dementia attributed to loneliness	7%	£7,490		
Social cost per annum			£108,735	£158,160
Social cost per month			£9,061.25	£13,180.00

Tackling Loneliness	Assumption	Calculation	FY 16/17	FY 17/18
Total Cost of loneliness of Clients			£81,551	£158,160
Dead Weight	17%		-£13,592	-£26,360
Alternative Attribution	66%		-£53,824	-£104,386
Total Gain			£14,136	£27,414

Key Assumptions:

- **Tackling Loneliness:** Outcomes taken from: Social Impact Bonds (2015) [online]: Investing to Tackle Loneliness, Available at: http://www.socialfinance.org.uk/wp-content/uploads/2015/06/Investing_to_Tackle_Loneliness.pdf [Accessed 11 Jul 2017]
- **Cost of GP visits per use:** Figures have been taken from: Curtis, L (2010) [online]: Available at: <http://www.pssru.ac.uk/archive/pdf/uc/uc2010/uc2010.pdf> [Accessed 11 Jul 2017]
- **Increased GP visits:** Figures taken from: Ellaway et al (1999): "Someone to talk to? The role of loneliness as a factor in the frequency of GP consultations." British Journal of General Practice
- **Cost of A & E visits per use:** Figures taken from: NHS Monitor (2012) Reference Costs 2012-13, [Online], Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/261154/nhs_reference_costs_2012-13_acc.pdf [Accessed 11 Jul 2017]
- **Increased A & E use:** Figures taken from: Geller et al (1999) Loneliness as a predictor of hospital emergency department use, Journal of Family Practice
- **Cost of unplanned admissions per use:** Figures taken from: Social Impact Bonds (2015) [online]: Investing to Tackle Loneliness, Available at: http://www.socialfinance.org.uk/wp-content/uploads/2015/06/Investing_to_Tackle_Loneliness.pdf [Accessed 11 Jul 2017]
- **Increased emergency admissions:** Figures taken from: Molloy et al. (2010) Loneliness and Emergency and Planned Hospitalizations in a Community Sample of Older Adults, Journal of the American Geriatrics Society.
- **Cost of Depression:** Figures taken from: NHS Monitor (2012) Reference Costs 2012-13, [Online], Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/261154/nhs_reference_costs_2012-13_acc.pdf [Accessed 11 Jul 2017]

- **Increased risk of depression attributed to loneliness:** Figures taken from: Heikkinen et al (2003), Depressive symptoms in late life: a 10-year follow up, Finnish Research Centre for Interdisciplinary Gerontology
- **Cost of dementia:** Figures taken from: NHS Monitor (2012) Reference Costs 2012-13, [Online], Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/261154/nhs_reference_costs_2012-13_acc.pdf [Accessed 11 Jul 2017]
- **Increased risk of dementia attributed to loneliness:** Figures taken from: Wilson et al (2007), Loneliness and Risk of Alzheimer Disease, Archives of General Psychiatry
- **Alternative Attribution:** This is the assumption that there are other organisations that are also responsible for providing company to the clients
- **Deadweight:** This is the likelihood of the client tackling loneliness if LVP were not available to provide this

Increased Physical Activity

Increased Physical Activity	Assumption	Calculation	FY 16/17	FY 17/18
Number of clients with mental health problems			11	16
Cost for the NHS for heart treatment	£18,900,000,000			
Physical inactivity causing coronary heart disease	10.5%			
Cost to the UK for physical inactivity related heart disease		£1,984,500,000		
Cost to NHS for Diabetes	£13,000,000,000			
Physical inactivity causing diabetes	13%			
Cost to the UK for physical inactivity related diabetes		£1,690,000,000		
Cost to NHS for Premature death	£107,000,000			
Physical inactivity causing premature all - cause mortality	16.9%			
Cost to the UK for physical inactivity related premature death		£18,083,000		

Increased Physical Activity	Assumption	Calculation	FY 16/17	FY 17/18
Total cost to the NHS for cost of cancer	£1,100,000,000			
Physical inactivity related colon cancer	18.7%			
Cost to the UK for physical inactivity related colon cancer		£205,700,000		
Total national cost		£3,898,283,000		
Physically active population:				
Men	40%			
Women	28%			
Men in UK	32,377,674			
Women in UK	33,270,380			
Total inactive people		43,381,278		
Cost saved per inactive person		£89.86		
Cost saved for clients per annum			£988	£1,437.78
Cost saved for clients per month			£82.37	£120
Present Value gained from active clients			£741	£1,438
Dead weight	17%		-£124	-£240
Alternative Attribution	66%		-£489	-£949
Total Gain			£129	£249

Key Assumptions:

- **Costs to the NHS for heart treatment:** Figures taken from: Townsend N, Wickramasinghe K, Bhatnagar P, Smolina K, Nichols M, Leal J, et al. (2012) Coronary heart disease statistics: A compendium of health statistics edition. London, England: British Heart Foundation and Oxford, England: University of Oxford"
- **Physical Inactivity causing coronary heart disease:** Figures taken from: BHF National Centre (2013), Economic costs of physical inactivity, [Online], Available at: <http://www.ssehsactive.org.uk/userfiles/Documents/economiccosts.pdf>, [Accessed 11 Jul 2017]
- **Cost to NHS for Diabetes:** Figures taken from: Hex N, Bartlett C, Wright D, Taylor M, Varley D. (2012) Estimating the current and future costs of type 1 and type 2 diabetes in the United Kingdom, including direct health costs and indirect societal and productivity cost. *Diabetes Med*; 29(7):855-62
- **Physical Inactivity causing Diabetes:** Figures taken from: BHF National Centre (2013), Economic costs of physical inactivity, [Online], Available at: <http://www.ssehsactive.org.uk/userfiles/Documents/economiccosts.pdf>, [Accessed 11 Jul 2017]
- **Cost to the NHS for Premature Death:** Figures taken from: Chief Medical Officers (2011), Start Active, Stay Active: A report on physical activity for health from the four home countries, [Online], Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/216370/dh_128210.pdf, [Accessed 11 Jul 2017]
- **Physical Inactivity causing premature all-cause mortality:** Figures taken from: BHF National Centre, (2013) Economic costs of physical inactivity, [Online], Available at: <http://www.ssehsactive.org.uk/userfiles/Documents/economiccosts.pdf>, [Accessed 11 Jul 2017]
- **Total cost to the NHS for the cost of cancer:** Figures taken from: McCormick, B. and Stone, I. (2007). Economic costs of obesity and the case for government intervention. *Obesity Reviews*, 8(s1), pp.161-164.
- **Physical inactivity related colon cancer:** Figures taken from:
 - Trueman P, Chilcott J, Tappenden P, Lawson K, Pilgrim H, Bending M. (2007) Bowel cancer services: Costs and benefits. Report to the Department of Health. York and Sheffield: York Health Economics Consortium and the School of Health and Related Research (University of Sheffield)
 - BHF National Centre, (2013) Economic costs of physical inactivity, [Online], Available at: <http://www.ssehsactive.org.uk/userfiles/Documents/economiccosts.pdf>, [Accessed 11 Jul 2017]
- **Physically active population:** Figures taken from:
 - NHS Digital (2017), Statistics on Obesity, Physical Activity and Diet[Online], Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/613532/obes-phys-acti-diet-eng-2017-rep.pdf, [Accessed at 11 Jul 2017]

– Sustrans, (2017). Physical activity and health- facts and figures [online] Available at: • <http://www.sustrans.org.uk/policy-evidence/the-impact-of-our-work/related-academic-research-and-statistics/physical-activity> [Accessed 11 Jul. 2017].

- **Population of UK:** Figures taken from: Office for National Statistics, (2017). Population Estimates for UK, England and Wales, Scotland and Northern Ireland: mid 2016 [online] Available at: • <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/bulletins/annualmidyearpopulationestimates/mid2016> [Accessed 11 Jul. 2017].

Alternative Attribution: This is the assumption that there are other organisations/individuals that are responsible for keeping clients physically active

Young People

Reduced risk of vulnerability	Assumption	Calculations	FY 16/17	FY 17/18
Number of cadets affected			185	203
Cost of troubled families	£47,235			
Present Value gained from support			£8,738,475	£9,588,705
Alternative Attribution	66%		-£5,767,394	-£6,328,545
Dead Weight	17%		-£1,485,541	-£1,630,080
Reduced risk of vulnerability in cadets			£1,485,541	£1,630,080

Key Assumptions:

- Costs of troubled families:** Figures taken from: Department for Communities and Local Government (2013) The Cost of Troubled Families, London, England, Accessed at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/68744/The_Cost_of_Troubled_Families_v1.pdf 23/08/2018

Volunteering

Economic value of volunteering

Economic value of volunteering	Assumption	Calculation	FY 16/17	FY 17/18
Number of volunteers over 18			1,908	3,304
Number of volunteers under 18			454	454
Average number of hours volunteered per week			3.5	3.5
Average number of hours volunteered in the duration of the programme			136.50	182.0
Hours volunteered by special constables				109,828
Hours volunteered by other volunteers over 18			260,442	711,156
Average hourly wage in Lancashire for over 18's	7.83			
Value of economic benefit of volunteering			2,039,261	5,568,351
Hours volunteered by under 18's			61,971	82,628
Average hourly wage in Lancashire for under 18's	4.30			
Value of economic benefit of volunteering			260,278	347,038
Scale down due to other projects	33%		86,759	115,679
Economic value of volunteers' contribution			£2,299,539	£5,915,389

Key Assumptions:

- **Number of Volunteers:** Figures have been taken from: Better Impact and is the total number of volunteers on the database as at 28th April 2017.
- **Average number of hours volunteered per week:** This is the average number of hours' volunteers volunteer with LVP, as found in section 5.2.2- Average Hours per Volunteer

- **National Hourly Living wage in Lancashire:** Figures provided by Lancashire Volunteer Partnership
- **Scale down due to commitments:** Figures provided by Lancashire Volunteer Partnership. Our young volunteers provide a great deal of social value and they should not be overlooked when calculating contributions to the Economic value of LVP. For these purposes we have assumed that at least 1/3 of their volunteering hours are spent either on social action projects or engaging in prevention activity and these have been costed accordingly.
- **Alternative Attribution:** This is the assumption that there are other organisations that are also responsible for providing volunteering opportunities
- **Deadweight:** This is the likelihood of the volunteering being able to provide economical value without LVP being able to provide this

Benefits of Reducing Depression and Anxiety

Mental Wellbeing	Assumption	Calculations	FY 16/17	FY 17/18
Number of volunteers			2,117	4,009
Unit cost of mental health problems				
Total cost of Depression (Service costs)	£1,680,000,000			
Number of people suffering from Depression	1,240,000			
Cost of service due to Depression per person		£1,355		
Assumed proportion of depression sufferers	15%			
Number of volunteers suffering			354	632
Total cost of Anxiety (Service Costs)	£1,240,000,000			
Number of people suffering from Anxiety	2,280,000			
Cost of service due to Anxiety per person		£544		
Assumed proportion of anxiety sufferers	49%			
Number of volunteers suffering			1,067	1,964

Weighted average costs for anxiety and depression per annum		£1,022,574	£1,883,096
Weighted average costs for anxiety and depression per month		85,214	156,925
Value of mental health problems avoided		£766,930	£1,883,096
Alternative Attribution	66%	-£506,174	-£1,242,843
Dead Weight	17%	-£130,378	-£320,126
Attributable gain from avoided mental health problems		£130,378	£320,126

Key Assumptions:

- **Number of volunteers:** Figures provided by LVP based on how many volunteers there are.
- **Total cost of Depression (Service costs) and number of people suffering from depression:** Figures are from the Kings Fund, The cost of mental health care in England to 2026, 2008
- **Number of people who experienced Depression:** Figures taken from the Guardian, Poor Housing is bad for your mental health. Available at: <https://www.theguardian.com/housing-network/2016/feb/04/poor-housing-bad-mental-health> (Accessed at: April 2017)
- **Total cost of Anxiety (Service Costs) and number of people suffering from Anxiety:** Figures are from the Kings Fund, The cost of mental health care in England to 2026, 2008
- **Number of people who experienced anxiety:** Figures taken from the Guardian, Poor Housing is bad for your mental health. Available at: <https://www.theguardian.com/housing-network/2016/feb/04/poor-housing-bad-mental-health> (Accessed at: April 2017)
- **Alternative Attribution:** This is the assumption that there are other organisations or individuals that are responsible for ensuring that the volunteers does not feel depressed or anxious
- **Dead weight:** This is the likelihood of the volunteers seeking help from another organisation if LVP did not exist

Increased Physical Activity

Increased Physical Activity	Assumption	Calculation	FY 16/17	FY 17/18
Number of volunteers with mental health problems			2,177	4,009

Cost for the NHS for heart treatment	£ 18,900,000,000		
Physical inactivity causing coronary heart disease	10.5%		
Cost to the UK for physical inactivity related heart disease		£ 1,984,500,000	
Cost to NHS for Diabetes	£ 13,000,000,000		
Physical inactivity causing diabetes	13%		
Cost to the UK for physical inactivity related diabetes		£ 1,690,000,000	
Cost to NHS for Premature death	£ 107,000,000		
Physical inactivity causing premature all - cause mortality	16.9%		
Cost to the UK for physical inactivity related premature death		£ 18,083,000	
Total cost to the NHS for cost of cancer	£ 1,100,000,000		
Physical inactivity related colon cancer	18.7%		
Cost to the UK for physical inactivity related colon cancer		£ 205,700,000	
Total national cost		£ 3,898,283,000	
Physically active population:			
Men	40%		
Women	28%		
Men in UK	32,377,674		
Women in UK	33,270,380		
Total inactive people		43,381,278	
Cost saved per inactive person		£89.86	
Cost saved for volunteers per annum		£195,627	£360,252.56

Cost saved for volunteers per month		£16,302.27	£30,021
Present Value gained from active volunteers		£146,720	£360,253
Alternative Attribution	66%	-£96,836	-£237,767
Dead Weight	17	-£24,942	-£61,243
Total Gain		£24,942	£61,243

Key Assumptions:

- **Costs to the NHS for heart treatment:** Figures taken from: Townsend N, Wickramasinghe K, Bhatnagar P, Smolina K, Nichols M, Leal J, et al. (2012) Coronary heart disease statistics: A compendium of health statistics edition. London, England: British Heart Foundation and Oxford, England: University of Oxford"
- **Physical Inactivity causing coronary heart disease:** Figures taken from: BHF National Centre (2013), Economic costs of physical inactivity, [Online], Available at: <http://www.ssehsactive.org.uk/userfiles/Documents/economiccosts.pdf>, [Accessed 11 Jul 2017]
- **Cost to NHS for Diabetes:** Figures taken from: Hex N, Bartlett C, Wright D, Taylor M, Varley D. (2012) Estimating the current and future costs of type 1 and type 2 diabetes in the United Kingdom, including direct health costs and indirect societal and productivity cost. Diabetes Med; 29(7):855-62
- **Physical Inactivity causing Diabetes:** Figures taken from: BHF National Centre (2013), Economic costs of physical inactivity, [Online], Available at: <http://www.ssehsactive.org.uk/userfiles/Documents/economiccosts.pdf>, [Accessed 11 Jul 2017]
- **Cost to the NHS for Premature Death:** Figures taken from: Chief Medical Officers (2011), Start Active, Stay Active: A report on physical activity for health from the four home countries, [Online], Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/216370/dh_128210.pdf, [Accessed 11 Jul 2017]
- **Physical Inactivity causing premature all-cause mortality:** Figures taken from: BHF National Centre, (2013) Economic costs of physical inactivity, [Online], Available at: <http://www.ssehsactive.org.uk/userfiles/Documents/economiccosts.pdf>, [Accessed 11 Jul 2017]
- **Total cost to the NHS for the cost of cancer:** Figures taken from: McCormick, B. and Stone, I. (2007). Economic costs of obesity and the case for government intervention. Obesity Reviews, 8(s1), pp.161-164.
- **Physical inactivity related colon cancer:** Figures taken from:

- Trueman P, Chilcott J, Tappenden P, Lowson K, Pilgrim H, Bending M. (2007) Bowel cancer services: Costs and benefits. Report to the Department of Health. York and Sheffield: York Health Economics Consortium and the School of Health and Related Research (University of Sheffield)
- BHF National Centre, (2013) Economic costs of physical inactivity, [Online], Available at: <http://www.ssehsactive.org.uk/userfiles/Documents/economiccosts.pdf>, [Accessed 11 Jul 2017]
- **Physically active population:** Figures taken from:
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Alternative Attribution: This is the assumption that there are other organisations/individuals that are responsible for keeping volunteers physically active

SUMMARY

Category		FY 16/17	FY 17/18	Total Benefit
Older People		£206,710	£403,548	£610,258
	Respite for carer	£9,607	£17,986	£27,593
	Tackling Loneliness	£195,328	£382,088	£577,416
	Increased Physical Activity	£1,776	£3,473	£5,249
Mental Health		£36,872	£72,579	£109,451
	Tackling Loneliness	£32,126	£63,396	£95,522
	Increased Physical Activity	£292	£576	£868
	Benefits of reducing depression and anxiety-co-morbidity	£2,714	£5,356	£8,070
	Respite for carer	£1,740	£3,251	£4,990
Physical Disability		£52,523	£102,452	£154,975
	Respite for carer	£1,950	£3,901	£5,851
	Tackling Loneliness	£50,117	£97,664	£147,781
	Increased Physical Activity	£456	£888	£1,343
Learning Disability		£41,620	£80,202	£121,822
	Respite for carer	£4,015	£7,585	£11,600
	Tackling Loneliness	£37,266	£71,963	£109,229
	Increased Physical Activity	£339	£654	£993
Sensory Impairment		£15,077	£29,181	£44,257
	Respite for carer	£813	£1,517	£2,330
	Tackling Loneliness	£14,136	£27,414	£41,550
	Increased Physical Activity	£129	£249	£378
Young People	Reduced risk of vulnerability in cadets	£1,485,541	£1,630,080	£3,115,621
Volunteering		£2,281,341	£6,065,400	£8,346,741
	Economic value of volunteering	£2,126,020	£5,684,031	£7,810,051
	Benefits of reducing depression and anxiety	£130,378	£320,126	£450,504
	Increased Physical Activity	£24,942	£61,243	£86,185
Total		£4,119,684	£8,383,440	£12,503,124

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