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TOWNSTAL COMMUNITY PARTNERSHIP

MEASURING IMPROVEMENT IN COMMUNITY WELL-BEING

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H.E.L.P. (Health Empowerment Leverage Project)

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PART ONE

INTRODUCTION AND BACKGROUND

1. Introduction

In 2010, the Department of Health commissioned HELP to pull together the evidence that community development can improve health and well-being in neighbourhoods with high levels of social and health need, particularly in the three pilot areas it was funded to work with. One of these was Townstal, a neighbourhood that sits above the town of Dartmouth in Devon.

This report summarises the data for a series of indicators measuring some key social and health factors in Townstal. The indicators have been drawn from HELP's recent report for the Department of Health, and in particular an illustrative cost benefit model based on figures from one of the other pilot areas, Smith's Wood in Solihull (Health Empowerment Leverage Project, 2011). Appendix B of that report sets out those local figures along with wider evidence of the relationship between the indicators chosen, and levels of community activity and social trust, which these projects have aimed to foster.

Here, we adapt that material by applying evidence for Townstal and some geographical comparators to the case we have made. This serves as a starting point for measuring change in health and social conditions over future years. We would not expect immediate change: HELP estimate that long-term change may begin to emerge after 3-5 years. This is therefore a baseline, with some early pointers.

Although the indicator set has been widely accepted in informal consultation, it is proposed that since progress may receive a boost from local understanding, endorsement and ownership by both local agencies and residents, there should in future be wider involvement in the choice of the indicators.

This kind of ownership is particularly important given the new potential for investment in community health and well-being through the channels of Clinical Commissioning Groups and Health and Wellbeing Boards. We believe that the economic case for investment in community development has been well made, and that building in additional targeted health investment which harnesses the energy of an active community will add significant preventative value.

We propose that the Townstal Community Partnership, and its partner agencies, should give careful consideration to the potential for using the evidence presented here to stimulate further measures to promote social trust, community activity, and health and well-being.

Background - Townstal and the 2010 Index of Deprivation

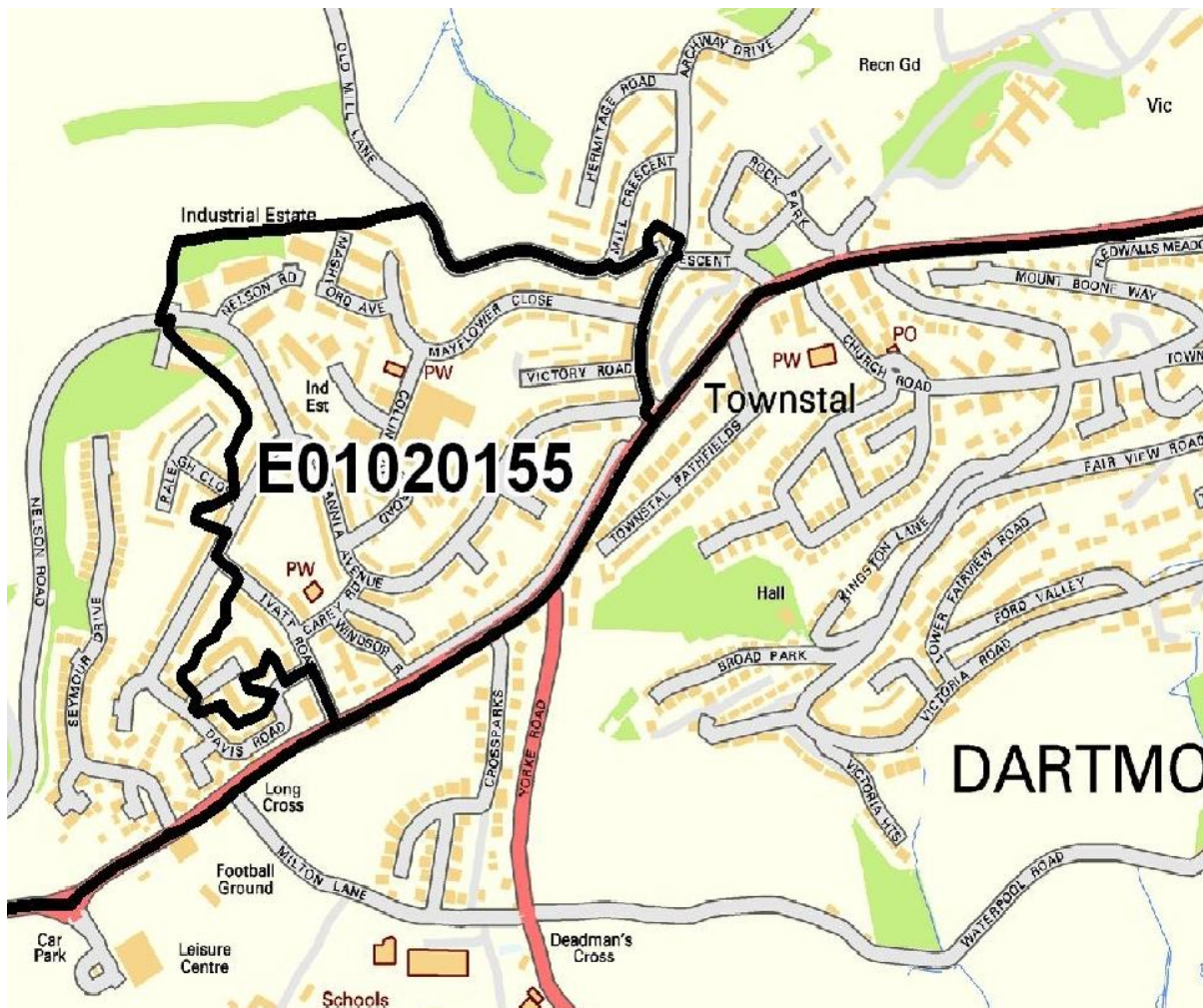
A brief summary of Townstal's place in the the 2010 Index of Multiple Deprivation (IMD) (Communities and Local Government, 2011) may serve as a useful introduction to conditions in the area. Fuller description can be found in the HELP report to the Department of Health (see above).

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The indices provide rankings of 32,482 small areas in England (Lower Super Output Areas (LSOAs), population around 1,500).

A detailed picture of the whole area is not viable because of small area boundaries. LSOA E01020155 (see Map) is the only LSOA exclusive to Townstal: it covers the area north of Townstal Road, with its eastern boundary including the western half of Townstal Crescent and part of Old Mill Lane; and its western boundary excluding Davis Road and Britannia Avenue up to Raleigh Close (which is also excluded). Outside that boundary, the rest of Townstal north of Townstal Road and College Way is part of a much more varied LSOA (1020154) which includes the Naval College and some hotels overlooking the Dart Estuary - and which therefore does not measure social conditions in Townstal in any reliable way.

MAP - REPRESENTATIVE AREA OF TOWNSTAL, DARTMOUTH USED TO SUMMARISE INDEX OF MULTIPLE DEPRIVATION (2010) FINDINGS



Source: NHS Devon. Contains Ordnance Survey data / © Crown Copyright and database right 2011

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The IMD therefore does not capture conditions in Townstal in any complete way; but the small area within the boundaries described can be taken as a substantial sample of the area population. It is important to note that the 2010 Indices do not describe conditions in 2010. The data they use largely derive from the period 2005-9.

What is striking is an extraordinary range of rankings in the seven 'domains' which comprise the Index. They are summarised here:

This part of Townstal is:

- in the poorest tenth of small areas in England in terms of education
- just outside the poorest tenth in terms of employment
- in the poorest fifth for health, and income, and overall deprivation
- just outside the poorest third in terms of 'living environment'¹
- in the least deprived third in terms of 'barriers to housing and services'²
- just outside the least deprived fifth in terms of crime

NOTE: Data for the Baseline Indicator Set presented in Part Two below are derived from postcode data which encompass the wider Townstal area, except where stated otherwise.

2. Evidence for the Relationship between Social Trust, Community Activity and Health: Introducing the Cost Benefit Model

Community participation, empowerment and control supporting health improvement

A Rapid Review of the effectiveness of health promotion for NICE, conducted by the University of Teesside, has proposed, following a background paper prepared for NICE, that:

the more a community is supported to take control, by being involved in the design, development and implementation of activities to improve their lives (i.e. co-production, delegated power or community control), the more likely their health (and a range of other outcomes) will improve (Swainston and Summerbell, 2007).

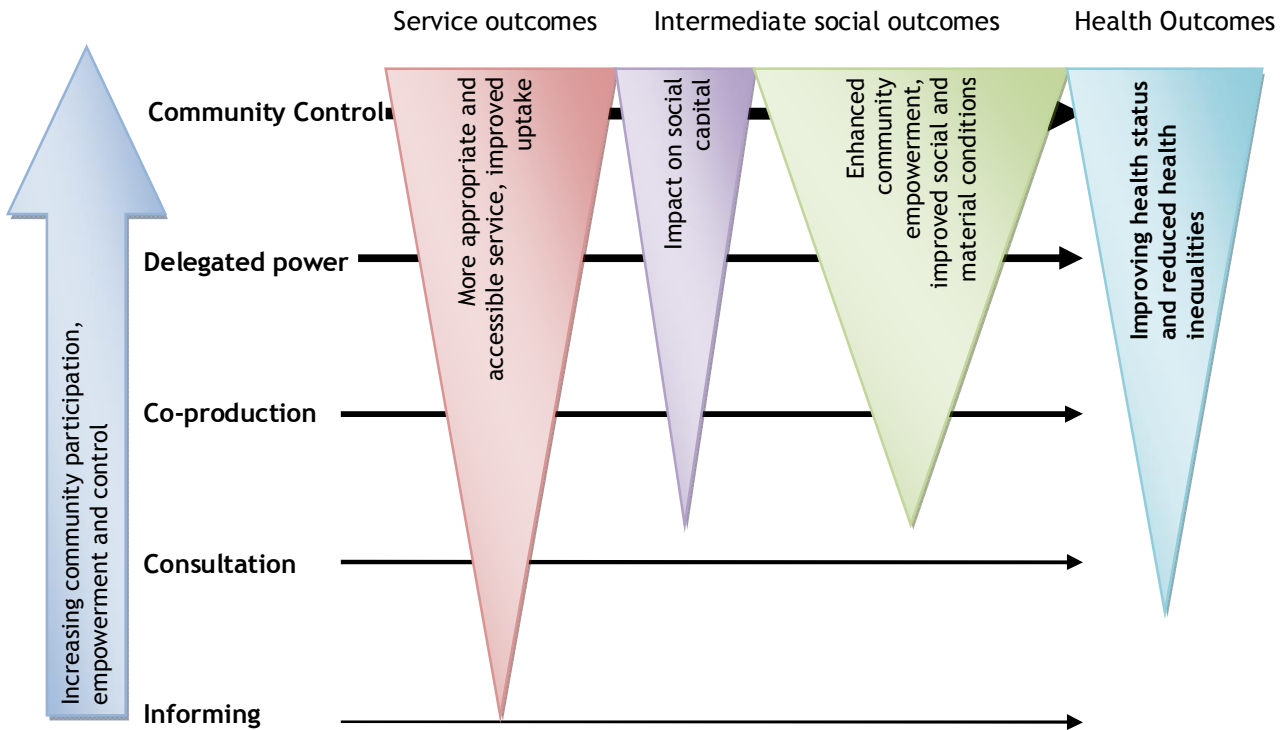
Evidence of the degree and nature of growth in community participation, empowerment and control in Townstal is presented in a report based on focus group discussions with key residents and service providers (Griffiths, 2012).

¹ The Living Environment domain is composed from data on housing conditions and amenities, air quality, and road traffic accidents.

² Barriers to housing and services include issues such as overcrowding, homelessness and housing affordability; and geographical barriers comprising distance from local amenities.

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Figure 1 - Pathways from community participation, empowerment and control to health improvement



Source: J. Popay, 2006, *Community engagement, community development and health improvement. A Background Paper prepared for NICE*

Social Capital and Self-Rated Health

The HELP approach to community development is underpinned by compelling evidence that strong social trust is associated with good self-rated health; and that the latter is a strong predictor of actual health outcomes.

There is a wide range of research showing that joining and taking part in local organisations helps to foster trust in others and a sense of shared values, broadening participants’ ‘sense of self’ and enhancing ‘participants’ ‘taste’ for collective benefits’. These processes are associated with better health (Putnam, 1993; 2000). Thus the development of these relationships, broadly known as ‘social capital’, has health benefits; and conversely, poor social capital is associated with poor health, with regard to overall health and wellbeing, life expectancy, and specific conditions (Bennett, 2002; Fabrigoule et al, 1995; Bassuk et al, 1999; Berkman and Kawachi, 2000; Lochner et al 2003).

Research led by Kawachi examined whether levels of self-rated fair or poor health were associated with living in American states with differing levels of social trust, and found that where social trust was high, self-rated health was significantly better. The study looked at the link between self-rated poor health and mortality, and found:

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'A recent review of 27 community studies concluded that even such a simple global assessment (self-described excellent / very good / good / fair / poor health used by the Behavioral Risk Factor Surveillance System (BRFSS)), appears to have high predictive validity for mortality, independent of other medical, behavioral, or psychosocial risk factors. For most studies, odds ratios (ORs) for subsequent mortality ranged from 1.5 to 3.0 among individuals reporting poor health compared with excellent health. The risk of mortality for self-rated poor health often exceeded that of smoking when these rates were reported in the same study. Furthermore, self-rated health has been shown in longitudinal studies to predict the onset of disability.' (Kawachi et al, 1999)

These findings suggest that a shift in a community from a low level of social trust to a high level, i.e. equivalent to changing a low-trust American state into a high-trust one, could produce a significant reduction in proportions with self-rated fair or poor health; and that this would be associated with corresponding reductions in mortality and improvements in health.

Such a margin of change would mean a sea-change in health. How do you move from low to high social trust in a community? This is what community development sets out to do, through stimulation of new community activities, groups, initiatives and networks. HELP used the findings from Kawachi and many other sources to create a model to explore evaluation of community development interventions.

The HELP Cost-Benefit Model

In Part Two below, we identify nine indicators representing areas of health or social need and spending which evidence suggests may benefit from a community development initiative. We present baseline data for seven of these, and some early trend data, mostly too early to be significant, as follows:

- Emergency hospital admissions
- A&E attendance
- Cardiovascular diseases emergency admissions
- Emergency admissions as a result of falls
- Recorded crime
- NEET (Not in education, employment or training between the ages of 16 and 18)
- Special educational needs

For the other two, obesity and depression, Townstal is too small an area to support robust local data. The research and practice context for these is presented in an Appendix.

Though the case for using levels of Special Educational Needs (SEN) as an indicator is compelling, its viability is in doubt: a Green Paper on the future of SEN in 2011, while citing research findings that SEN status has been the strongest predictor of deterioration in wellbeing for boys and girls, proposed a narrowing of the criteria which will mean that 'fewer children are identified as having SEN' (Department for Education, 2011). It remains to be seen whether draft legislation (Department for Education, 2012) will carry this intention through. Further information on the issue can be found on the HELP website.

For each of the indicators above, the link with positive community development outcomes is described, supported by a summary of supporting evidence, including health-related activity that can be commissioned as part of a community intervention. Relevant examples of

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practice are summarised. This creates a narrative that supports the case for using each indicator, which may then inform future practice and commissioning.

The model contains an element for calculating cost savings associated with improvements in particular health indicators. The choice of indicator can be varied according to local circumstances and priorities.

As well as health, other savings would accrue to policing, education, DWP and other services. The multifaceted nature of the benefits may suggest that health agencies should seek to engage other local services in sharing the cost of the investment through a place-based budget or other mechanism.

The approach is supported by research findings that integrated health and well-being services can realise significant financial benefits. For example, studies have shown that integrated early intervention programmes can generate resource savings of between £1.20 and £2.65 for every £1 spent (POPPs, LinkAge Plus, Supporting People, self care schemes). For every £1 spent on balance/Tai Chi classes by the taxpayer in LinkAge Plus areas, there was a health and social care saving of £1.35 (Turning Point / Connected Care, 2010).

The model is presented here as a template using an illustrative saving level of 5% for each indicator, comprising 2.5% as a result of a specific, targeted intervention affecting a proportion of the population agreed to be sufficiently significant; and an additional 2.5% added value where research supports the case for an improvement in social capital leading to a relevant health improvement, in the community in general or in specific groups of individuals, as supported by the research evidence: together a notional 5% to be achieved.

As 'real' figures emerge over time, they can be inserted into the model, with local agreement about the degree to which community development has effected change. The model would evolve as relevant activities were generated. The transparency of the model would allow local negotiation to consider risks of double-counting in cost savings and to avoid them.

The model reflects the multi-dimensional impact of streams of activity. For example, many of the research findings relevant to Cardiovascular Disease report a beneficial impact in relation to mental health; and the dance activities in Camborne reported under the heading 'Crime' clearly increase physical activity, and in the reported research context would have an impact on mental wellbeing. There is also some overlap in the three indicators using emergency admissions: they are differentiated to draw attention to the key issues of cardiovascular diseases and admissions of older people due to accidental falls. Double counting should be avoided in any cost benefit analysis.

PART TWO

SEVEN CORE INDICATORS

Two further indicators for which Townstal data were not feasible are outlined in Appendix 1.

1. Emergency hospital admissions overall

1.1 Community Development Effect

If levels of health and wellbeing improve due to increased social capital and healthy activity, use of acute services will reduce. There is major potential for added value through focused community investment (commissioning) in areas of very high levels of emergency admissions, which are associated with high levels of deprivation. Community development targeted to geographical hotspots of spending on acute services can result in savings which can be reinvested in preventive community level activity, reducing demand in turn for primary care.

1.2 Research Base

Research in the London Boroughs of Sutton and Merton mapped the annual cost of emergency admissions of people aged 50 and over in small area format (LSOA, average population c.1500) (Griffiths, 2009a). The variation was extremely wide, from £2,677 to £622,540. These were both outliers: but there were seven LSOAs with HRG costs above £350,000, and seven below £50,000. The variation between quartiles was also very wide: the quarter of small areas with the highest spending on emergency admissions of SOAs accounted for £17 million (42% of costs of admission of people aged 50 and over); and the bottom quarter for £5m (12% of costs). This is a striking variation which suggests that significant economies can be achieved through focus on preventative, neighbourhood-based approaches in such hotspots, which have a significant correlation below the age of 70 with deprivation (Griffiths, 2001, Griffiths,2009b).

Loneliness and low levels of social integration significantly increase mortality. People with stronger networks are healthier and happier (Bennett, 2002). Social networks are consistently and positively associated with reduced morbidity and mortality (Fabrigoule et al, 1995).

Research also reports significant health benefits for individuals actively involved in community empowerment/engagement initiatives including improvements in physical and mental health, health related behaviour and quality of life (Piachaud, 2009; Grady, 2009).

Physical inactivity is a significant, independent risk factor for a range of long-term health conditions (Foster et al, 2009). An active lifestyle:

- has a substantial impact on the risk of major non-communicable disease, including coronary heart disease (CHD), hypertension, type 2 diabetes, chronic kidney disease and some cancers;
- supports weight management - physical activity by itself can result in modest weight loss of around 0.5-1kg per month.
- can reduce the risk of stroke, and be used to treat peripheral vascular disease and to modify cardiovascular disease (CVD) risk factors such as high blood pressure and adverse lipid profiles (Department of Health, 2004).

Advice on physical activity should embrace the broader concept of health and activity - walking, dancing, playing with the grandchildren, or gardening (McMurdo, 1999).

1.3 Example from HELP, C2 or similar projects

Reductions in emergency admissions specifically have not been tested in health-related community development. See other indicators for description of a wide range of health-enhancing activity. The Townstal Focus Group report conveys a strongly held view among participating residents that community activity has had a positive impact on health and wellbeing (ref.)

1.4 Indicator/s

Emergency hospital admissions

1.5 Baseline for Townstal

Due to small local totals, three-year rolling averages for Directly Age-standardised Rates per 100,000 (DASR) were calculated for Townstal, Devon, and the most deprived fifth of small areas (England). The baseline figure for future change is 2006/7 - 2008/9. A graph in Appendix 2 shows the trend from 2005/6 - 2007/8 by way of context.

EMERGENCY HOSPITAL ADMISSIONS, TOWNSTAL, DEVON AND THE MOST DEPRIVED FIFTH OF SMALL AREAS IN ENGLAND: THREE-YEAR ROLLING AVERAGES OF DIRECTLY AGE-STANDARDISED RATES PER 100,000 (DASR)

	2006/7 - 2008/9	2007/8 - 2009/10	2008/9 - 2010/11
Townstal	8,311	8,054	8,071
Devon	6,685	6,770	6,903
Most Deprived fifth of small areas (England)	9,840	9,908	10,211
England	8,307	8,463	8,713

The level for Townstal is significantly higher than that for Devon. The rate for Devon is rising; the trend for Townstal is less clear. The rate for the most deprived fifth of small areas (England) is significantly higher than both, and rising.

1.6 Average cost

£1,998 (NHS Devon, 2011-12 YTD)

1.7 Illustrative 5% additional saving attributable to CD

29 cases, £57,942

2. Accident and Emergency attendance

2.1 Community Development Effect

There is a strong case for linking community development to reduce crime and alcohol abuse with intelligence regarding A&E attendance, in order to reduce alcohol-related violence and health expenditure related to it. An associated issue is access to, and use of, primary care, which may be improved through better engagement between a GP practice and an active local community.

2.2 Research Base

35% of all A&E attendances involve alcohol-related harm, rising to 70% of A&E attendances at peak times. In a recent A&E study:

- 41% of attendees had been drinking
- 14% were intoxicated
- 43% identified as problematic users
- Cost - Up to £1.6bn to the NHS

PCTs have a duty to work in partnership with other responsible authorities to tackle crime & disorder. There is emerging evidence that A&E intelligence can have an impact on targeting police and other resources to reduce violence (Sheehan and Nurse, 2006).

Emergency Medicine can contribute to community violence prevention by working with public health and local crime reduction/community safety partnerships to measure community violence; identifying serial (repeat) attenders and referring them to agencies, for example to women's safety units, who can intervene to reduce the chances of further harm; auditing hotspot locations for violence such as particular bars and nightclubs; being committed to decreasing community violence as well as treating the injured; initiating and participating in local safety campaigns, working with local media (Shepherd, 2007).

2.3 Example from HELP, C2 or similar projects

REACH, the Redruth Enabling Active Community Health, is an example of close collaboration between a community project using the C2 approach from which HELP is derived, and an emergency service. It was a partnership between the Redruth North Partnership and the South West Ambulance Service. Its aim was to provide easy community access to a known and trusted practitioner (an emergency care practitioner/paramedic), while reducing the numbers of inappropriate 999 calls. The initiative won an NHS Health and Social Care Award for reducing health inequalities in July 2006. Outcomes included 210 patients treated between 2004-2006 on site, a 30% drop in incidence of under-age problem drinking and an 18% reduction in emergency call outs (Stuteley, 2007).

In Townstal, unsatisfactory access to a GP Practice in Dartmouth has been taken up by the Townstal Community Partnership. It appears likely that a new primary care outlet much closer to the estate may bring much better access. Outreach health activities in the community hall may also bring benefits.

2.4 Indicator/s

A&E / Minor Injuries Unit attendance, Directly Age-standardised Rates (DASR) per 100,000

2.5 A&E Attendance in Townstal and comparators: Directly Age-standardised Rates per 100,000

The baseline figure for future change is 2008/9. A graph in Appendix 2 shows the trend from 2005/6 by way of context.

	2008/9	2009/10	2010/11
Townstal	55,737	60,980	57,070
Devon	31,222	32,981	34,126
Most Deprived fifth of small areas (England)	48,883	49,876	50,389

In recent years the rate for Townstal has been significantly higher than both the rate for Devon and that for the most deprived fifth of small areas (England). However, while the rate for these two comparators has consistently risen from 2007/8, the trend in Townstal reversed in 2010/11. It remains to be seen whether that will be replicated in 2011/12, mirroring a fall in crime and a perceived fall in anti-social behaviour (see below, and report from focus groups (Griffiths, HELP, 2012)).

2.6 Average cost

Per A&E attendance £86.90

2.7 Illustrative saving: degree of attribution to CD to be discussed

2009/10 - 2010/11, fall of 92, saving £7,995

3. Cardiovascular diseases (CVD) hospital emergency admissions under age 75

Cardiovascular disease (CVD) means all the diseases of the heart and circulation including coronary heart disease (angina and heart attack), and stroke.

3.1 Community development effect

Spread of greater trust, cooperation, social and physical activity, empowerment and resilience among residents promote improvements in quality of life that impact on CVD. Development of community resources and networks to host and foster extensions of care pathways can encompass a preventive community activity resource base which reduces incidence of CVD, assists rehabilitation, and reduces demand of the acute health sector.

3.2 Research base

Higher levels of *social trust* are associated with lower rates of most major causes of death, including coronary heart disease (Kawachi et al, 1997).

A number of studies are consistent with the idea that areas with poor social capital have higher rates of cardiovascular disease (Augustin et al, 2008), in particular among lower-income individuals (Scheffler et al, 2008).

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On average, an inactive person spends 38% more days in hospital than an active person, and has 5.5% more family physician visits, 13% more specialist services and 12% more nurse visits than an active individual (Sari, 2008).

Cost-benefit analyses of cycling and walking infrastructure generally produce high benefit-cost ratios (BCRs). The median BCR in one such analysis was 5:1 which is counted as 'high value for money'. It appears that health benefits make a significant contribution to the high BCRs for cycling and walking projects (Cavill et al, 2008)

A paper by Lomas (1998) offers an estimate of Social Return On Investment (SROI) for community development (CD) in heart disease. He estimates, based on available evidence from elsewhere, to what extent CD activities would reduce cardiac disease and compares those outcomes with those from more conventional approaches. He compares potential heart disease deaths in men prevented per 1000 exposed to each 'intervention' per year:

Social cohesion and networks of associations would prevent 2.9 fatal heart attacks or heart failure

Medical care and cholesterol-lowering drugs would prevent 4.0 fatal heart attacks in screened males

Routine access, free care would prevent 2.1 all cause deaths in high-risk males over 50 years old

3.3 Examples of relevant activities (from Townstal and other HELP pilot projects)

- Reported greater social trust, community activity and confidence, social activities with very high level of community involvement (Townstal)
- Higher levels of physical activity through youth club (Townstal)
- Constructive and inclusive relationship with housing, education and police resulting in far better access and rapid resolution of problems, reducing stress and improving well-being (Townstal).

From other HELP pilot projects:

- Weight management
- Smoking Cessation
- Buggy Walking route for parents of young families
- Health trainers (one to one lifestyle/ health behaviour advice)
- Pedal Power: bikes supplied by Police, aimed at 'families with complex needs' referred by police, social services etc. Bikes restored and given to families with safety gear and on completion of cycling proficiency course. Older siblings and Dads teaching younger ones.
- Young people engaged in local woodland management, coppicing and den building. Outcomes are accredited training in woodland management; improving habitat diversity in woodland; positive outdoor experiences eg fire lighting, cooking and wood carving.

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- Zumba dancing sessions

3.4 Indicator/s

CVD hospital emergency admissions under age 75.

Mortality rate from cardiovascular disease has been a key health indicator for successive governments. It is a proposed health outcome indicator for the Coalition Government's Public Health Outcomes Framework (Department of Health, 2011). Circulatory diseases account for 35% of geographical health inequalities for males, and 30% for females (Health Inequalities Unit, 2008).

However, mortality rates are a long-term indicator to influence. Hospital admission rates are an indicator located further upstream. They are available at very local level in significant numbers, and offer a clearer focus for collaboration between health and other services in addressing the determinants of ill health, and prevention and rehabilitation pathways which engage and empower local people through community development. Finally, there is a strong and established link between deprivation and emergency admissions, with spending hotspots on acute services which have great potential for realising tangible savings to support a strategic shift towards prevention and early intervention, as well as addressing health inequalities (Griffiths, 2009). This is entirely in accord with the Government's new Public Health Outcomes Framework.

3.5 CARDIO-VASCULAR DISEASE (CVD) EMERGENCY HOSPITAL ADMISSIONS, TOWNSTAL, DEVON AND THE MOST DEPRIVED FIFTH OF SMALL AREAS IN ENGLAND: THREE-YEAR ROLLING AVERAGES OF DIRECTLY AGE-STANDARDISED RATES PER 100,000 (DASR)

Due to small local totals, three-year rolling averages were calculated for Townstal, Devon, and the most deprived fifth of small areas (England). The baseline figure for future change is 2006/7 - 2008/09. A graph in Appendix 2 shows the trend from 2005/6 - 2007/8 to 2008/9 - 2010/11 by way of context.

	2006/7 - 2008/9	2007/8 - 2009/10	2008/9 - 2010/11
Townstal	795	660	745
Devon	384	370	354
Most Deprived fifth of small areas (England)	673	620	599

The Townstal Community Partnership was formally constituted in July 2009. Due to small numbers of CVD Admissions in Townstal, NHS Devon has calculated a 3-year rolling average for the admissions rate. The Townstal rate in 2008/9 - 2010/11 was double that for Devon, and there is no clear trend, in contrast to the Devon rate which has been in steady decline.

The rate for Townstal is higher than that for the most deprived fifth of small areas in England, though due to the small numbers it is not a statistically significant difference. The 'most deprived fifth' rate has been declining quite steeply, faster than that for Devon.

3.6 Cost of treatment

Average cost of admission £4,614 (NHS East Lancashire, 2010).

3.7 Illustrative 5% additional saving attributable to CD

The number of CVD admissions in 2008/9 - 2010/11 from Townstal was 50. A reduction of 3 admissions would save $3 \times 4614 = £12,492$.

4. Older people: reducing falls

4.1 Community Development Effect

An increased level of community activity, particularly physical activity suitable for older people (including walking groups) provides a network which can raise the level of physical and mental wellbeing, improving muscle strength and balance; and with neighbourhood-level commissioning of community groups this can be tailored to reduce the risk of falls and assist recovery.

4.2 Research Base

See references to physical activity 3.2 above, and in Appendix below.

Ageing and inactivity leads to muscle loss and increases falls risk. Only 14% of 75 year olds are sufficiently active to maintain health (Skelton et al., 1999). Older people can regain 27% of muscle strength reversing age related decline by 15 years by attending one exercise class a week and doing home exercises (Skelton and McLaughlin, 1996).

NICE find a programme of muscle strengthening and balance retraining, individually prescribed at home by a trained health professional, and a 15-week Tai Chi group exercise intervention, to be beneficial (NICE, 2004).

A randomised control trial offering community-based support to older people who had experienced falls resulting in emergency ambulance calls but who were not conveyed to hospital achieved a halving of subsequent falls compared to a control group. The intervention offered training in strength and balance, assessment and remedy of hazards in the home, advice and practice in getting up from the floor (provided by the occupational therapists), and group sessions on fall prevention in local community centres including one hour of muscle strengthening and balance training (Logan, 2010).

Through the Healthy Communities Collaborative, there was evidence of an improvement in social capital within the communities involved in the reducing falls programme, resulting in:

- 12% increase in people's perception of whether their area was a good place to live
- 12% increase in people's perception of whether individuals show concern for each other
- 22% increase in the number of people who knew where to get advice about falls
- 48% increase among participants in the proportion who thought they could change and improve things in their communities (Coulter, 2009).

Cost saving per fall less per year was identified by the Healthy Communities Collaborative as £800 p.p. in hospital costs, £82 in ambulance costs, and £1883 in avoided residential care costs. Hip fracture costs £18,421 per patient (National Hip Fracture Database, 2010) (not yet in projection here)

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For every £1 spent on balance/Tai Chi classes by the taxpayer in LinkAge Plus areas there is a health and social care saving of £1.35. This suggests that balance classes are a highly effective way to reduce the incidence and associated costs of falls, leading to fractures, hospitalisation and operations (Turning Point / Connected Care, 2010).

4.3 Example from HELP, C2 or similar projects

LinkAge Plus and other projects have supported peer group physical activity, with buddying (Activity Buddies on a British Heart Foundation model) providing support to the less able and less confident with mutual benefit. Dance tailored to older people by East London Dance, engaging a passion (and skill) for healthy activity shared by many in their younger days. See the Well Centre, Bonny Downs Community Association, East London, for a wide range of healthy community activities, including Tai Chi and dance classes.

4.4 Indicator/s

Emergency admissions for falls (Diagnosis Code analysis).

4.5 Baseline for Townstal

Due to small local totals, three-year rolling averages for Directly Age-standardised Rates per 100,000 (DASR) were calculated for Townstal, Devon, and the most deprived fifth of small areas (England). The baseline figure for future change is 2006/7 - 2008/09. A graph in Appendix 2 shows the trend from 2005/6 - 2007/8 to 2008/9 - 2010/11 by way of context.

ACCIDENTAL FALLS, EMERGENCY HOSPITAL ADMISSIONS, TOWNSTAL, DEVON AND THE MOST DEPRIVED FIFTH OF SMALL AREAS IN ENGLAND: THREE-YEAR ROLLING AVERAGES OF DIRECTLY AGE-STANDARDISED RATES PER 100,000 (DASR)

	2006/7 - 2008/9	2007/8 - 2009/10	2008/9 - 2010/11
Townstal	508	641	739
Devon	477	491	499
Most Deprived fifth of small areas (England)	688	699	725

Numbers in Townstal are small, and because of this, comparisons since 2005/6-2007/8 have not been statistically significant, except for 2008/09-2010/11, when Townstal's rate was significantly higher than that for Devon. However, it should be noted that since 2005/6-2007/8, the number of emergency admissions for falls in Townstal have steadily risen, from 30 to 57. This suggests that some action along the lines suggested by the evidence base would be desirable.

4.6 Average cost

Cost saving per fall less per year was identified by the Healthy Communities Collaborative as £800 p.p. in hospital costs, £82 in ambulance costs, and £1883 in avoided residential care costs

5. Crime and the fear of crime

5.1 Community Development Effect

Concern about crime is among the first priorities of many communities; and this is reflected in successive HELP Listening Events. Lower crime is associated with social capital which is positively associated with health. There is also a link between fear of crime and health: levels of fear of crime are not always consistent with actual crime in a community. It is therefore beneficial to health to reduce both crime and the fear of crime.

5.2 Research Base

Those areas with stronger social networks experience less crime (Skogan, 1986), and less delinquency (Sampson et al, 1997).

In a Chicago study, overall, neighbourhood social capital - as measured by reciprocity, trust, and civic participation - was associated with lower neighbourhood death rates, after adjustment for neighbourhood material deprivation (Lochner et al, 2003).

The fear of crime refers to the fear of being a victim of crime as opposed to the actual probability of being a victim of crime (Hale, 1996; Farrall et al, 2007). Individuals with high fear of crime are twice as likely to suffer from depression. Fear of crime is associated with decreased physical functioning and lower quality of life (Stafford et al, 2007).

5.3 Examples of relevant CD activity

See examples above of work to improve social capital. Positive trends in crime reduction in Beacon (Falmouth), Camborne, Redruth North, Townstal.

- Large scale youth dance activities run by Camborne Neighbourhood Police Team, using the HELP approach to work with 325 children, many of them linked, as perpetrators or victims, to anti-social behaviour or crime. This has been subject to qualitative evaluation, with a finding that relationships between children and police were substantially improved (Camborne (2006)
- Strong involvement of Police Community Support Officer in development and running of youth club, including sport and recreational activities; and more widely with housing providers and Community Partnership, leading to reduction in anti-social behaviour

5.4 Indicator/s

Reported crime

5.5 Average incidence in a population of 1,000

Due to small local totals, two-year rolling averages for recorded crime rates were calculated for Townstal, the neighbouring Dartmouth and Kingswear Ward, Devon, and England and Wales. The baseline figure for future change is 2007/9.

Comparator: 2007/9, England and Wales: 89 per 1,000. Fell in 2009/11 to 77.1 per 1,000 (13% fall)

Comparator: neighbouring ward, Dartmouth and Kingswear. 2007/9: 57.6 per 1,000. Fell in 2009/11 to 51.2 per 1,000 (11% fall).

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Comparator: Devon. 2007/9: 67.9 per 1,000. Fell in 2009/11 to 57.6 per 1,000 (15% fall).

5.6 Baseline from Townstal figure (1,000 base)

2007/9: 303 crimes, rate 62.8/1,000. Fell in 2009/11 to 46.3 per 1,000 (26% fall)

Graphs in Appendix 2 show the trend from 2007/9 to 2009/11; and the relative decline from 2007/9.

5.7 Average cost

Illustrative estimated cost of individual crime in Townstal (based on local pattern) £1,754.

5.8 Illustrative 13% fall saving in excess of national fall (attribution to Partnership to be negotiated)

Reduction of 20 crimes annually (actual 2007/9 - 2009/11), £35,645.

6. NEET (Not in education, employment or training between the ages of 16 and 18)

6.1 Community Development Effect

Community level work with young people at risk to promote social inclusion, including work on confidence, resilience and social skills, can have far-reaching gains in terms of employability, educational attainment, mental health and reduced crime.

6.2 Research Base

Major predictor of later unemployment, low income, depression, involvement in crime and poor mental health (Places database, DfE)

6.3 Example from HELP, C2 or similar projects

See youth activity examples in 5.3 above.

- Greenfingers project in Redruth North aimed at unemployed disaffected young people, (NEET) (partnership between Redruth North Partnership and Cornwall College, offering NVQ level 1 in horticulture, while improving estate gardens of older people and those with disabilities) in return for free driving lessons. Now higher levels of participation in NVQ and other learning, a fall in youth unemployment and the creation of gardens and open space.
- Life skills courses, IT skills training (Beacon, Falmouth)
- Response to service cuts through Community Partnership: school in Townstal hosting Connexions outreach for young people (previously removed from Dartmouth); youth club continues after withdrawn by Youth Service, staffed by police out of uniform (Townstal, Dartmouth); reduction in anti-social behaviour and improvement in attitudes to physical environment; increase in physical activities.

6.4 Indicator/s

Number of NEET (population denominator a problem in small geographical areas).

6.5 Average incidence

6.7% of residents aged 16-18 (2008, England)

6.6 Baseline from Townstal

Number: 17 individuals 2008/9.

6.7 Average cost

Public finance cost of NEET, £7,986 per head (Coles et al 2010).

6.8 Illustrative 5% additional saving attributable to CD

Reduce by 1: £7,986.

7. Special Educational Needs (SEN)

NOTE: see update on the implications of using SEN as an indicator on page 7 above, and on the HELP website.

7.1 Community Development Effect

An improvement in early years nurturing through the development of networks of parents that normally form a supportive peer group in a neighbourhood may improve the confidence and skills of parents, and reduce the extent and severity of social, emotional and behavioural difficulties. Community activities, including the development of play resources, are likely to support this process.

7.2 Research Base

These are extracts from the report of the House of Commons Education and Skills Committee, (the Third Report of Session 2005-06 on Special Educational Needs) (House of Commons, 2006):

- There is a rising number of children with social, emotional or behavioural difficulties (SEBD).
- There is a strong correlation between social deprivation and SEN that deserves careful consideration (with some exceptions, particularly along the autism spectrum and specifically Asperger's Syndrome).
- The continuing correlation between children with SEN and exclusions, low attainment, not being in education, employment or training (NEET), and even youth crime, means that there are significant long term economic and social costs involved in failing children with SEN. The personal cost to families of children with SEN should also be considered.
- The impact for those children with SEN who end up being excluded, NEET, or even in crime, is of great concern. We know, for example, that a high proportion of young people in Youth Offender Institutions have special educational needs and 15% have statements of SEN (compared to 3% of the total school population). There are considerable costs involved in failing to meet the needs of large numbers of children with SEN. Moreover, the Government has a responsibility to provide high-quality education for all children to enable them to reach their potential.

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- Where a child with SEN is not having their needs met, it is likely that there are also costs in terms of the impact on the broader education system: possible disruption to education of classmates in both mainstream and special schools; and on teacher retention. Evidence of the impact on teacher retention of pupil behaviour (including, although not exclusively, pupils with social, emotional, and behavioural difficulties (SEBD)) is widely acknowledged.
- Being unable to communicate effectively is deeply frustrating: well over half of the children classified as having emotional, behavioural and social difficulties (EBSO) have a communication disability too. An unaddressed communication disability often leads to behavioural problems. This strong inter-relationship is all too often overlooked. As a result, children with EBSO often fail to have their communication disability addressed, with the outcome that their frustrations continue and they become locked in a vicious, self-perpetuating cycle. Isolation and social exclusion is the frequent result.
- Research shows that a high percentage of people in youth offenders institutions have special educational needs. Most did not benefit from a statement of special educational needs. One of the biggest risk factors to involvement in crime is non-school attendance, yet 87% of exclusions from primary schools and 60% from secondary schools are children with special educational needs. The clear correlation between the fact that the majority of children excluded from school are those with special educational needs and the number of young offenders who have been identified with special educational needs, is concerning and needs to be dealt with as a matter of urgency. There is also evidence that many children educated in pupil referral units have been diagnosed with SEN; policy should be developed which has due regard to ensure that such children avoid the risk of becoming the 'ASBO' generation of tomorrow.

7.3 Example from HELP, C2 or similar projects

Beacon, Falmouth, 1995-2000, 'Grumpy Mums' Group, working with mums with children on the Child Protection Register; culminated in a high proportion of the mums gaining child care qualifications.

Youth club in Townstal involving a high proportion of children with special educational needs in recreational activities.

7.4 Indicator/s

Percentage of children with special educational needs in primary school.

7.5 Incidence

Rate for England 2010, 19.9%. Devon, 2011, 19.5%.

7.6 Baseline from Townstal

2010, 77 (31%); 2011, 69 (28%).

7.7 Average cost

The immediate cost of direct SEN provision in a Solihull primary school was calculated at £993p.a. per pupil. However, the longer term cost of exclusions, low attainment, not being in education, employment or training (NEET), youth crime, and related future costs of unemployment, poor physical and mental health, and replication in future families represents

a vastly greater future cost. The strong link between SEN and NEET is examined in detail in Coles et al., 2010 (pp.9-10), and the cost multipliers explored in some detail.

APPENDIX 1 - INDICATORS WITHOUT NUMBERS ATTACHED FOR TOWNSTAL

1. Depression

In the development of this indicator set, data were taken from the *IMS Disease analyser*, creating a figure for those 'in contact with GP services per year, diagnosed as having either depression or mixed anxiety and depression'. For Townstal, actual GP data were obtained. However, the figures were less than a third of the level for Devon or for England. This strongly suggests under-reporting of depression in Townstal. It may be related to a problem of poor access to primary care due to the isolated location of Townstal (Griffiths, 2012).

An alternative approach would be a survey measurement of mental well-being. However, since the Townstal Community Partnership is well under way, it is too late for such a measurement of change. A retrospective question would be indicative. It would require a viable statistical sample, and of course the resources to carry out such a survey. This is outside the scope of this report.

The background to establishment of an indicator of mental well-being is given below.

(a) Community Development Effect

Increase of community activity and social networks alleviates stress, improves confidence and resilience, reduces the risk of depression, creates positive alternatives to antidepressants.

(b) Research Base

National surveys of psychiatric morbidity in adults aged 16-64 in the UK show that the most significant difference between this group and people without mental ill-health problems is social participation (Jenkins et al, 2008). There is strong evidence that social relationships can reduce the risk of depression (Morgan and Swann, 2004).

Good personal support networks, for example friendship or a confiding relationship, and opportunities for social and physical activities, protect mental health and enable people at any age to recover from stressful life events like bereavement or financial problems (Cooper et al, 1999).

Men and women who scored highest in a survey on emotional health were twice as likely to be alive by the study's end. The link between subjective feelings of happiness and good health held even after controlling for chronic disease, smoking, drinking habits, weight, sex and education (Goodwin, 2000).

A systematic review of 22 studies evaluating the effectiveness of health promotion interventions to alleviate social isolation and loneliness among older people found that group activities like discussion and self-help groups, bereavement support and counselling, were all found to be effective (Cattan, 2002).

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An active lifestyle:

- reduces the risk of depression and promotes many other positive mental health benefits, including reducing state and trait anxiety; improves physical self-perceptions and self-esteem; and can help reduce physiological reactions to stress;
- has been found to be just as effective in the treatment of mental ill health as anti-depressant drugs and psychotherapy (Mutrie, 2000; Biddle et al, eds., 2000)

Recent cross-sectional studies and controlled trials have suggested that exercise, such as aerobic classes and t'ai chi, provides both physical and psychological benefits in elder populations. These benefits include greater life satisfaction, positive mood states and mental well-being, reductions in psychological distress and depressive symptoms, lower blood pressure and fewer falls (World Health Organization, 2004; Li et al, 2001).

See also 3.2 above.

(c) Example from HELP, C2 or similar projects

Wide range of activities to build social capital throughout HELP projects (see 3.3 above)

(d) Indicator/s

Depression diagnosed by primary care, based on data from GP Practices serving area, applied proportionately. Ideally would be specific to geography, based on postcode analysis (but see note above on under-reporting, possibly linked to poor geographical access to primary care).

(e) Average cost

£1355 p.p service cost; also £4694 p.p earnings lost (McCrone et al, 2008).

(f) Illustrative 5% additional service saving attributable to CD

(not including the personal earnings lost) E.g. 5% reduction of 18 cases, service saving £24,390.

2. Obesity

In the development of this indicator set in Solihull, data for a larger area than Townstal were taken from the National Child Measurement Programme (NCMP). To establish a local figure for adults, the ratio of the local child rate to the rate for England was applied to the adult rate for England. In Townstal, NHS Devon report that 'a combination of DH publication rules for release of school data, and small numbers when looking at small area geographies (even with pooling) mean that there is nothing suitable to use on that front'. GP data were obtained, but again, comparison with Devon and national figures suggest that there is under-reporting of obesity in Townstal.

The background to establishment of an indicator of obesity is given below. The research evidence may support development of healthy activities.

(a) Community Development Effect

Greater levels of physical activity generated in an active community can result in weight loss and an improvement in health awareness. New, improved and better-used open spaces and sports facilities are commonly achieved through a community empowerment approach.

(b) Research Base

Being obese and being overweight both increase the risk of a range of diseases that can have a significant health impact on individuals, although the risks rise with BMI (Body Mass Index) and so are greater for the obese:

- 10 per cent of all cancer deaths among non-smokers are related to obesity
- the risk of Coronary Artery Disease increased 3.6 times for each unit increase in BMI
- 85 per cent of hypertension is associated with a BMI greater than 25
- the risk of developing type 2 diabetes is about 20 times greater for people who are very obese (BMI over 35), compared to individuals with a BMI of between 18 and 25
- up to 90 per cent of people who are obese have fatty liver. Non-alcoholic fatty liver disease is projected to be the leading cause of cirrhosis in the next generation
- obesity in pregnancy is associated with increased risks of complications for both mother and baby
- social stigmatisation and bullying are common and can, in some cases, lead to depression and other mental health conditions (Dept of Health, 2008).

The majority of children and young people classified by the HSE 2007 as overweight (77.3%) consider themselves to be about the right weight, as do 46.3% of children classified as obese. 65% of children and young people classified as obese are trying to lose weight.

The Chief Medical Officer advises that children and young people should participate in a minimum of 60 minutes of at least moderate intensity physical activity each day. 32% of children and young people age 11-15 believe that people their own age should take part in physical activity every day of the week (Roberts and Marvin, 2011).

An active lifestyle supports weight management - physical activity by itself can result in modest weight loss of around 0.5-1kg per month (Foster et al, 2009).

Collective efficacy - the willingness of community members to look out for each other and intervene when trouble arises - is negatively associated with BMI, risk of overweight, and overweight status, when levels of neighbourhood disadvantage have been taken into account. This suggests that future interventions to control weight by addressing the social environment at the community level may be promising (Cohen et al, 2006).

There is little evidence specifically on the cost effectiveness of non-pharmacological interventions such as diet, physical activity and behavioural treatment in the treatment of obesity. Notwithstanding the limited evidence in an already obese population, these types of interventions appear to be a cost-effective use of resources (NICE, 2006). Dietary interventions seem particularly cost effective due to the low levels of staff contact needed, as do group interventions (Goldfield et al, 2001). The degree of cost effectiveness of non-pharmacological interventions is highly sensitive to the duration of benefit. If weight loss relative to trend remains constant for 5 years post intervention before returning to baseline, the cost per QALY in the best-performing non-pharmacological studies ranges from £174 to £9971 (NICE, 2006).

(c) Example from HELP, C2 or similar projects

See CVD section above for material on physical activity, healthy lifestyle advice.

Renovation of park with new play facilities, high child commitment due to their active involvement in its development and design (Townstal)

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Street running and other sporting activity in Townstal Youth Club, very high engagement by young people.

(d) Indicator/s

% obese, adult and child.

(e) Average incidence in population

England 08/09: Reception class: 9,600/100,000; Year 6: 18,300/100,000

Adults: England proportion 24.2% (2006-8), 9.46m (24,200/100,000)

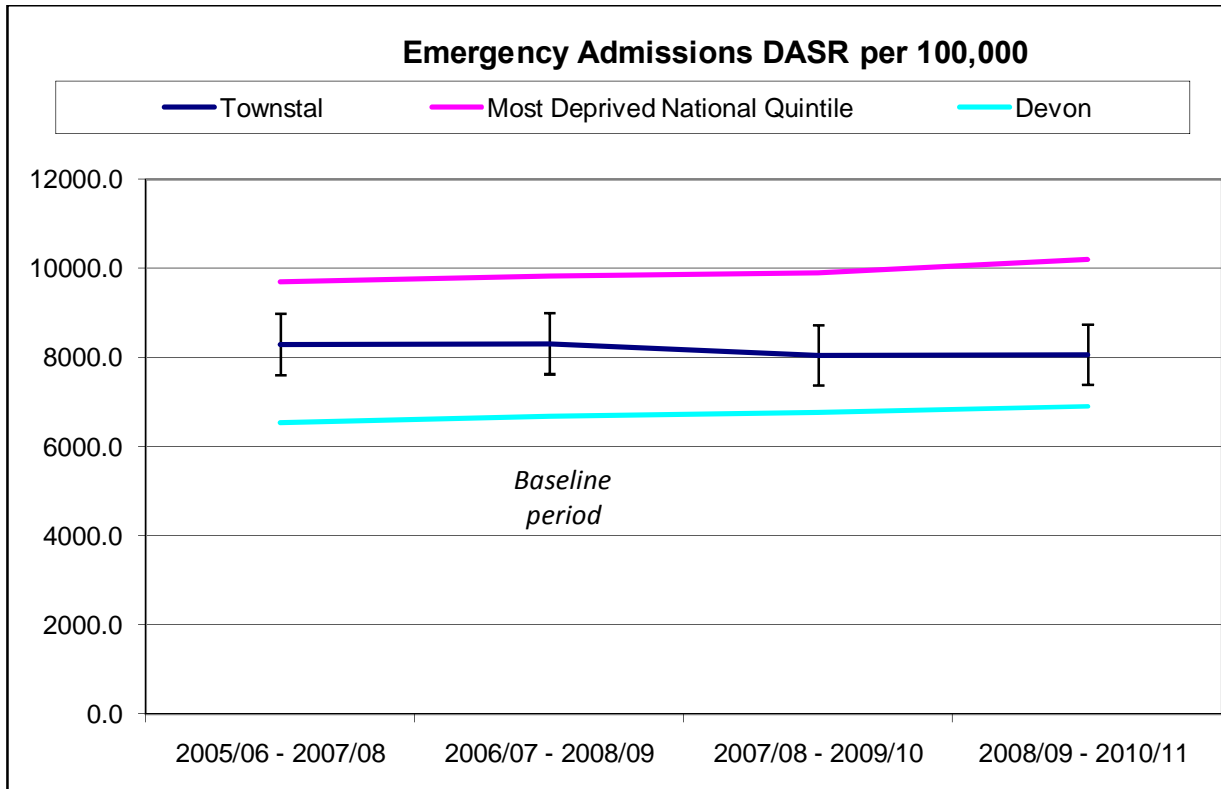
(f) Average cost

Adults: derived from data on wider cost of raised BMI and obesity, adjusted proportionately to obesity alone; and estimated future cost of diseases related to BMI minus CHD (covered in Part 1 above) (£7.32bn 2007) (McPherson et al, 2007); applied to UK adult population: £648.30 per obese person.

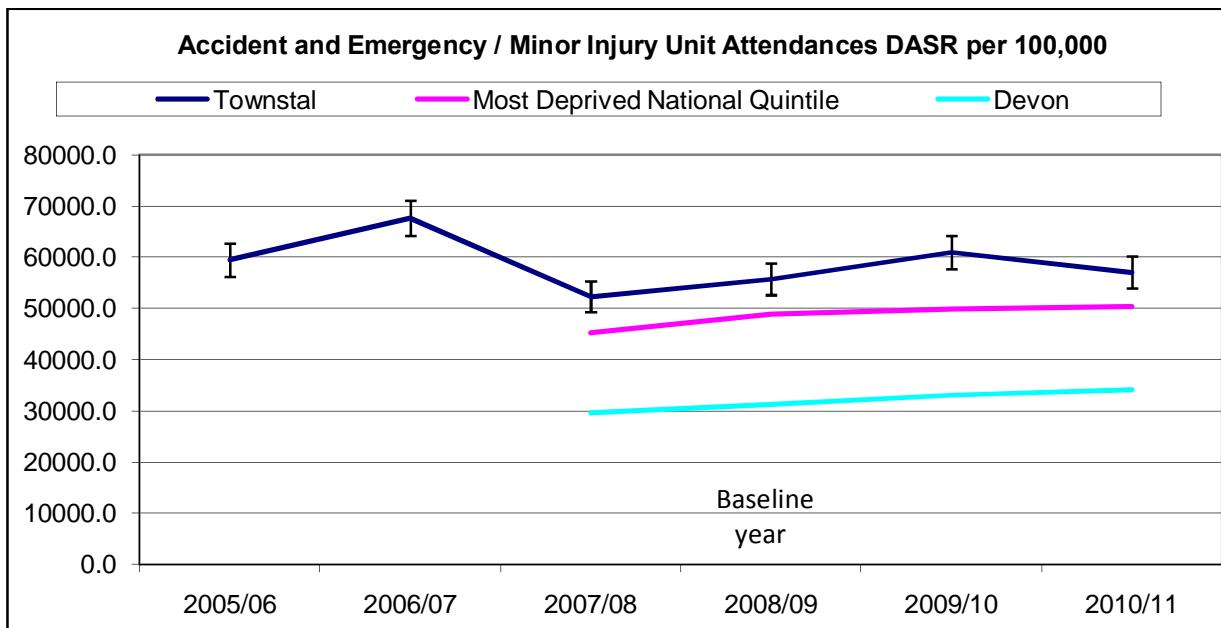
(g) Illustrative 5% additional saving attributable to CD

E.g. Adults: 58 fewer obese @ £648.30p.a. = £37,601

APPENDIX TWO - COMPARATIVE INDICATOR TRENDS UP TO BASELINE PERIOD 2008/9-2010/11

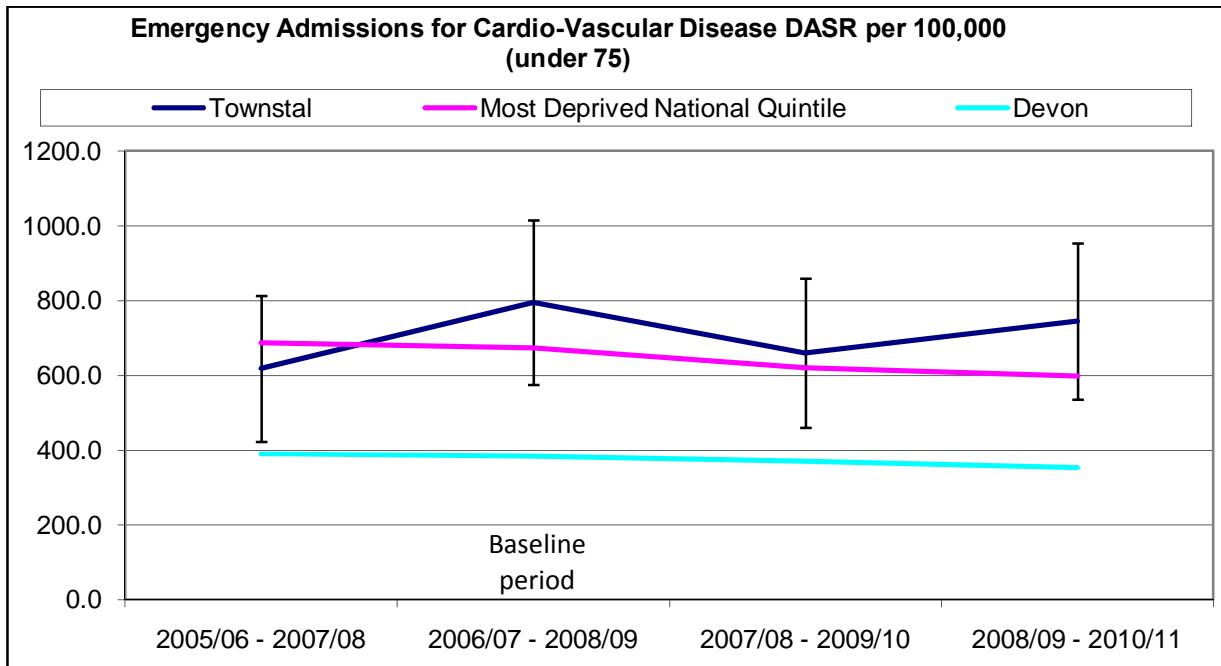


Source: Public Health Intelligence, NHS Devon

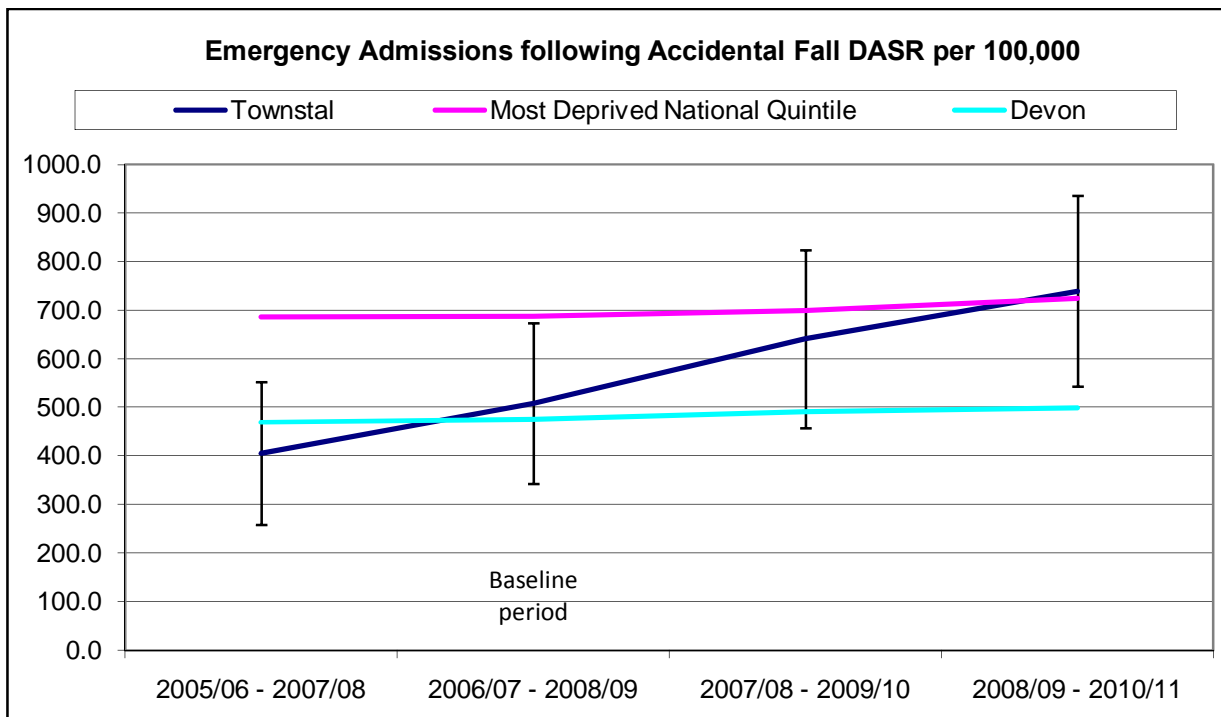


Source: Public Health Intelligence, NHS Devon

TOWNSTAL COMMUNITY PARTNERSHIP: MEASURING IMPROVEMENT IN COMMUNITY WELL-BEING

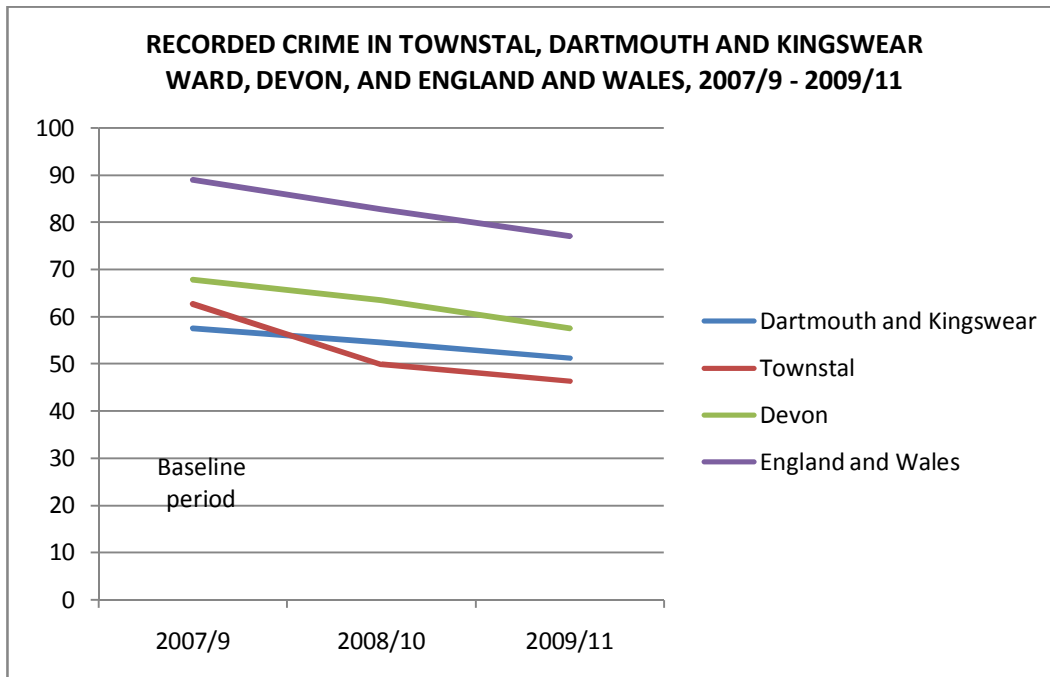


Source: Public Health Intelligence, NHS Devon

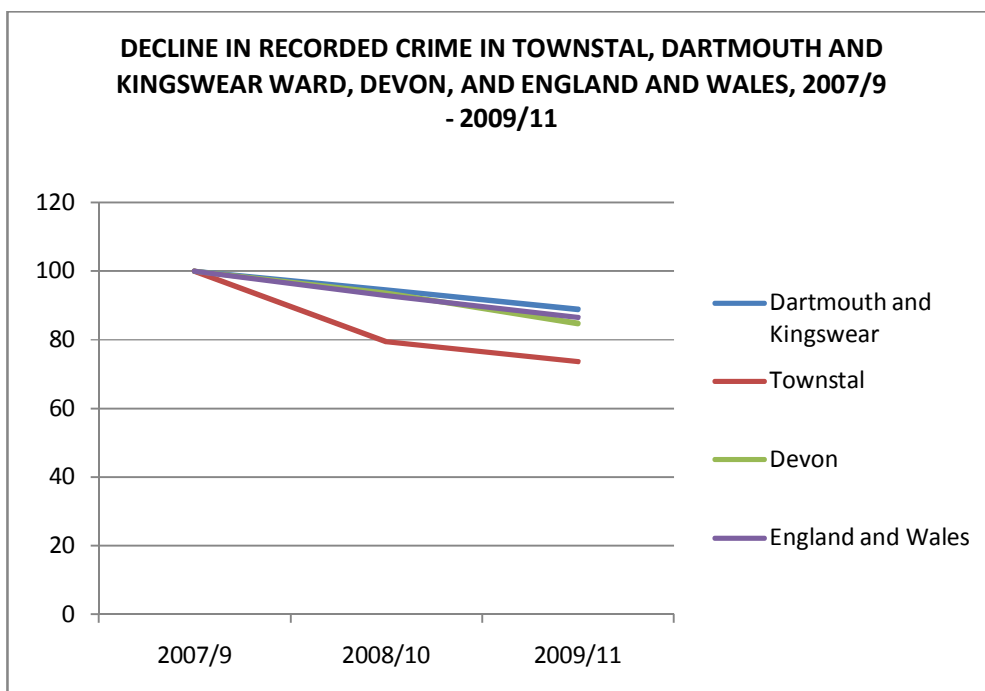


Source: Public Health Intelligence, NHS Devon

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Source: Devon and Cornwall Police; author's calculations



Source: Devon and Cornwall Police; author's calculations

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