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Preventative Spending

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This paper examines the case for early intervention strategies which are designed to reduce the demand for more expensive intervention or treatment at a later date.

Key Points

- Northern Ireland is one of the most socially and economically deprived regions of the UK. The cycle of deprivation is a long-standing intractable problem with this generation of economically inactive currently raising the next.
- Preventative spending is often more valuable during a recession because people are forced to make cuts in their standard of living which has a detrimental impact on their own well being and the prospects for the next generation.
- The demand for public services is projected to rise significantly as a result of negative social problems.
- The current allocation of resources into expensive short-term treatments when there are cost-effective long-term solutions is dynamically inefficient.
- There is not a consensus on how programmes of preventative spending ought to be immediately financed. Nor is there consensus that in every case an increase in spending is required.
- Government departments suffer from 'silo' budgeting and are not sufficiently prepared to spend money on an issue when benefits/savings are realised by other departments.
- Measuring the effectiveness and efficiency of preventative spending is difficult given that:
 - Preventative measures are not 100% effective;
 - Social outcomes are insufficiently recorded;
 - Other influences may add or detract from a campaigns effectiveness;
 - External benefits are often gained by others indirectly; and
 - Benefits may be unquantifiable.
- Only 1% of the NHS budget is currently spent promoting health.
- £7.5m was spent in Northern Ireland in 2009 treating drug and alcohol addiction.
- Crime cost the Northern Ireland economy £2.9bn per year in addition to wider immeasurable social costs.
- Studies show that many home modifications and social service interventions are cost-effective when compared to residential care.
- Evidence suggests that preventative spending programmes, when targeted at the early years (0-3) age group are some of the most effective in delivering long-term savings.
- Studies indicate that for every £1 spent on early years education, you must spend £7 to have the same impact in adolescence.

Executive Summary

This paper provides a summary of a body of research compiled by the Scottish Finance Committee (SFC) during its inquiry into preventative spending and also includes a number of additional relevant sources. This paper outlines the case for preventative spending, the barriers to implementation, the methods of application and also includes a range of case studies.

Definition

Preventative Spending is, 'a clinical, social, behavioural, educational, environmental, fiscal or legislative intervention or broad partnership programme designed to reduce the risk of mental and physical illness, disability or premature death and/or to promote long-term physical, social, emotional and psychological well being' (Arbuthnott, 2010).

Case

For various reasons public services have been designed to react to problems rather than proactively prevent problems from developing at an early opportunity. Although for over a decade public expenditure has been increasing, evidence suggests that as a result of negative social outcomes (such as a poor diet and crime) the demand for services has also been rising. This increase in public expenditure failed to tackle negative social outcomes which, commentators assert, sustain this demand. At the current juncture, demand is projected to continue to increase while public spending is being cut as a result of the banking crisis.

Deprivation is often inherited by the children of the deprived. We measure deprivation in monetary terms, however it must be recognised that this form of measurement is imperfect. Although levels of economic and social deprivation are often correlated, compared to 50 years ago in real terms each person in the UK is on average more than two and a half times wealthier and yet deprivation is still a distinct problem in society (The Guardian, 2010). Today Northern Ireland is one of the most economically deprived regions of the UK. Each year we spend a significant amount of money treating the outcomes associated with deprivation rather than on preventative solutions aimed at breaking the cycle.

Barriers to Implementation

Problematically preventative spending is difficult to implement. The benefits are accrued in the medium to long-term and preventative spending often generates widespread external value, both of which are difficult to measure. There is always an element of uncertainty that a preventative spending campaign could be ineffective and/or inefficient as the benefits are intangible and the adoption of the policy is usually based on the results of a similar campaign in a different location. Political will is required and some may consider early intervention politically intrusive. Moreover, an upfront source of government revenue may be required for funding.

Early Years

Evidence suggests that the most effective preventative spending is that targeted at the 0-3 early years age group. Examples include:

- Antenatal health promotion;
- Additional maternity care; and
- Parenting classes.

Evidence shows that 95% of a child's brain development occurs during this period and these years are deemed crucial for ensuring that children are properly prepared to start formal education. Targeting preventative spending at this age group is in many cases the most cost-effective form of preventative spending because significant realised benefits multiply throughout a child's life and can be achieved for a relatively small initial investment.

Health Care

Preventative measures are already an integral part of the health care system. Nevertheless health professionals such as Dr. Alan Maryon-Davis, president of the UK faculty of Public Health, contend that the UK spends an insufficient amount on prevention across the board. In the last few decades, a number of costly preventable illnesses such as diabetes and mental ill health have become much more prominent in society. Significant savings could be made if the prevalence of these illnesses in particular could be curtailed. A recent study by the University of Queensland and Deakin University in Australia outlined the cost-effectiveness 150 different preventative health care strategies. The study found that many of these measures were indeed cost-effective.

Policing and Justice

Policing and justice is a costly, reactive way to deal with crime. The social characteristics of prisoners highlight that crime is connected to deprivation. For these reasons a body of evidence suggests that the best type of prevention is dealing with the problem of deprivation. In Scotland Detective Chief Superintendent John Carnochan took a forward thinking joined-up approach to tackling crime when he diverted additional resources into early year's services. Both the Justice Reinvestment Programme in Texas and the Restorative Justice programme in the UK were examples of two successful preventative spending schemes which demonstrated the potential ways to save money through rehabilitation.

Application

Throughout the inquiry into Preventative Spending by the Scottish Finance Committee there was a recurring message which highlighted the need to define the desired outcomes of service delivery. Advocates contend that services can lose their value if delivered as an end in itself rather than a means to an end. Three ideas for financing preventative spending were identified:

- A proportional shift in the emphasis of spending towards prevention;

- Greater use of 'pooled' cross departmental budgets; and
- Frontloading investment with the use of social impact bonds.

The current cost benefit analysis method used to evaluate investment was identified as inadequate and a number of alternatives such as such as the Social Return on Investment (SROI) were suggested. It was also identified that the macroeconomic model fails to adequately account for resulting multidimensional benefits of preventative spending. In addition, lowering bureaucracy, increasing information sharing between departments and increasing the quality of staff were all identified by organisations as important for ensuring the successful application of programmes.

Conclusion

The need for preventative spending is the result of market failure and there is a great deal of evidence which suggests that our current allocation of resources is dynamically inefficient. A change in mindset is required if preventative spending is to be enacted. Additionally, cross-departmental partnership and joined up government are the required foundations for preventative spending interventions. Spending is not always required to enact prevention. For example, increasing the effectiveness of public services will help to ensure that, within the established framework, intervention occurs at the earliest point at which people make contact with public services. In addition, with a creative mindset, there are a wide range of preventative policies which could be developed that do not require financing. In most cases the government is in the most advantageous position to make the most sizeable impact.

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1. Introduction

Preventative Spending is, 'a clinical, social, behavioural, educational, environmental, fiscal or legislative intervention or broad partnership programme designed to reduce the risk of mental and physical illness, disability or premature death and/or to promote long-term physical, social, emotional and psychological well being.'

(Arbuthnott, 2010)

We all have been exposed to measures of prevention; smoking cessation campaigns for example. Nevertheless, when Northern Ireland is compared to other societies (such as those in Scandinavia) it is apparent that the concept of prevention is less well incorporated into government policy. As a result our public services have been designed to react to the consequences of negative social pressures rather than in a proactive way to prevent the initial emergence of these pressures.

The Finance Committee in the Scottish Parliament began an inquiry into preventative spending in September on the basis that during a time of fiscal consolidation long-term preventative action should, 'not be forgotten' (Burnside, 2010). This inquiry has demonstrated how widely preventative spending has been researched and highlighted the wealth of tried and tested effective and efficient examples that are available upon which preventative policies could be designed. This paper will summarise this evidence.

2. What is the case for Preventative Spending?

'Recent research by UK think tank the new economics foundation identified the UK to be the lowest in Europe in spending on almost every preventable social problem including crime, mental ill health, drug use, obesity and family breakdown. As a result we, as a nation, spend a third more on addressing the consequences.'

(Scottish Parliament, 2010)

It is well known to policy makers that Northern Ireland is one of the most socially and economically deprived regions of the UK. It is also widely accepted that this cycle of deprivation in Northern Ireland has been a long-standing intractable problem with this generation of economically inactive currently raising the next.

Indeed the UK is recorded as having one of the lowest levels of social mobility out of 12 countries measured by the OECD (2010, p. 7). During their time in office at Westminster Labour administered the biggest increases in public spending for decades. Nevertheless, commentators contend that the reactive nature of our public services means that much of this increase was spent dealing with the consequences as a result of social ills rather than resourcing necessary long-term solutions to break the cycle of deprivation.

Going forward, the demand for public services is set to rise further and it is estimated that, 'If current inefficient spending continues the cost to the UK economy of dealing with social

problems such as family breakdown, mental ill-health and drug abuse could reach as much as £4 trillion over the next 20 years. (Action for Children, 2009). This figure excludes other increasing pressures on our public services such as additional demand for healthcare much of which is attributed to rapid increases in those suffering from diabetes (Connor, 2009). The table below (provided by Action for Children, 2009) shows that the UK currently fares poorly compared to our European counterparts:

Table 1. The comparative costs of social problems in 16 countries across Europe (£ billions)*

Index of countries	Costs in £ billions
Finland	44.55
Denmark	84.94
Sweden	88.54
Austria	90.87
The Netherlands	97.24
Spain	98.70
France	108.11
Norway	107.03
Belgium	101.80
Germany	110.41
Ireland	116.07
Luxembourg	118.33
Greece	121.29
Portugal	118.16
Italy	118.87
United Kingdom	161.31

**Costs of social problems have been calculated based on UK cost equivalent*

During its inquiry, the Scottish Finance Committee (SFC) has taken evidence from a wide body of individuals and organisations who have attested evidence to show that real and lasting savings are possible if government were to follow a preventative spending approach. This report will detail some of this evidence and provide examples of successful preventative spending campaigns in other jurisdictions.

‘Can we afford to invest; can we afford not to invest?’

(Action for Children, 2009)

3. Do we spend enough on prevention?

It is impossible to prove that preventative spending is in every case an efficient use of government resources. Indeed, some campaigns of preventative spending are more effective than others and some may be completely ineffective. Before discussing preventative spending more specifically, the following reasons detail some of the barriers to implementation:

The benefits of current spending are accrued in the medium to long-run:

- Benefits in their entirety from a current campaign are only fully realised in the medium to long-term.
- There is therefore less incentive to make current 'intangible' investments with long-term prosperity in mind against investments which provide current 'tangible' benefits.

Preventative spending often generates widespread external value:¹

- For example, effective rehabilitation for alcoholics generates positive value for society: rehabilitated alcoholics will add more social value to their family in their role as a parent. This is outside the direct positive economic benefits such as maintaining a steady job and paying taxes to the government.
- Government departments suffer from 'silo' budgets and are ill prepared to spend money on an issue when the benefits/savings are realised by other departments or by society as a whole.² Negative social consequences can be thought of like a sink of dirty dishes in a shared house where no individual is willing to do the job because it is thought of as everybody else's responsibility (Alan Sinclair in Burnside, 2010).

Measuring the effectiveness and efficiency of preventative spending can be difficult:

- Preventative spending is not 100% effective. Those who are not impacted by preventative measures are often much more visible than those who have been impacted.
- Campaigns of preventative spending have different effects when used in different social and cultural settings. A successful campaign in France may not have the same effect locally.
- Other influences on peoples' lives add or detract from the effectiveness of a specific campaign. E.g. Operating a healthy eating campaign may prove ineffective at cutting levels of obesity if individuals at the same time cut the amount of time they spend exercising.
- With long-term and wide ranging external benefits quantitative cost benefit analysis often fails to properly measure the unquantifiable benefits which are the result of preventative spending. This could include, for example, higher self esteem, greater community cohesion and inter-generational learning

¹ Preventative spending is an example of what economists term a 'merit good.' As individuals we are myopic and fail to take into account the long term benefits of demanding and consuming a merit good.

² Birmingham city council, for example, calculated that early years investment would yield £10 to the city for every £1 that it spends but only a quarter of that benefit would accrue to the council (Birmingham Total Place Pilot, 2010).

Political arguments:

- Some for political reasons contend that there is too much government interference in individuals' lives. Nevertheless an inefficient allocation of resources into preventative spending will mean that individuals will pay more tax as a result of poor decisions that others make.

Government revenue is required:

- For all of the reasons outlined above, it can be politically difficult for government to justify and raise revenue for preventative spending purposes.
- Although efficient preventative spending would entail that across the entire economy total benefits will be higher than total costs, the automatic benefit to the public purse (in terms of resulting higher tax revenue) may not be sufficient to offset the costs.

4. Children and Early Years

'If the race is already halfway run even before children begin school, then we clearly need to examine what happens in the earliest years.'

Professor Esping-Anderson in Melhuish P. E., 2010

'Like it or not, the most important mental and behavioural patterns, once established, are difficult to change once children enter school.'

Nobel Peace Prize winning economist, James Heckman in Melhuish P. E., 2010

A great body of the evidence presented to the SFC has focused on early years interventions, reflecting a belief that the greatest impact can be achieved at this with preventative spending targeting this age group. Advocates contend that social investments made in this age group provide the highest rate of return on investment in human capital (Wilson, 2010).

In 2007 the UNICEF placed the UK amongst the ex-Soviet states and near the bottom of the international rankings for child well being (See: **Annex 1**). Northern Ireland fares particularly poorly. Over one third of children live in poverty compared to 14% of children in England. Northern Ireland has a higher rate of children on the child protection register: 38 per 10,000 children compared to 22 Scotland, 24 England and 33 in Wales (Save the Children, 2010; Barnados, 2008). Mirroring the UK's poor performance in child well being, the country experiences, 'some of the worst social outcomes - such as crime, mental ill health and drug use - across Europe' (Action for Children, 2009).

Advocates of early intervention contend that the correlation between poor upbringing and negative social outcomes is not coincidental. This correlation is shown in the evidence presented by Aberlour Childcare in Scotland (2010):

- Over one quarter of inmates prisons have been in care.

- Over 20% of 16-19yr olds designated as NEET (not in education, employment or training) are recent care leavers.
- 65% of care leavers fail to attain a basic English and Maths qualification.
- Only 3% of care leavers go on to gain any higher education qualification.

Although parents are trusted with the responsibility to raise their children, the cost of neglect in this regard is borne by society. Studies show that one generation of 16-18yr old NEET will cost society £31bn over their lifetime and education underachievement costs the UK £18bn per year (Nottingham City Council, 2010; Niven, 2010). Recent statistics for Northern Ireland show that between 2000 and 2009, during a period of economic growth, the problem amplified with the number of young people classified as NEET doubling to 52,000 (Kelly, 2010). Recent research by the London School of Economics suggests that when lost productivity is included, each job seeker costs up to £16,000 per year (Prince's Trust, 2010).

Philip Wilson, a senior lecturer on infant mental health at the University of Glasgow detailed an example illustrating the reactive nature of public services for children. Wilson stated that public services tend to prioritise other shocking forms of child abuse over neglect, even though neglect is a much greater social problem: 'The fact that at least 60,000 children in Scotland are living with problem drug or alcohol use in the family yet only 2,000 are subject to child protection procedures, is testament to the fact that we are failing to protect the most vulnerable children' (Wilson, 2010).

4.1 Case

Early years advocates contend that the cycle of deprivation starts even before a child is born. Dr. Jonathan Sher from Children in Scotland outlined the importance of the health of the mother during pregnancy and the problems following from with heavy smoking, drinking or obesity at the time of conception. These problems, he said, were very difficult to reverse during pregnancy and result in defective birth outcomes which place a significant long-term strain on the public purse. Two effective examples of ante-natal preventative measures were mentioned during the inquiry:

- Folic Acid Supplements: These inexpensive nutritional supplements when taken before conception reduce the change of spina bificia and other defects by up to 70% (Sher, 2010).
- Foetal Alcohol Syndrome: 'Parental exposure to alcohol is the leading cause of brain damage and developmental delay amongst children in industrialised countries.' Yet, stopping all alcohol consumption during pregnancy is 100% effective in preventing foetal alcohol syndrome (Children in Scotland, 2010).

Following birth, breastfeeding was identified as another effective measure of prevention. Breastfeeding was identified as providing lifelong health benefits, both to the mother and

child.³ Evidence from the WHO was presented which estimates that if all children were exclusively breastfed until the age of 6 months and then supplemented with food until the age of 2, the lives of 1.5m children would be saved globally (Hosking & Ita, 2010).

The UK performs poorly in this regard with less than 1% of mothers exclusively breastfeeding at 6 months compared to the EU average of 28% (Hosking & Ita, 2010). Reflecting this Sweden was identified as an example of good practice, where the infant mortality rate of 2.5 per 1000 births is less than half that in the UK (Hosking, Finance Committee Official Report, 2010). In addition to significantly more women choosing to breastfeed, Sweden was also identified by Hosking as offering women higher quality ante and post natal care (2010):

- Maternity care services are accessed by 99% of pregnant women, who typically have 11 individual contacts with those services, mostly midwives.
- 98% of all maternity health care clinics offer parenting education to first time parents.
- 99% of families make use of child health care services and on average have 20 individual contacts with those services, primarily nurses.
- 8-10% of midwives time is spent receiving training in parenting education which includes regular professional training from psychologists.

'There are no bad parents, only untrained parents... No one taught me to be a parent. When I had my three children, I did what most people do: I copied my own parents. That is fine for those who had good parenting, but those who did not tend to replicate the cycles of abuse and violence.'

(Hosking, Finance Committee Official Report, 2010)

The availability and uptake up of high quality parenting education in Sweden was identified as another measure of effective prevention. Evidence shows that 95% of brain development occurs between birth and age 3 and during this time parents have the responsibility to ensure that many important skills are developed such as language, listening and behaviour (Hosking, Finance Committee Official Report, 2010).

11.5% of children in the UK start school without the behavioural skills they need and are subsequently more likely to drop out of the education system (NESTA, 2010). Moreover school un-readiness was identified as having negative effects on the other children in classroom. This was highlighted in a study into the performance of children in Switzerland, Slovenia and England (Hosking, 2010). This study identified variations in the academic ability of children when starting school as the principle reason why children in Slovenia and Switzerland had caught up and outperformed English children even after starting school at a later date.

³ Breastfeeding has been shown to prevent illnesses such as eczema, middle-ear infections, intestinal disorders, respiratory tract infections (such as pneumonia, asthma, diabetes) and sudden infant death syndrome in the infant, for example (Reuters, 2010). It has also been shown to lower the chance of the mother developing such illnesses as heart disease and stroke (BBC News, 2009).

Language is one of the most crucial elements of a child's development at this age and language delay has been identified as a highly sensitive marker of child neglect. (Over 80% of preschool children in care have language delay) (Wilson, 2010). Moreover, 'reading to a child regularly at 3 years old was estimated to be twice as important as family income for a child's development at age 5' (Oxfam, 2010).⁴ Once again research suggests that the UK performs poorly compared to Europe. At 30 months 10% of children in Scotland were identified as having some degree of language delay, double the rate compared to Sweden (Wilson, 2010).

These figures above are indicative of poor parenting.⁵ Research also highlights as a consequence of poor parenting children are more likely to develop early violent behaviour, leading to their involvement in crime in the future. For example, it is estimated, that, untreated, 40% of children with early behavioural difficulties go on to develop conduct disorder (Hutchings, 2007). Subsequently, 40% of 8 year olds with conduct disorder are repeatedly convicted of crimes such as theft vandalism and assault in adolescence (NES Psychology, 2010).

Research indicates that this behaviour starts at a very early age. Oxfam states that, 'nurses could identify an at-risk group who, by the age of 21 had committed more crime, were more likely to abuse their partners and have antisocial personalities.' This claim was also made by WAVE; 'at 3 years old the 17% most violent children (who may account for 50% or more of future crime) are showing levels of aggression 10 times higher than the most peaceable 3%' (Hosking & Ita, 2010).⁶ Many of these children belong to the most vulnerable group, which amounts to less than 1% of the general population. According to WAVE this 1% provides one third of the prison population and have two and a half times the national average of teenage pregnancies (Hosking & Ita, 2010). This cycle is then repeated: daughters of teenage parents are three times more likely to become teenage mothers, and 65% of sons with a convicted father go on to offend themselves (Nottingham City Council, 2010).

4.2 Return on Investment

'There is robust evidence that expenditure in the preschool years gives the highest rate of return on investment in human capital'

(Wilson, 2010)

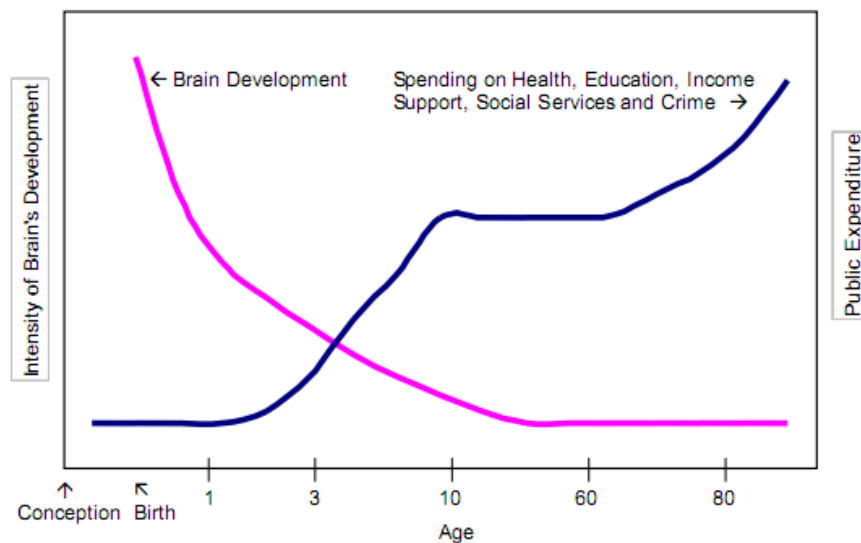
Dr Zeedyk and other advocates for early year's intervention contend that the preventative spending which targets the early years is so successful because it has the potential to influence brain development (Zeedyk, 2010). Graph 1 below submitted to the SFC by Prof.

⁴ The Every Child a Chance Trust calculates that the cost of poor literacy is estimated to be between £5000-£64,000 for an individual over a lifetime (Save the Children, 2010).

⁵ Men in Sweden are eligible for 40 weeks' full-time paid paternity leave, compared with just two days for their British counterparts (BBC News, 2010).

⁶ It is estimated nationally that if the number of offences by children and young people was reduced by 1%, it would generate £45 million in savings to households and individuals per year (Nottingham City Council, 2010).

Edward Melhuish shows the current disparity between brain development and public spending (Melhuish P. E., 2010):



A body of evidence presented to the SFC attests that early years intervention is a cost-effective approach. Prof. James Heckman calculates that for example that for every £1 spent on early years education, you must spend £7 to have the same impact in adolescence (Violence Reducation Unit, 2010). A further advantage of early intervention is that the benefits continue to be realised into the future. The table below details examples:

Table 2: Potential Monetary Savings (or costs) from Affected Child Outcomes

Effect on Child Outcome	Monetary Benefits (or costs) to Govt
Reduced child maltreatment	Lower costs to child welfare system
Reduced child accidents and injuries	Lower costs for emergency room visits and other public health care costs
Reduced incidence of teen childbearing	Lower costs for public health care system and social welfare programmes
Reduced grade repetition	Fewer years spent in primary and secondary education
Reduced use of special education	Lower costs for special education
Increased high school graduation rate	(More years spent in primary and secondary education, i.e., drop-out rate reduced)
Increased college attendance rate	(More years spent in post-secondary education)
Increased labour force participation and earnings in adulthood	Increased tax revenue
Reduced use of welfare and other means-tested programmes	Reduced administrative costs for social welfare programmes; reduced welfare programme transfer payments
Reduced crime and contact with criminal justice system	Lower costs for the criminal justice system
Reduced incidence of smoking and substance abuse	Lower costs for public health care system and from premature death
Improved pregnancy outcomes	Lower medical costs from fewer low birth weight babies

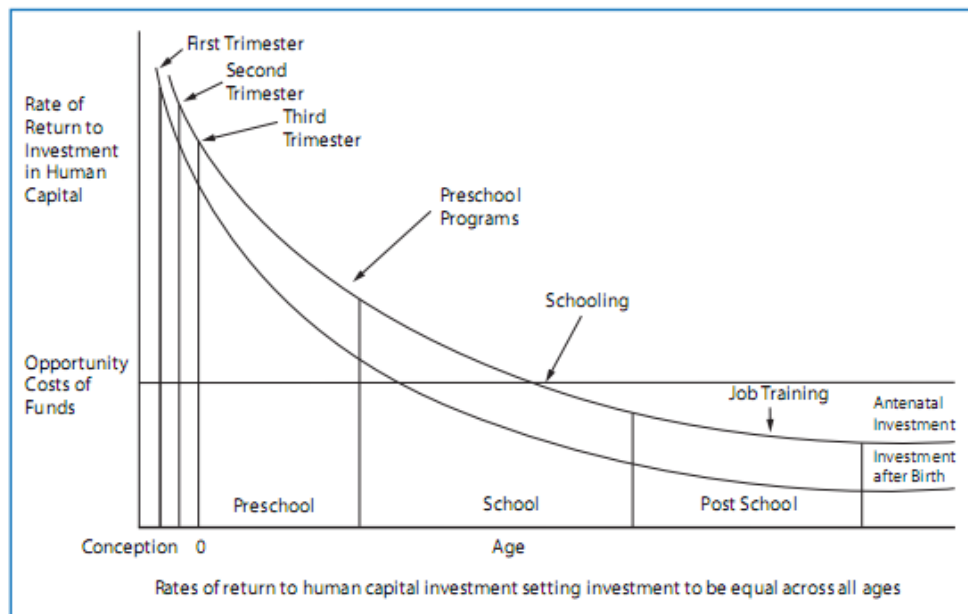
Source: Rand Corporation 2008

The following examples outline the return on investment by various organisations:

- Oxfam calculate that £1 invested in intensive tuition programmes for those with the lowest level of ability in literacy would save £12 - £19 in the future (Oxfam, 2010).
- A US version of sure start demonstrated that for every \$1 spent, \$7 was saved from the cost of criminal justice and welfare systems later in life (Oxfam, 2010).
- £1 invested in action for Children's targeted services produced between £7.60 and £9.20 in benefits to society (Action for Children, 2009).

Additionally, A study conducted by PriceWaterhouseCoopers in 2004 calculated that, 'expanding free Early excellence centres services for 2,3 and 4-year-olds in Britain and improving the quality of ECE services by upgrading the skills of the workforce, would result in a 1-2% increase in GDP through higher rates of maternal employment and increased lifetime employment. Mitchell et al. comment that this estimate may have been substantially higher had PriceWaterhouseCoopers also considered social benefits, such as the impact on income distribution, child poverty, remedial education, improved health or lower crime rates' (Oxfam, 2010).

Graph 2 below illustrates the return on investment from intervention:



Source: Doyle et al, 2007, *Early childhood Intervention: rationale, timing and efficacy*, UCD Discussion Series

Although there was a near universal acceptance regarding the importance of early years intervention, evidence by the YMCA, Scotland contested the consensus on the completion of brain development between the ages of 0-3. The YMCA claims that there is recognition that there is an important process of refinement in brain development called synaptic pruning which continues throughout the teenage years. They contend that because of this process, if young people continue to live in an environment of suspicion, repression and futility, the circuits that are confirmed during the teenage years will be those that are most appropriate to

survival in such an environment. This evidence, they claim, demonstrates the importance that youth in their adolescent years are not disregarded (YMCA, 2010).

See **Annex 2** for relevant case studies.

5. Health Care

Savings in the cost of future healthcare offer some of the clearest examples of the costs associated with reactive public spending. As technology advances it is becoming increasingly possible to identify the root causes of many illnesses and treatment which is administered at the earliest possible opportunity is more than often the most cost-effective approach.

In 2009, Dr Alan Maryon-Davis, president of the UK faculty of Public Health made an appeal to policy makers to think twice about cutting preventative programmes during times of financial austerity; it would be 'sheer short-sighted folly' to cut back on programmes which help prevent chronic conditions and which currently only constitute 'a paltry' 1% of the NHS budget (Maryon-Davis, 2009). Maryon-Davis maintains that what is required is to move from what he described as an unsustainable 'national illness service' to more of a 'national health service.'

This call seems particularly applicable to Northern Ireland as the IPH predicts that chronic diseases such as hypertension, coronary heart disease, stroke and diabetes are likely to dramatically increase in the future (Institute of Public Health, 2010). Moreover, NHS studies show that people living in more deprived areas suffer from worse health when compared to others (NHS Wales, 2004).

Diabetes provides a striking example which illustrates cost of preventative inaction. New cases have increased by 74% between 1997 and 2003 (Connor, 2009) and the between 2000 and 2030 the WHO expects this number to rise further from 1,765,000 to 2,668,000 (2010).⁷

The rise in the prevalence of the disease has been mirrored by an unsustainable surge in the demand for treatment and the subsequent costs borne by the NHS. Although doctors contend that the increase in diabetes is the result of poor diet and lack of exercise across society, only a fraction of the cost of treatment is actually spent on preventative measures.⁸ Aside from the impact on well being and quality of life, the long-term economic costs to society are evident: diabetes treatment now consumes 10% of the total NHS budget, an increase of 5 percentage points in 6 years (BBC News, 2004; Diabetes.co.uk, 2010).

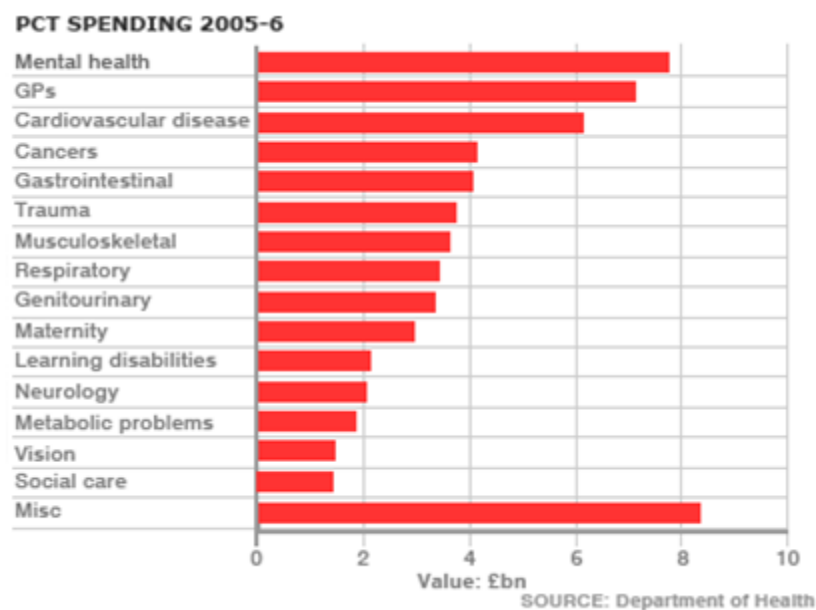
⁷ Britain has the fastest growing rate of obesity in the developed world and evidence from Diabetes UK show that obese people are up to 80 times more likely to develop Type 2 diabetes than those who maintain a healthy weight. (Diabetes UK, 2005)

⁸ Transform Scotland & Friends of the Earth calculate that less than 39% of adults aged 16 or over in Scotland are meeting the national physical activity recommendation: walking, cycling and public transport to 50% (the same as The Netherlands) could cut obesity rates in half (Transform Scotland, 2010; Friends of the Earth, 2010).

Smoking remains a costly and intractable problem for society. Analysis from the US estimates that for every smoker who dies from a smoking attributable condition, another 20 experience smoking-attributable illnesses such as chronic bronchitis and emphysema (ASH, 2010). Smoking is estimated to cost the NHS over £5bn per year and total societal costs of smoking amount to 13.74 billion annually, nearly 4bn more than the government recovers in tobacco duties (Press Association, 2009).⁹

65% of smokers start when they are under 18 and 40% start when they are under 16 (ASH, 2010). 26.7% of the UK population are classified as daily smokers. This is a relatively high figure compared to some other European countries such as Portugal (16.5%) and Sweden (17.5%), for example (Eurostat 2009). ASH contends that preventing young people starting to smoke remains the best and most cost-effective form of treatment.

According to evidence, the cost of treating mental ill health is another example of where the government has the potential to make long-run savings. To provide an example of the scale of the costs related to mental ill health, Graph 3 below breaks down the spending by primary care trusts in England and Wales in 2006:



Across the UK and in 2010, the annual cost to the NHS of mental ill health has increased to £28bn per year with the wider cost to society is estimated at £105bn per year (Yew, 2010). This includes the cost to the economy from sickness absence and unemployment plus the financial burden the illness places on families. Indeed, 1 in 4 people will suffer from mental ill health at some point in their life and mental illness accounts for more disability adjusted life years lost per annum than any other health condition (NHS, 2010; McBride, 2010).

In 2006 a BBC Newsline investigation revealed that in Northern Ireland 1000 young people were on a waiting list to see a psychiatrist and some had been waiting for over 2 years. 'This

⁹ Nevertheless, a lower life expectancy also presents a saving to the state in terms of lower pension contributions.

was despite the fact that the province has one of the Europe's worst suicide rates and the UK's highest levels of mental illness' (Mills, 2006). Yet, across the UK, only £2m is spent on prevention and alleviation such as promoting self esteem and coping skills (Yew, 2010). Experts such as Bob Grove from the Centre for Mental Health and Andrew McCullough from the Mental Health Foundation contend these figures are indicative of a failure to tackle the root causes of mental health problems and provide cost-effective treatment of individuals at an early stage (Yew, 2010).

See **Annex 3** for relevant case studies.

6. Alcohol and Drugs

The costs of alcohol and drugs are well documented, with negative spill over effects aside from direct healthcare costs. This includes, for example, the costs borne by social services from associated child protection issues and the cost to the justice department in tackling drug and alcohol related crime.

In the UK the average person consumes 11 litres of pure alcohol per year. When contrasted to Sweden (where the same figure is 7 litres per year) it is no surprise that in an OECD report on drunkenness in 24 countries the UK was found to be the worst (Hosking, 2010). In terms of healthcare alone, the Royal College of Physicians and NHS confederation have described the growth in the cost of alcohol related treatment to £2.7bn per year as, 'unsustainable' (BBC News, 2010).

Between 1998 and 2008 Addaction state that the use of illegal drugs also cost the UK £10bn in healthcare costs as well as £100bn as a result of related crime (Addaction, 2008). Moreover, each person who remains dependent on illegal drugs costs the country £44,000 a year. In 2009, £7.5m was spent in Northern Ireland treating drug and alcohol addiction (Belfast Telegraph, 2010).

The Serenity Cafe (a project which facilitates people recovering from addiction in Scotland) describes addiction as a, 'long-term chronic neurobiological disorder that has genetic, phycosal and environmental dimensions' (2010). They contend that whilst it can be treated relapses can be frequent.

Some studies suggest as few as 3% of people sustain abstinence after drug treatment programmes, while American studies suggest that average relapse rates after drug and alcohol treatment are around 60%. The Serenity Cafe suggests that greater expenditure on prevention could reduce the costs which are a consequence of addiction. On better treatment mechanisms the organisation advocate allocating a small percentage of spending towards what is termed recovery capital. This they contend would help to increase the numbers who achieve long-term sustained abstinence.

See **Annex 4** for relevant case studies.

7. Policing and Justice

'We need a good and effective criminal justice system that will stabilise the patient, but the cure must happen far earlier than our involvement does'

Detective Chief Superintendent John Carnochan, Scottish Violence Reduction Unit (2010)

'Holland has a similar economy to ours, and it gives support for the very early years—during pregnancy and the first months and two or three years of life. It is really interesting to see that Holland, which has possibly the best early years or child performance in the whole of Europe, is now selling its prison space to Belgium, which has one of the worst such performances'

Alan Sinclair, Centre for Confidence and Well-being (2010)

It costs in excess of £80,000 per year to keep an individual locked in jail Northern Ireland and each new prison place in the UK is estimated to cost £119,000 (NI Assembly, 2009; Marsh, 2008). Resolving a murder in the UK costs an estimated £1m and estimates suggest 2.5bn is spent treating the outcomes of violence each year in England and Wales (Violence Reduction Unit, 2010).

In Northern Ireland, crime costs the economy £2.9bn per year in addition to wider immeasurable costs (Belfast Telegraph, 2010). £90m per year is spent on legal aid with more than 60% of this money spent on criminal cases (Kearney, 2009). However, after all this expense, 'three quarters of offenders return to crime' (BBC News, 2010). Although the number of prisoners in Northern Ireland fell during the 1990's, since then it has been rising and now stands at 1,528 (Prison Service, 2010).

The social characteristics of prisoners are outlined in Table 3 below:

	SOCIAL CHARACTERISTICS OF PRISONERS			
	GENERAL POPULATION		PRISONERS	
	%			
Ran away from home as a child	11 (all)		47 (male)	50 (female)
Excluded from school	2 (all)		49 (male)	33 (female)
No qualifications	15 (all)		52 (male)	71 (female)
Suffer from two or more mental disorders	5 (male)	2 (female)	72 (male)	70 (female)
Psychotic disorder	0.5 (male)	0.6 (female)	7 (male)	14 (female)
Drug use in the previous year	13 (male)	8 (female)	66 (male)	55 (female)
Hazardous drinking	38 (male)	15 (female)	63 (male)	39 (female)

SOURCE: Prison Reform Trust/Social Exclusion Unit

It is clear that the characteristics in this table not only define the prison population but are the very characteristics which harness the development of criminals. Commentators such as Detective Chief Superintendent John Carnochan of the Violence Reduction Unit maintain that a cost-effective long-term approach involves tackling the development of these characteristics at an early stage. Indeed Carnochan put these words into practice. Following a reduction in murders in Strathclyde he requested that the money the unit saved from reducing the murder rate be allocated into early years services (Zeedyk, 2010).

Effective rehabilitation of offenders is another possible preventative spending approach. Whilst the balance between justice and rehabilitation must be struck, spending on the effective rehabilitation of criminals can help to ensure that:

- Others do not fall victim to crime from released offenders; and
- More money is not spent by the tax payer jailing repeat offenders.¹⁰

A study by the Centre for Criminal Justice Economics in the University of York points out that for every \$1 spent on prison, only \$0.24 to \$0.36 is saved on avoiding offending. This contrasts to spending on probation, which delivers \$1.70 in benefits for every dollar spent (McDougall, Cohen, Swaray, & Perry, 2010).

See **Annex 5** for relevant case studies.

8. Domestic Violence

A study by Sylvia Walby estimated that domestic abuse cost England and Wales £23bn in 2004 (Zero Tolerance, 2010). This included direct costs of £6bn and emotional costs of £17bn. One in 4 women will experience domestic abuse from a partner in her lifetime and the cost to the public purse of violence against women in all its forms is estimated to be almost double this figure at £40bn (Zero Tolerance, 2010). The UK Corporate Alliance against Domestic Violence estimates that domestic violence currently costs UK business over £1.9 billion a year (Zero Tolerance, 2010).

In Northern Ireland cases of domestic abuse are reported on average every 21 minutes (Belfast Telegraph, 2010). 11,000 children are directly affected by domestic abuse and the cost to the local economy is estimated at £180m per year (Devaney, 2009). Almost 2000 of the recorded 9,903 domestic abuse crimes in 2009 -10 were perpetrated against men (PSNI, 2010).

Two examples of cost-effective preventative interventions were provided by Zero Tolerance and demonstrate the possibility of significant savings (2010):

- The 1994 Violence Against Women Act in the USA has resulted in an estimated net benefit of \$16.4 billion, including \$14.8 billion in averted victim's costs.

¹⁰ For some prisoners leaving prison can be a difficult reality check: 1 in 3 will not have somewhere to live and 6 out of 10 employers will automatically exclude individuals with a criminal record (BBC News, 2006).

- Providing shelters for victims of domestic violence resulted in a benefit to cost ratio between 6.8 and 18.4. .

See **Annex 6** for relevant case studies.

9. The Elderly and Disabled

With disability and ageing there are many associated costs. Some of these costs along with possible potential savings were identified by The Scottish Federation of Housing Association (2010) for the SFC.

The organisation identified that the average cost to the state of a fractured hip is £28,665, which is 4.7 times the average cost of a major housing adaptation (£6,000) and 100 times the cost of fitting hand and grab rails to prevent falls. For a seriously disabled wheelchair user, the cost of residential care is £700-£800 a week or £400,000 in 10 years, but providing adaptations and equipment that enables someone to move out of a residential placement produces direct savings, normally within the first year. Home modifications can also help to prevent or defer entry into residential care for older people. One year's delay will save £26,000 per person, less the cost of the adaptation (average £6,000). An hour's home care per day costs £5,000 a year. Moreover, adaptations that remove or reduce the need for daily visits pay for themselves in a time-span ranging from a few months to three years and then produce annual savings. In the cases that the organisation reviewed, annual savings varied from £1,200 to £29,000 a year.

One of the biggest challenges facing Western society is the cost associated with dementia. 1 in 3 people aged over 65 in the UK will die with dementia and this year the global cost of the disease is expected to exceed 1% of world GDP. Experts warn that dementia is, 'the greatest health and social crisis of the century' (Roberts, 2010).

Scientists have yet to find a cure for dementia, a good diet, regular exercise, mental activity and social engagement have all been shown to slow the onset of the disease (Hill & Reiss, 2008). For these reasons in Australia the government has initiated a campaign entitled 'Mind Your Mind' in order to raise awareness and encourage Australians to reduce their risk of developing the disease (Alzheimer's Australia, 2010).

Dementia costs the UK £23bn per year (more than cancer and heart disease combined), yet it receives a fraction of the funding. 'Researchers calculated that for every pound spent on dementia studies, £12 was spent on investigating cancer and £3 on heart disease' (Sturcke, 2010).

See **Annex 7** for relevant case studies.

10. Application

Throughout the inquiry by the SFC there was one particular recurring message, applicable to the entire concept of preventative spending:

- *'The whole mindset seems to be that the local authority is there to offer services and processes, not to produce better outcomes'*
(Hosking, Finance Committee Official Report, 2010)
- *'I passionately believe that we have to refocus on people rather than process'*
(Decon, 2010)
- *'If funding were truly related to "outcomes" rather than "outputs", as it should, then thinking outside the box would encourage budget holders within different public bodies to share their resources more freely'*
(Independent Living in Scotland Project, 2010)
- *'Building services around people not agencies'*
(Birmingham Total Place Pilot, 2010)
- *'Culture eats strategy for breakfast. Until we get the culture right, no strategy will work'*
(Watson, 2010)

10.1 Measurement

Throughout the inquiry a number of organisations highlighted the inadequacy of current measurement tools. Dr. Rosemary Geddes from the Scottish Collaboration for Public Health Research and Policy outlined how local authorities in Scotland can choose a range of measurement indicators from a menu of 52 and can make up some of their own if they like. This proved problematic because such a system makes it difficult to measure what is going on in the entire country. (Geddes, 2010)

Action For Children stated that current policy tools, 'restrict investment decisions being made beyond their narrow financial return, making it difficult to identify needs and gaps in services to make our investments count.' The call for more effective indicators was echoed by Jenny Kemp from Zero Tolerance and WAVE; 'Inadequate measurement and policy evaluation tools restrict investment decisions being considered beyond their financial return to the state and mean public services are led more by cost efficiencies, not by public benefit' (Hosking & Ita, 2010).

The following measurement recommendations were made:

- Action for Children and WAVE advocate replacing conventional cost benefit analysis with the Social Return on Investment (SROI) indicator. SROI attempts to measure the

wider public benefit of investment, which is often not counted using conventional measurements. This can be thought of as the benefits to society that are generated by a service and can include economic savings to the public purse but also some less tangible benefits that are important for how people experience their lives (Hosking & Ita, 2010; Action for Children, 2009).¹¹

- WAVE recommends that new measures of societal progress be established. These would act as a mechanism to better value children and young people as 'public goods', through the introduction of National Accounts of Child Well-being. (Hosking & Ita, 2010)
- Barnados and Save the Children contend that measurements based on longitudinal research are the most effective when used to measure outcomes (Barnados Scotland, 2010; Save the Children, 2010).

10.2 Economic Modelling

Action for Children identified failings in the economic model used by society. The 'narrow definition' of societal progress 'fails to account for the multidimensional nature of child well-being or the value of 'good childhoods'. Moreover, they contend that an economic model showing how a transition towards a more preventative system could be achieved in practice is lacking (Action for Children, 2009).

10.3 Bureaucracy and Information Sharing

The constraint that bureaucracy places on effective service delivery was another theme throughout the inquiry. For example, Ann Houston from Children 1st stated that the level of regulation has served to divorce community members from the protection of children (2010).

Susan Deacon, an appointee of the Scottish government reported that, '£450m a year was spent by Scotland's charities and third sector organisations purely on reporting back to their funders; somewhere in the region of 5 % of their funding went on producing multiple reports and multiple evaluations' (Deacon, 2010).

Information sharing in Nottingham's early intervention project was described as the 'single biggest issue' (Curryer, 2010). Curryer further highlighted the problem of 'Professional

¹¹ SROI measures the value of the benefits relative to the costs of achieving those benefits:

$$[\text{SROI}] = \frac{[\text{Net present value of benefits}]}{[\text{Net present value of investment}]}$$

The Committee discussed the use of SROI during its inquiry into public procurement and recommended that DFP put in place a suitable model for systematically measuring, evaluating and incorporating wider social value considerations within economic appraisals and business cases in order to inform the public procurement process (CFP, 2010).

snobbery,' where one domain believes their particular way of operating is superior. Nevertheless, Curryer also believes that through having all agencies strongly endorse Nottingham's early intervention project, 'the number of bureaucratic issues reduced considerably' (2010).

10.4 Staff

Poor quality staffing was identified by WAVE as a factor which detracts from the effectiveness of service delivery for children. Analysis by WAVE shows that the following characteristics for staff in care homes accounted for nearly 30% of the variation in reported rates of pregnancies in under-19-year-olds:

- Higher rates of in-service training
- Offered more fact-seeking responses to hypothetical dilemmas involving young people
- Intended to carry on in their current post for longer.

John Carnochan from the Violence Reduction Unit identified that though nursery school staff have the most optimal potential to make the greatest impact on a child's development, yet those in the profession were, 'some of the lowest paid and least valued' (Carnochan, 2010).

WAVE suggests that one of the ways the UK could improve the delivery of early years services is if staff had better qualifications. Table 4 below outlines the qualifications of staff from a study comparing England, Denmark and Germany (Hosking & Ita, 2010).

Qualification	England (%)	Germany (%)	Denmark (%)
Low	8	0	0
Medium	36	45	3
High	20	51	94
Other childcare qualification	0	2	0
None/no relevant qualification	36	2	3
Total	100	100	100

WAVE found that 'it took almost double the staff-to-children ratio to deliver poor results in England than those who delivered medium results in Germany and very good results in Denmark.'

WAVE also advocates an expansion in the study of social pedagogy, which is a popular and established degree course on the continent. The organisation contends that a greater understanding of this holistic approach would be particularly suitable for meeting children's needs in residential care. This echoes a 2009 House of Commons committee report which

stated *We urge the Government to think broadly and creatively about the possible future applications of the social pedagogy approach in the care system....*' (Hosking & Ita, 2010).

10.5 Finance

'Money gravitates to problem management and not problem solving'

(Watson, 2010)

There is not a consensus on how programmes of preventative spending ought to be immediately financed. Nor is there a consensus that in every area an increase in spending is required.¹²

The ideas for financing include:

- A proportional shift in the emphasis of government spending towards preventative programmes, with the savings increasingly reinvested in preventative schemes.
- Greater use of 'pooled' cross departmental budgets set aside to tackle issues (utilised both in Birmingham and Nottingham).
- Frontloading social investment with the issue of social impact bonds.

Action for Children have carried out significant analysis work on the latter idea. In their 'Backing the Future' report the organisation calculates that UK-wide investment of £191 in targeted interventions coupled with a £428bn investment in universal childcare and parental leave would provide savings of £486 billion over 20 years.

'Using bonds to finance investment is not a new idea. Previous work on the Social Impact Bond has been carried out to provide a new way of investing money in social outcomes. The idea is that investments can be made by commercial investors, foundations or governments into programmes of work that seek to improve the lives of a group of people (e.g., young people at risk of unemployment or offending). Not only would this bond provide a safe investment opportunity, it would also provide an opportunity for financial investors and regular citizens (e.g., through pension funds) to invest in the future of their society. This provides people with the opportunity to realise both a financial and a social return on their long-term investments' (Action for Children, 2009). A case study located at **Annex 7** details the introduction of social impact bonds in Peterborough.

¹² Action for Children (2009) found evidence that in some cases there is a weak relationship between the level a country spends and social outcomes. They contest that spending alone cannot explain the UK's poor performance. Although spending on child benefit packages in 2004 in the UK matched that of Scandinavia, there was no associated improvement in outcomes. The organisation suggest that this discrepancy 'may rest not so much in what countries spend, but in the way they spend it... with the UK devoting a disproportionate amount of its investment to means-tested cash transfers and far less on the universal services.' Moreover, they highlight that unequal outcomes from the UK's economic growth may have undermined the effectiveness of redistributive investment 'given the evidence linking inequality with low levels of social mobility and child well-being' (Action for Children, 2009) From a political standpoint providing a universal service also has the benefit of harnessing universal ownership.

Save the Children (2010) assert that any financial investment ought to achieve cross party budgetary support. This is because measuring the impact of programmes requires a time frame in the medium-long-term time which is longer than the budget period. The organisation also advocate that the government, rather than the voluntary sector is best placed to deliver sustained investment on the scale that is required. This is because government services (such as schools) have the infrastructure already in place to reach large numbers of people.

Faced with a zero-sum decision some witnesses such as George Hosking from WAVE (2010) and Professor Edward Melhuish (2010) stated that money would be better spent if it were shifted from tertiary education into early years and primary education.

See **Annex 7** for relevant case studies which detail the application of preventative spending.

11. Conclusion

The need for preventative spending is the result of market failure. A body of evidence as presented in this paper suggests that our current allocation of resources into expensive short term treatments when there are cost-effective long-term solutions is dynamically inefficient. This evidence also outlines that preventative spending programmes when targeted at the early years age group are some of the most effective in delivering long-term savings. It follows that any benefits gained in the early years will have a multiplier effect throughout a child's life, which will offer wider external benefits to the rest of society. Successful early years intervention will also increase the equality of opportunity and improve intergenerational justice in society. In addition, other research, such as that on preventative health by ACE, demonstrates that in many other areas preventative spending can lead to real savings.

Across the board advocates contend that a change in mindset is required if preventative spending is to be truly effective. Cross-departmental partnership and joined up government is often necessary and investment (such as that in preventative health care) will require a recognition that government sometimes knows best.¹³ As it stands, faced with the current incentive structure, many individuals make poor choices that lead to a detrimental impact on their health and a cost for the public purse.

Arguably during a recessionary period preventative spending is even more important than during a period of growth. Unemployment caused by a recession will force people to make cuts to their standard of living which has a detrimental impact on their own well being and the prospects of the next generation. The lack of opportunities for young people may lead them to an increased number becoming involved with drugs or caught in a life of crime, for example. Reducing preventative spending which may be part of a framework of support for those most disenfranchised in society at the time when demand for support is at its highest may add to the downward recessionary spiral.

¹³ Commentators such as Wilford contend that joined-up government in NI is particularly difficult to establish due to the structure of the executive (2009).

It is important to recognise that prevention does not in every case require spending. For example, faced with budget constraints the following are example ideas of measures, which could still be considered:

Taxation and Minimum Pricing

This can be used to create incentives and raise revenue with the effect of promoting a healthy lifestyle. E.g. junk food tax or minimum alcohol price.¹⁴

Effectiveness and Output

Increasing the effectiveness and output of public services can effectively increase investment in the social economy, and as a consequence public services become more efficient. The following are examples:

- Decreasing bureaucracy, thereby increasing front-line services
- Targeted education initiatives in schools e.g. healthy-eating campaigns, fitness campaign, health and safety courses, parenting classes and/or drug awareness.
- Increased affordable-use government facilities for groups e.g. community centres and schools.
- Targeted initiatives by public servants e.g. community workers organising additional events for the elderly.
- Increasing training/education requirements for nursery and care workers.

Legislation and Regulation

Examples include:

- Increasing alcohol and cigarette sales regulation.
- Regulating salt levels in food.
- Increasing the quality of school dinners.
- Restricting portion sizes.
- Prohibiting the marketing of children's toys next to unhealthy fast food.

Working Hours

- Decreasing working hours of public servants rather than reducing staff levels. This would increase the time workers have available to care for children and elderly.
- Extending working hours of nursery and school teachers. This would have the effect of increasing their effectiveness and also decreasing childcare costs for parents.
- Increase maternity and/or paternity leave.¹⁵

¹⁴ There is debate on whether NI currently has the power to enact such taxes.

¹⁵ The UK government recently lobbied against a similar proposal in Europe (BBC News, 2010).

Culture

Promoting a public service culture of information sharing and multi-agency approaches to problems

Welfare and Benefits

Although requiring a relatively small amount of government investment, spending a little money in order to increase benefit take up could produce noticeable benefits, particularly during the recession. As payments are paid by central government, spending money to ensure that more people claim the benefits they are entitled to will amount to a fiscal injection into the local economy. This could be achieved, for example, by increasing awareness and the assistance available to people. An increase in benefit take up will in turn will have a multiplier effect and help local businesses. It will also ensure those least well off in society have access to entitlements which will therefore decrease demand on public services.¹⁶

12. Recommendations

In light of the findings from this study, it is recommended that preventative spending is featured in the Committee's scrutiny of the Draft Budget 2011-15.

¹⁶ £16bn in income-related benefits and tax credits goes unclaimed in the UK in a year. (BBC News, 2010)

Annex 1: UNICEF Child Wellbeing Ranking

		Dimension 1	Dimension 2	Dimension 3	Dimension 4	Dimension 5	Dimension 6
Dimensions of child well-being	Average ranking position (for all 6 dimensions)	Material well-being	Health and safety	Educational well-being	Family and peer relationships	Behaviours and risks	Subjective well-being
Netherlands	4.2	10	2	6	3	3	1
Sweden	5.0	1	1	5	15	1	7
Denmark	7.2	4	4	8	9	6	12
Finland	7.5	3	3	4	17	7	11
Spain	8.0	12	6	15	8	5	2
Switzerland	8.3	5	9	14	4	12	6
Norway	8.7	2	8	11	10	13	8
Italy	10.0	14	5	20	1	10	10
Ireland	10.2	19	19	7	7	4	5
Belgium	10.7	7	16	1	5	19	16
Germany	11.2	13	11	10	13	11	9
Canada	11.8	6	13	2	18	17	15
Greece	11.8	15	18	16	11	8	3
Poland	12.3	21	15	3	14	2	19
Czech Republic	12.5	11	10	9	19	9	17
France	13.0	9	7	18	12	14	18
Portugal	13.7	16	14	21	2	15	14
Austria	13.8	8	20	19	16	16	4
Hungary	14.5	20	17	13	6	18	13
United States	18.0	17	21	12	20	20	–
United Kingdom	18.2	18	12	17	21	21	20

OECD countries with insufficient data to be included in the overview: Australia, Iceland, Japan, Luxembourg, Mexico, New Zealand, the Slovak Republic, South Korea, Turkey.

Annex 2: Children and Early Years

There are many examples of successful of early year's preventative spending programmes. The WAVE trust has outlined 47 such studies from around the world which can be found in the annex of their 2010 Early Intervention Report at:

http://www.wavetrust.org/WAVE_Reports/WAVE_Trust_International_Early_Intervention_Review_2010.pdf

The Netherlands (Burnside, 2010)

The most recent UNICEF study of child wellbeing in OECD countries ranks the Netherlands as the highest scoring for child wellbeing, with the UK at the bottom of the table (UNICEF 2007 – see Annex 1). This case study looks at some of the early year services in place in the Netherlands.

There are several key messages about how parent support is conceptualised; viewed in policy terms; and implemented in practical programmes.

Firstly, there is an overall national policy framework which supports families through universal provision of health, education and welfare services (including benefits) as well as support activities. The policy agenda is the responsibility of the Ministry for Children which introduced a strategic plan for children and families. This includes extending Children and Family Centres to every neighbourhood (to be set up by the 530 local authorities but bringing public and voluntary sectors together).

The 12 regional authorities are responsible for implementing and funding specialist Youth Care Agencies as a single point of access for all children and carers with pressing problems or enquiries. Parent support programmes are based on positive prevention and problem intervention. The preventive approach is used more with parents of younger children and the problem focus for parents of older children and young people, although there is an increasing emphasis on improving more general support for all families. Many programmes are adapted from UK and US programmes but there are distinctive approaches such as supporting ethnic minority groups or encouraging readiness for school.

Kraamzorg (Maternity Nursing Care)

'Kraamzorg' is one of the key support programmes for new mothers in the Netherlands – for both first time and subsequent births. It is significant that this system of support has been in place for decades and is taken for granted by Dutch families as a high quality service which everyone would use. Essentially, the system is designed to support families in the period immediately after birth – for up to ten days – or longer where it is needed. A major difference from the support offered by midwives in the UK is that there is a cadre of trained professionals who are NOT midwives but have their own status as maternity carers who look after mothers and new babies – AND other members of the family including fathers and other children. Their main focus is on settling in the baby and mother to family life and they help with breast feeding, bathing and routines for the baby, looking after the mother's

personal care needs as well as offering social-emotional support and advice; and in cases where it is needed, preparing meals for the rest of the family and generally keeping the household running. Families can choose whether they wish to have an all-day service or a part-time service with two visits per day – a long visit of several hours in the morning and a pop-in visit later in the day. Any strictly medical problems are referred to a health professional such as a GP or midwife. It is partly because of this kind of support that the Netherlands maintains its reputation for safe home deliveries and also widespread use of the ‘polyclinic’ where women go into hospital only for the actual birth of the baby and return home in a matter of hours. The emphasis is on childbirth as a part of family life, not a medical condition, except in cases of specifically identified need. As a universal service, there is no stigma attached and mothers from all walks of life are very positive about the help they have received from this service.

The Consultatiebureau (Mother and Well-Baby Clinic)

Following on the immediate support after birth, there is a well established network of clinics where families can have their babies’ development monitored and receive advice on general issues about feeding, growing and stimulating as well as dealing with any problems which arise.

It says something of the atmosphere created by the professionals in the clinics and general attitudes in Dutch society that something like 97% of families make use of these services, and it is only in cases where there may be other problems that they are not taken up. The issue of accessibility does not arise.

The ‘Brede School’ (Community Schools)

The concept of the Brede School is rather different from that of the community school in the UK. It is based more on the idea of a one stop centre promoting the co-operation of all services dealing with children and families with schools as the lead agency. In this regard, Brede Schools are more akin to the aims of the development of integrated children’s services, as opposed to schools which provide out-of-school activities generally aimed at involving young people in leisure activities. The aim is that this co-operation should result in improved growth and development of children and young people. It has been part of the range of provision in different places since 1998 and is based mainly in primary schools.

Each programme is different as they are intended to be responsive to local needs, taking into account what parents and children themselves want. Other partners include the pre-schools, social welfare agencies, sports programmes, child public health and arts organisations, for example. Target groups for the broad range of activities on offer include children and young people, parents, neighbours, volunteers and other community groups with their own particular interests.

The USA

It may be easier to evaluate specific examples of preventative spending in the USA as many have been implemented in isolation in a society where preventative spending is the exception rather than the norm.

Harlem Children's Zone Project (Hosking & Ita, 2010)

This programme is focused on 97 blocks of the very disadvantaged community of central Harlem. The method is described as a Project Pipeline, delivered in stages to cover all children's ages from zero through to college. Initially, parents and potential parents attend Baby College where they learn parenting skills. The programme also includes a fitness and nutrition centre which offers free classes to children in karate, fitness and dance and where participants learn about health and nutrition and receive regular academic assistance. Statistics from the baby college show that:

- 371 individuals graduated in 2009.
- 86% of Baby College parents who read to their children less than 5 times a week at pre-test, improved their frequency.
- 92.5% of respondents said they had learned a lot from the classes.

Examples of the programme's achievements:

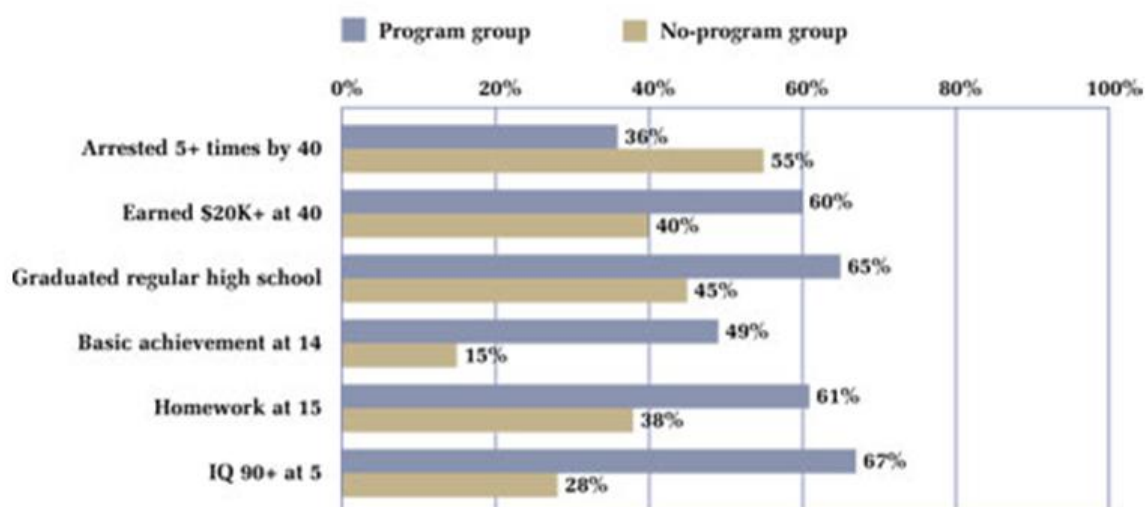
- Of the 161 four-year-olds entering the Harlem Gems in 2008-2009, 17% had a school readiness classification of 'delayed' or 'very delayed'. By the end of the year, there were no students classified as 'very delayed' and the percentage of 'advanced' rose from 33.5% to 65.2%, and those at 'very advanced,' rose from 2% to 8.1%.
- Since their creation in 2004 and 2005, Promise Academy I and II elementary schools did so well that leading Harvard economist Roland Fryer concluded that the students had actually closed the black-white achievement gap.
- In 2009, the third-graders from both schools were 100 percent on or above grade level in the state-wide maths programme.
- At PA1 the third-graders were 94 percent on or above grade level in English Language Arts, while the third-graders at PAII were at 86 percent.
- Part of the afterschool programme is a chess programme: one team finished second and two other teams came in third in the All Nationals for Girls in 2009 (in all the chess programme served 106 children throughout HCZ who went on to win 78 trophies).
- In 2008-2009, the programme's karate team brought home 86 trophies, including 36 first-place trophies.

High Scope/Perry Pre-School Project (Hosking & Ita, 2010; HighScope, 2010)

These programmes which commenced in the 1960's form part of most internationally renowned research studies on early year's provision. At ages 3 and 4, children from disadvantaged backgrounds were randomly divided into a program group of 123 children that received a quality preschool program based on HighScope's participatory learning approach and a comparison group who received no preschool program. This involved highly trained teachers delivering the programme five half-days per week, with one 90-minute weekly home visit.

By the age of 27 the long-term benefits of this programme were evident with improvements in: school dropout rates, rates of drug use, teenage pregnancy rates, employment, welfare dependency, and crime rates. In addition, a follow up of the individuals on the programme once they had reached 40 showed that they were less likely to have been arrested and those who graduated from high school earned more than those who had not participated in the programme – particularly men.

Major Findings: High/Scope Perry Preschool Study at 40



Triple P: South Carolina (Hosking & Ita, 2010)

The Positive Parenting Programme ('Triple P') is a behavioural family intervention based on social learning principles and is now used widely in a range of countries. It is a programme known for its standardised training and accreditation processes. Providers reported delivering the intervention to between 8,883 and 13,560 families over a 2-year period.

The programme is delivered to parents rather than to children, and is based on five core parenting principles:

1. Ensuring a safe and engaging environment for children.
2. Creating a positive learning environment for children.

3. Using assertive discipline.
4. Having realistic expectations, assumptions and beliefs about the causes of children's behaviour.
5. The importance of parental self-care.

Triple P works at 5 levels (from community-based to a narrow targeted focus). From a policy-making perspective, and particularly in relation to inequalities, division into 5 delivery levels of increasing intensity is key:

- **Level 1:** population level for all interested parents of children 0-16 years (promotion of parenting style through media, parenting tip sheets, TV programmes, newspaper columns, radio announcements etc).
- **Level 2:** brief early intervention strategy for parents of children with mild behavioural/developmental issues. Delivered through primary care services (1-2 consultation sessions, tip sheets, videotaped programmes).
- **Level 3:** more intensive early intervention strategy, targeting parents of children with mild to moderate behavioural/developmental difficulties (involves 4 sessions providing active skills training for parents).
- **Level 4:** group or self-directed parent training programme for parents of children with more severe behavioural/developmental difficulties (involves 8-10 sessions of intensive work with parents, offered as three separate delivery approaches).
- **Level 5:** enhanced programme, individually tailored. Aimed at whole families with persistent childhood behavioural problems and where other sources of parental family stress are present.

A number of studies have shown Triple P to be effective in improving children's behaviour and parent-child interaction and reducing parenting conflicts. Studies have also shown:

- Improvements in disruptive behaviour to be maintained for up to two years after intervention.
- The intervention to be effective within a range of settings (standard, self-directed, telephone-assisted, group and enhanced intervention) and with several different family types.

The UK

Two notable preventative spending projects have been initiated in England. Conclusive evidence is not yet available for either project.

Early Intervention City: Nottingham (Nottingham City Council, 2010; Curryer, 2010)

Nottingham has become the UK's first early intervention city in 2008 with 16 different early intervention projects currently undertaken. The aim of the scheme is, "to break the

intergenerational nature of underachievement and deprivation in Nottingham by identifying at the earliest possible opportunity those children, young people, adults and families who are likely to experience difficulty and to intervene and empower people to transform their lives and their future children's lives' (Nottingham City Council, 2010).

Through the plan drawn up in the council's local area agreement, Nottingham aims to:

- Reduce the number of children whose parents or siblings have offended, from offending.
- Decrease the number of repeat incidents of domestic violence.
- Reduce obesity/increase participation in activities and sport.
- Improve mental health.
- Provide the best start in life to children born to teenage parents.
- Accelerate the improvement in attainment of children in care and increase social aspiration.
- Accelerate the reduction of persistent absence across all City secondary schools.

Partnership and whole city ownership is a key principle underpinning the operation of the programme. It is supported by One Nottingham, the Local Strategic Partnership and its partners, and is championed by the City Council. The funding for the programme was allocated through a committee process whereby organisations together with a full business case bid for resources. At the end of the period, those projects with which there was no evidence of success were decommissioned. The University of Nottingham has also been incorporated in the project: Added value has been created by linking the programme with research undertaken by PhD students and the university has been involved in evaluating the success of the programmes.

During an evidence session with the SFC Ian Curryer outlined some of the findings to date:

- An immeasurable impact on childrens' access to language and readiness to enter more formal education later in life.
- Savings in the cost of domestic violence: it costs £5500 to relocate a family but with early intervention costs £3000 for improved security measures.
- Total cost of targeted early years package is £1400 per child against total cost of reading recovery teacher is 1660 per child – net saving £230.
- Stronger families violence project – saves £650 per year.
- Information sharing between departments has been a problem.

Total Place: Birmingham (Birmingham Total Place Pilot, 2010)

Total place is a new Whitehall strategy designed to look at a whole area and preventative spending approach to delivering public services. The aim of the scheme is to transform the system from a delivery led to service-led thinking and delivery based on outcomes. Still in

its infancy, the programme is currently being piloted across 13 areas of England including Manchester and Birmingham. The following principles have been identified as key components of Total Place in Birmingham:

- A Budget for Birmingham
- Collective responsibility
- Applying evidence on cost-effectiveness
- Building services around people not agencies
- Supporting people and communities to do more for themselves
- Delivering major cross-sector efficiencies
- Freeing localities to deliver

9 pilot evidence based projects are current being implemented in Birmingham under the Brighter Futures banner which targets early years and young people. Investment of £42m over 15 years is estimated to yield a benefit of £101m to the council and £400m to the city. According to US research, through the focus on prevention Birmingham could save £400m over 15 years (Smith, Mark, 2009).

Total Place programmes are supported by enabling activities that focus on developing the workforce and improving working practices. Birmingham aim to transform the wider system in which children's services operate and to move from a service-led thinking to planning and delivery based on outcomes. The approach also utilises a sophisticated cost/benefit model that outlines cashable and non-cashable benefits generated.

One scheme amongst the many adopted aims to tackle the high prevalence of conduct disorder in Birmingham (which has a rate approaching 20% compared to the national average of 11%). Evidence suggests that at the age of 28 the cost of those who developed conduct disorders in childhood is estimated to be 10 times higher than those with no behavioural problems.

The success of correcting a conduct disorder at an early stage has been estimated at 75%, compared to a much lower success rate of 25% for adolescents. Based on this evidence, Birmingham have calculated that the cost of implementing the programme will generate cost savings of 2:1 (£2 Saved for every £1 spend) for council children's services, with a potential 4:1 saving across all agencies over 15 years.

Annex 3: Health Care

There are many obvious examples of successful preventative spending campaigns which are already incorporated into the healthcare system. This includes for example hand washing and immunizations. Nevertheless, studies demonstrate that there are still many more potential cost-effective preventative spending opportunities.

Case Study: Assessing Cost-Effectiveness in Prevention Study: Australia (Vos et. al, 2010)

The University of Queensland and Deakin University in Australia recently published on a report cited as being the largest and most rigorous evaluation of preventative strategies undertaken. The study assessed the cost-effectiveness of 150 different measures of preventative healthcare spending. The table below summarises the results:

Table 0.2 Cost-effectiveness results for preventive and treatment interventions by topic area: total population

Topic area	Total	Dominant	Very cost-effective (\$0–10,000/DALY)	Cost-effective (\$10,000–50,000/DALY)	Not cost-effective (>\$50,000/DALY)	Dominated	Insufficient evidence
Preventive interventions							
Alcohol	9	4	3	2	–	–	–
Tobacco*	8	2	3	–	–	–	–
Physical activity	6	2	2	2	–	–	–
Nutrition	26	3	1	3	19	–	–
Body mass	9	1	1	2	4	–	1
Blood pressure/cholesterol	13	2	2	7	–	2	–
Osteoporosis	3	1	–	1	1	–	–
Illicit drugs	2	–	–	1	1	–	–
Cancer	9	–	–	5	3	1	–
Diabetes	7	–	–	5	1	1	–
Kidney disease	2	1	–	1	–	–	–
Mental disorders	11	2	5	2	1	–	1
Cardiovascular disease	1	–	–	–	–	–	1
Other prevention	11	4	1	–	5	–	1
Infectious disease	6	1	2	–	3	–	–
Total	123	23	20	31	38	4	4
Treatment interventions							
Alcohol	2	–	–	–	2	–	–
Illicit drugs	1	–	1	–	–	–	–
Cancer	1	–	–	1	–	–	–
Kidney disease	2	–	–	1	1	–	–
Mental disorders	10	1	4	5	–	–	–
Cardiovascular disease	5	–	1	2	2	–	–
Other treatment	6	1	2	1	–	–	2
Total	27	2	8	10	5	–	2

DALY, disability-adjusted life year

*Analyses for three tobacco control interventions have not yet been completed.

N.B. One DALY was estimated to equal \$50,000 (Aus)

Results of study were classified into 5 categories:

- Dominant: interventions that both improve health and achieve net cost savings;
- Very cost-effective: interventions that improve health at a cost of less than \$10,000 per DALY prevented;

- Cost-effective: interventions that improve health at a cost of between \$10,000 and \$50,000 per DALY prevented;
- Not cost-effective: interventions that improve health at a cost of more than \$50,000 per DALY prevented; and
- Dominated: interventions for which more cost-effective alternatives are available.

The report made a number of cost-effective policy recommendations based on their conclusions, including:

- Actions:
 - a 30% increase in tax on tobacco;
 - a tax increase on alcohol;
 - a taxation of 10% on non-core unhealthy foods [Interestingly an approach which has recently been implemented in Denmark (BBC Panorama, 2010)];
 - mandatory limits on salt in bread, margarine and cereals;
 - a shift to screening for absolute cardiovascular risk and targeted treatments
 - pursuit of the introduction of a low-cost generic polypill (not containing aspirin) for cardiovascular prevention; and
 - expansion of access to lap band surgery for the severely obese.
- Reallocation of funding towards best-practice prevention activities with strong cost-effectiveness credentials and away from prevention activities with poor cost-effectiveness credentials, including:
 - inefficient cardiovascular preventive treatment;
 - prostate-specific antigen (PSA) testing for prostate cancer;
 - aspirin for primary prevention of cardiovascular disease;
 - most approaches promoting fruit and vegetable intake and weight loss programs; and
 - school-based illicit drug interventions.
- Expanded funding of a larger package of health promotion including:
 - screening for pre-diabetes, chronic kidney disease, low bone mineral density in elderly women;
 - subsidising nicotine replacement therapies; and
 - a range of interventions promoting physical activity (pedometers, mass media, GP prescription or referrals).
- To introduce a number of cost-effective preventive interventions for mental disorders (screening for minor depression in adults, childhood depression and anxiety; problem-solving after a suicide attempt; and early psychosis intervention)

accompanied by rigorous evaluation to expand the evidence base that is still thin and short-term; and

- To invest in evaluation research to contribute to the evidence base of prevention, particularly for policy initiatives and community-based interventions that have the potential to have large health impacts but that we had to model based on suggestive rather than solid evidence.

Case Study: Finland (Burnside, 2010)

In the 1960s, Finland had high rates of coronary heart disease and amongst the lowest life expectancy in the OECD. The North Karelia Project, launched in 1972, was a preventative intervention designed to reduce the risk factors in the population of North Karelia and was formulated and implemented to carry out a comprehensive intervention via local community organisations and individual action.

GPs, schools, libraries, local media and supermarkets were all involved in the scheme whose core message related to changing lifestyle choices, such as not smoking, doing more exercise, eating more fruit and vegetables, etc. Families affected by premature death and heart disease were convinced that by changing lifestyles, their health and wellbeing could be improved.

The implementation of the project resulted in significant savings in health expenditure, and coronary heart disease mortality rates in the North Karelia male population reduced by 82% in 2002 compared with the pre-programme years. In the 1980s the scheme was replicated throughout Finland which resulted in coronary heart disease mortality among men falling by approximately 75%.

Annex 4: Drugs and Alcohol

Case Study: The Matter Hospital, Belfast (RCN, 2010)

Practice in the Matter hospital was identified by the Royal College of Nursing in Scotland as being a good example of effective preventative spending. The Matter employed one alcohol liaison nurse to take referrals from all clinical departments in the hospital, carrying out screening, assessment and treatment, as well as making referrals to GPs and the community addiction team. It was calculated that the preventative work carried out by the nurse saved an estimated £237,115 through reduced bed days in one year.

Case Study: Birmingham Total Place (HubCAPP, 2009; HM Treasury, 2010)

Birmingham identified drug and alcohol misuse as a key area of interest and, as such, the Repeat Attendees at A&E and Acute Units multi-agency project has been undertaken as part of an attempt to make effective savings on the demand for government services.

It was identified that in the city alcohol-specific admissions were mostly occasioned by complex medical conditions requiring in-patient treatment. Also, alcohol-dependency and misuse is associated with a range of social harms. As such, hazardous and harmful drinkers were more likely to become unemployed and experience homelessness or other forms of social exclusion and economic disadvantage as a direct, or indirect, result of their alcohol consumption. Furthermore, it was identified that there was a perceived gap in service delivery, and that opportunities to conduct integrated assessment, care-planning and information sharing, needed further development.

The project is acting as a 'Test and Learn' model designed to explore opportunities to integrate protocols, and find ways to optimise treatment and support in a multi-disciplinary context. As yet there is no data on specific outcomes; however a key milestone in assessing the impact made by the Total Place trials will come early in December 2010 with the publication of the Comprehensive Area Assessment.

Annex 5: Policing and Justice

Case Study: Justice Reinvestment Programme, Texas (NESTA, 2010)

Between 1985-2005, the prison population in Texas grew 300% costing the state over \$2bn in constructing new beds. In 2007 when forecasts predicted prison numbers to grow by another 14,000, Texas rejected plans to spend \$0.5bn on a new prison in favour of Justice reinvestment; a programme designed to tackle the root causes of crime. This redirected money from prisons towards addressing the re-settlement needs of prisoners whilst also improving the conditions of the most affected communities in hope of preventing initial reoffending.

Following this approach, Texas redirected half of the money ear-marked for the new prison on expanding residential and out-patient treatment centres for mental health, substance misuse and post-prison support. The cost of treatment was significantly less than the cost of the prison and impacts were felt in the short-term. Justice Reinvestment reduced parole revocations by 25% and the prison population increase was 90% less than predicted. Texas estimated savings of \$210.5 million in 2008/9 and additional savings from averted prison construction of \$233 million.

Case Study: Restorative Justice, UK (NESTA, 2010; Moran, 2009)

In a number of communities across the UK 'Restorative Justice' (RJ) is being used to tackle recidivism. In a controlled, safe environment the offender meets the victim of their crime and is encouraged to assume responsibility for their actions. For the victims of crime 41% say they want to meet the offender and 51% think restorative justice would work better than prison to reduce re-offending.

The findings:

- RJ has reduced re-offending by an average of 27%, by up to 33% when delivered in prison and by 55% when delivered in the community.
- 75-95% of victims who take part in RJ are glad they did so.
- RJ has been shown to reduce post traumatic stress symptoms of victims and help them return to work following serious crimes.
- Recent Pilots saved the criminal justice system over £7million: for every £1 spent on delivering RJ conferences, £9 was saved from the costs of re-offending.

Case Study: Justice Policies, Scotland (Burnside, 2010)

Burnside outlined the following schemes which are aimed at preventing crime:

- CashBack for Communities is a programme of diversionary activities for young people to increase the opportunities they have to develop their interests and skills

in an enjoyable, fulfilling and supported way, using funds recovered from criminals.

- The Violence Reduction Unit (VRU) was established in 2005 by Strathclyde Police and the Unit's remit was extended in 2006 by the then Scottish Executive to create a national centre of expertise on tackling violent crime. The Scottish Government currently sponsors the VRU through its Drugs and Community Safety budget.
- The Community Initiative to Reduce Violence (CIRV) was launched in the east end of Glasgow in 2008 and seeks to intensively engage with over 700 identified gang members and provide them with a range of support services and diversion projects in an effort to change their behaviour and lives. The Violence Reduction Unit is leading this project and the Scottish Government has already committed £1.6 million to the project with a further £3.4 million funding provided in services and in kind by partners.
- The No Knives, Better Lives campaign is a Scottish Government-led initiative which challenges attitudes to knife carrying amongst young people in Scotland. The Government has committed £500,000 to the campaign which was launched in Inverclyde in 2009. Recent press reports suggest that knife carrying in the area has fallen by 23% following the introduction of the initiative.
- The Violence Reduction Unit also supports Medics Against Violence, a charity set up by three Scottish surgeons which encourages medical professionals to be involved in violence prevention work. It currently operates a schools programme which sees volunteer health care professionals deliver anti-violence lessons in schools. Lessons are targeted at S2 pupils, and are designed to engage with pupils before they get involved in serious knife crime, but use some graphic images not suitable for younger pupils.
- Knife Licensing Scheme. From 1 June 2010, all dealers in knives are required to hold a knife dealers licence under the Civic Government (Scotland) Act 1982. The intention behind the scheme is that it will make it harder for knives to fall into the wrong hands.

Annex 6: Social Services and Domestic Violence

Case Study: Sanctuary Project, Nottingham (Curryer, 2010; Shippam, 2009)

Nottinghamshire police reported that 25% of violent crime in Nottingham was domestic violence. The Sanctuary project was established as a person centred initiative, designed to enable survivors of domestic abuse to remain in their homes and feel safe. The initiative was designed as an early intervention measure to prevent further violence, homelessness to ensure security and stability for the entire household. Once the perpetrator had been evicted, The project would enable those survivors who wanted to stay at home and organise extra security and support, which would be managed by a Sanctuary Co-ordinator. This would be a higher level of support than is currently offered by the Home Watch Security Scheme as it would include improved physical safety and structured specialist domestic violence Floating Support.

The Findings:

- 100% service users reported as being either satisfied or very satisfied with Sanctuary service.
- No survivors have moved house due to domestic violence after installation.
- The costs of relocating a family was estimated at £5,500 while the costs of added security measures were calculated at £3000: savings were therefore estimated to be around £2500 per intervention.
- The scheme meets the needs of most families who do not want to move.

Sanctuary Cost/Benefit Analysis

Agency	Cost of DV where no Sanctuary	Cost of Sanctuary	Saving to agency	Potential saving to agency from 67 Sanctuary installations
Nottingham City Council Statutory homeless service	£5,300.99	£2,885.66	£2,415.33	£3161,827.11
Nottingham City Homes	£3,286.46	£0	£3286.46	£220,192.82
On average, it costs Nottingham City Homes a total of £3,286.46 for each household being approved for a management transfer as a result of domestic violence				
Nottingham City Council Social services	£688.75	£0	£668.75	£44,806.25
Police and Health services	£6,902	£0	£6,902	£462,464.00 (£899,877.00)
This amount does not include the cost of police involvement for a serious wounding case, or the cost of prosecution. This course of action would cost a further £6529				
Fire services	£220	£0	£220	£14,740
Survivor	£600.86	£0	£600.86	-
The service provided through Sanctuary is free to all applicants regardless of tenure or employment status				

Annex 7: The Elderly and Disabled

Case Study: Older Peoples Advice Project (Falkirk Council, 2010; Scottish Federation of Housing Associations , 2010)

The Older Persons' Advice Project aims to increase the levels of benefit take up amongst older people (age 60+) resident in the Falkirk Community Planning Partnership areas. The aims and the objectives of the Project are to:

- Increase the rate of uptake of benefits by over 60s resident in the Priority Areas through the provision of support at all stages of making a claim.
- Effectively 'drain the pool' of existing under claimants within the population, reaching over 60s who have previously not been in contact with advice or income maximisation services.
- Link over 60s with the full range of services within their community.
- 'Stop the flow' of older people into the pool of under claimants in the future.
- Address fuel poverty amongst older households through income maximisation.

The project is based around an intensive proactive effort to reach out to all over 60s in the priority areas, many of whom would otherwise be unlikely or reluctant to engage with income maximisation and advice services.

A recently completed Social Return on Investment study of the OPAP project revealed that for every pound invested in the project, it generated a social return on investment of £27.53; i.e. savings to the public purse across a range of different budgets including health, social care and welfare benefits. Some of the project's main impacts include:

- Increased household income for OPAP clients by an average of £1,150 a year per annum.
- Improved quality of life for clients, such as reduced social isolation and improved diet.
- Improvement in clients' long-term health conditions.
- Reduced fuel poverty among clients.
- Reduced demand on NHS services from clients.
- Increased income to the Scottish economy due to clients' increased income and their resulting spending.

Case Study: Partnerships for older people projects (Age Scotland, 2010)

The Partnership for Older People Projects (POPP) were funded by the Department of Health in order to develop services for older people, aimed at promoting their health, well-

being and independence and preventing or delaying their need for higher intensity or institutional care. Twenty-nine local authorities were involved as pilot sites, working with health and voluntary sector partners to develop services, with funding of £60m. Two-thirds of the services in the POPPs areas were primarily directed at reducing social isolation and exclusion or promoting healthy living among older people. The rest focused on avoiding hospital admission or facilitating early discharge from acute or institutional care.

Amongst the results were:

- Overnight hospital stays were reduced by 47% and use of Accident and Emergency departments by 29%. This reduction resulted in considerable savings, to the extent that for every extra £1 spent on the POPP services, there has been approximately a £1.20 additional benefit in savings on emergency bed days.
- Reductions were also seen in physiotherapy/occupational therapy and clinic or outpatient appointments with a total cost reduction of £2,166 per person.
- Visits to A&E departments fell by 60%, hospital overnight stays were reduced by 48%, phone calls to GPs fell by 28%, visits to practice nurses reduced by 25% and GP appointments reduced by 10%.
- The evaluation found that a wide range of projects resulted in improved quality of life for participants and considerable savings, as well as better local working relationships.

Annex 8: The Application of Preventative Spending

Case Study: Social Impact Bonds, Peterborough (Age Scotland, 2010)

This bond pilot is designed to fund third sector organisations working to reduce re-offending rates of short sentence male prisoners leaving Peterborough Prison. Using the bond, the Ministry of Justice has agreed to make payments to investors in the event that re-offending is reduced below an agreed threshold.

The bond, which is funded by trusts and foundations, commercial investors and high net worth individuals, has raised £5m and will pay out a return depending on the reduction in re-offending rates amongst 3,000 young men on the scheme.

If this initiative reduces re-offending by 7.5% or more, investors will receive from Government a share of the long-term savings. If the bond delivers a drop in re-offending beyond the threshold, investors will receive an increasing return the greater the success at achieving the social outcome, up to a maximum of 13%. If the re-offending rate does not fall by at least 7.5% then investor will receive no return.

Case Study: Early Intervention City, Nottingham (Curryer, 2010)

Nottingham City Council required that organisations put together a full business case and bid for funding from a pooled budget for Early Intervention projects. Curryer details how this has shown benefits as the council has been decommissioning projects which did not demonstrated sufficient impact. 'In doing that, we are going back to the business case and using the evidence, evaluation, outputs and outcomes that were detailed in it to decommission work that has not shown success' (Curryer, 2010).

The council identified a range of characteristics of the projects which are working well:

- Intensive and focused on behaviour change.
- Evidence-based and delivered with strict fidelity. This tends to be supported by an effective supervision model with a clear trajectory of early indicators to monitor, for example, the Family-Nurse Partnership.
- Targeted at specific groups, at critical times.
- Where there is consideration of the whole context and causes, rather than symptoms.
- Caseloads that allow time to build a good relationship between the worker and family / child those when a strengths-based approach is used. This links to decreased direct demand on social care, or a more effective relationship.
- Where there is strong leadership and management by the project lead.
- Where deliverers are clear on specific early signs of risky behaviour, engage the child / family in an assessment and have access to a clear referral process. For

example, referrals into drug treatment have increased by 327% from DrugAware schools. Referrals have also been at an earlier stage, treatment time has been shortened and success rates have been higher.

- Where there are good communications in place so that a service is visible.

Characteristics of the projects which are not working well:

- Evaluation is poor and does not reflect the positive impact reported by workers.
- The intervention is not for a consistent reason, for example mentoring, and is therefore difficult to evaluate.
- When a project is implemented on top of an unstable system or where there has been turbulence and high vacancy levels in the delivery team.
- Where referral numbers have not been high enough. This suggests that the service is either not visible or not needed.

Case Study: Surestart Evaluation (Burnside, 2010)

'Sure Start Local Programmes (SSLPs) were set up as community based, multi-agency projects in some of the most disadvantaged areas in England. The aim of the intervention was to improve the well-being, attainments and life chances of all children aged 0-4 years old in the area and to support their families. An evaluation (Anning et al 2007) of the Surestart scheme in England found that there were varying degrees of effectiveness of schemes and it was not just about having an early intervention project, but about having the right project. The key findings of the evaluation were as follows:

- Proficient and effective SSLPs took a holistic approach to implementing the Sure Start vision.
- They built on the strengths of inherited provision and were creative in improving and setting up services.
- What worked at strategic level was: systemic, sustainable structures in governance and management/leadership;
- a welcoming, informal but professional ethos;
- empowering parents, children and practitioners.

What worked at operational level was:

- auditing and responding to community priorities in universal services;
- early identification and targeting of children and parents to benefit from specialist services;
- recruiting, training and deploying providers with appropriate qualifications and personal attributes; and
- managing the complexities of multi-agency teamwork.

However, overall “reach” figures were disappointing. Those who used services often used several, and reported satisfaction with them. But services offered at traditional times and in conventional formats did not reach many fathers, black and minority ethnic families and working parents. Providers found barriers to attracting “hard to reach” families difficult to overcome.

Few programmes demonstrated proficiency in (1) systematically monitoring, analysing and responding to patterns of service use or (2) rigour in measuring the impact of treatments. Multi-agency teamwork, including effective ways of sharing information, and clarity about the cost-effectiveness of deploying specialist and generalist workers strategically, proved difficult to manage and operate.’

Case Study: Total Place, Birmingham (2010)

Birmingham City Council identified the following objectives for Total Place:

- Developing a ‘Budget for Birmingham’
- Collective responsibility for Birmingham.
- Applying evidence on cost-effectiveness.
- Building services around people not agencies.
- Supporting people and communities to do more for themselves.
- Delivering major cross-sector efficiencies.
- Freeing localities to deliver.

Following the implementation of Total Place Birmingham also identified a number of obstacles and recommendations:

- Because many preventative measures take a number of years to generate overall savings, there was a need to move public investment from a short (one year) timeframe to a longer period.
- Conflicting performance management and regulatory expectations on different partners/sectors needed to be removed. Their existence forced partners to focus energies in different directions.
- Accountable officer responsibilities needed to be delegated to local areas in spending in local areas to ensure that ministers were not held accountable.
- National rules often got in the way of sensible outcomes: more local flexibility was necessary.
- The burden of national reporting needed to be reduced.
- More systematic evaluation of ‘what works’ and the conditions necessary to make it work were needed coupled with reliable cost benefit analysis.

- As data protection legislation was interpreted differently by different organisations, the public sector could not pool their knowledge and connect their actions.

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