

<b>Title:</b> <b>"No Health Without Mental Health" A cross-government mental health outcomes strategy for people of all ages</b>  <b>Lead department or agency:</b> Department of Health <b>Other departments or agencies:</b>	<b>Impact Assessment (IA)</b>
	<b>IA No:</b> 7008
	<b>Date:</b> 2 February 2011
	<b>Stage:</b> Final
	<b>Source of intervention:</b> Domestic
	<b>Type of measure:</b> Other

### Summary: Intervention and Options

**What is the problem under consideration? Why is government intervention necessary?**

Mental health problems are common (affecting 1 in 6 adults and 1 in 10 children). They start early (50% by 14 years) often persist, occur as a result of many determinants, and have adverse consequences including seriously premature mortality and social/economic costs. Access to services is unequal and rates of illness are unevenly distributed, with higher rates in excluded groups. To deal with these problems effectively and efficiently requires a co-ordinated central cross-government focus, supporting local action, to achieve clearer parity of esteem between mental and physical health services. A wide range of effective evidence-based early interventions applied across sectors, and beyond health and social care, can build individual and population resilience prevent problems starting, and further improve outcomes.

**What are the policy objectives and the intended effects?** This strategy aims to improve the health of the population as a whole by mainstreaming mental health - promoting good mental health as intrinsic to everyone's health; improving access to the full range of high quality services for all those with mental health problems; and helping to ensure parity of experience with people with physical ill-health. It has a life-course approach and sets out shared objectives, which have been agreed by partner organisations to improve mental health outcomes for individual and the population as a whole. They are: - a) More people will have good mental health, b) More people with MH problems will recover, c) More people with MH problems will have good physical health d) More people will have a positive experience of care and support, e) Fewer people suffering avoidable harm, and f) Fewer people with MH problems will suffer stigma and discrimination.

**What policy options have been considered?**

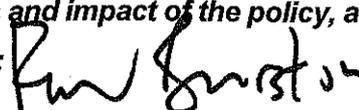
**Option 1:** Do nothing

**Option 2:** Develop a cross-government outcomes strategy for mental health that defines six objectives agreed with partner organisations which are supported by, and contribute to, the overarching indicators in each of the three National Outcome Frameworks for Social Care, Public Health and the NHS. It sets out the Government's approach and provides examples of interventions that will help achieve these objectives. It also outlines a number of priorities which include ensuring mental health remains high on the agenda by asking the Cabinet Committee on Public Health to oversee national implementation. The preferred option is required to establish the key importance of mental health and wellbeing at a time of significant change in the NHS and the wider public sector. Disseminating good practice will help support decision-making, while still recognising the autonomy of local organisations to decide what works in their area.

<b>Will the policy be reviewed? Yes</b>	<b>If applicable, set review date</b>
<b>What is the basis for this review? PIR</b>	<b>01/2016</b>
<b>Are there arrangements in place that will allow a systematic collection of monitoring information for future policy review?</b>	<b>YES See page 42</b>

**Ministerial Sign-off** For final proposal stage Impact Assessments:

*I have read the Impact Assessment and I am satisfied that (a) it represents a fair and reasonable view of the expected costs, benefits and impact of the policy, and (b) the benefits justify the costs.*

**Signed by the responsible Minister:**  **Date:** 31 Jan 2011

## Summary: Analysis and Evidence Policy Option 2

Description: Develop a cross-government mental health outcomes strategy

Price Base Year 2010/11	PV Base Year 2011/12	Time Period Years 26	Net Benefit (Present Value (PV)) (£m)		
			Low: Optional	High: Optional	Best Estimate: 6,835
<b>COSTS (£m)</b>	<b>Total Transition (Constant Price)</b>	<b>Years</b>	<b>Average Annual (excl. Transition) (Constant)</b>	<b>Total Cost (Present Value)</b>	
Low	Optional	1	Optional	Optional	
High	Optional		Optional	Optional	
Best Estimate	9		98	2,556	
<p><b>Description and scale of key monetised costs by 'main affected groups'</b></p> <p>The total costs figure shown, comprises Exchequer costs of around £1.1bn, with an opportunity cost of around £2.6bn. It is important to note that costs are indicative as if these are the costs if all the interventions presented in this IA were implemented across England. In fact, implementation will be decided at a local level.</p>					
<p><b>Other key non-monetised costs by 'main affected groups'</b></p> <p>Reduction in stigma and discrimination and interventions such as befriending may lead to an increase in the demand for mental health services because people then feel more able to ask for help when they need it. Costs associated with reducing stigma and discrimination are not included in this IA.</p>					
<b>BENEFITS (£m)</b>	<b>Total Transition (Constant Price)</b>	<b>Years</b>	<b>Average Annual (excl. Transition) (Constant)</b>	<b>Total Benefit (Present Value)</b>	
Low	Optional	0	Optional	Optional	
High	Optional		Optional	Optional	
Best Estimate	0		361	9,391	
<p><b>Description and scale of key monetised benefits by 'main affected groups'</b></p> <p>The total benefits figure shown comprises benefits to society of around £4.9bn, mainly in the form of productivity gains, but also valuation of life etc depending on the intervention of around £1.9bn, with an opportunity cost of around £4.5bn, savings to the Exchequer.</p>					
<p><b>Other key non-monetised benefits by 'main affected groups'</b></p> <p>Benefits from reduced stigma and discrimination have not been quantified, but it is likely to lead to increased quality of life and improved employment opportunities. Collaborative care for diabetes does not include cost savings and QALY gains from averted diabetes complications. Finally, benefits associated with debt services do not include debt repayments to creditors and health and wellbeing gains to individuals.</p>					
<b>Key assumptions/sensitivities/risks</b>			<b>Discount rate</b>	3.5%	
<p>Analysis presented in this IA is based on work undertaken by analysts from the London School of Economics on behalf of the Department. The analysis has not been formally peer reviewed. In the main part of the evidence base, we present all the assumptions used for each intervention.</p>					

<b>Direct impact on business (Equivalent Annual) £m):</b>			<b>In scope of</b>	<b>Measure classified</b>
<b>Costs:</b>	<b>Benefits:</b>	<b>Net:</b>	<b>No</b>	<b>OUT</b>

What is the geographic coverage of the policy/option?	England				
From what date will the policy be implemented?	2/2/2011				
Which organisation(s) will enforce the policy?	N/A				
What is the annual change in enforcement cost (£m)?	N/A				
Does enforcement comply with Hampton principles?	Yes				
Does implementation go beyond minimum EU requirements?	No				
What is the CO <sub>2</sub> equivalent change in greenhouse gas emissions? (Million tonnes CO <sub>2</sub> equivalent)	<b>Traded:</b> N/A		<b>Non-traded:</b>		
Does the proposal have an impact on competition?	No				
What proportion (%) of Total PV costs/benefits is directly attributable to primary legislation, if applicable?	<b>Costs:</b> N/A		<b>Benefits:</b>		
Annual cost (£m) per organisation (excl. Transition) (Constant Price)	<b>Micro</b>	<b>&lt; 20</b>	<b>Small</b>	<b>Medium</b>	<b>Large</b>
Are any of these organisations exempt?	No	No	No	No	No

### Specific Impact Tests: Checklist

Set out in the table below where information on any SITs undertaken as part of the analysis of the policy options can be found in the evidence base. For guidance on how to complete each test, double-click on the link for the guidance provided by the relevant department.

Please note this checklist is not intended to list each and every statutory consideration that departments should take into account when deciding which policy option to follow. It is the responsibility of departments to make sure that their duties are complied with.

Does your policy option/proposal have an impact on...?	Impact	Page ref within IA
<b>Statutory equality duties<sup>1</sup></b> <a href="#">Statutory Equality Duties Impact Test guidance</a>	Yes	30
<b>Economic impacts</b>		
Competition <a href="#">Competition Assessment Impact Test guidance</a>	No	
Small firms <a href="#">Small Firms Impact Test guidance</a>	No	
<b>Environmental impacts</b>		
Greenhouse gas assessment	No	
Wider environmental issues <a href="#">Wider Environmental Issues Impact Test guidance</a>	No	
<b>Social impacts</b>		
Health and well-being <a href="#">Health and Well-being Impact Test guidance</a>	Yes	30
Human rights <a href="#">Human Rights Impact Test guidance</a>	No	
Justice system <a href="#">Justice Impact Test guidance</a>	No	
Rural proofing <a href="#">Rural Proofing Impact Test guidance</a>	Yes	31
<b>Sustainable development</b> <a href="#">Sustainable Development Impact Test guidance</a>	No	

<sup>1</sup> Race, disability and gender Impact assessments are statutory requirements for relevant policies. Equality statutory requirements will be expanded 2011, once the Equality Bill comes into force. Statutory equality duties part of the Equality Bill apply to GB only. The Toolkit provides advice on statutory equality duties for public authorities with a remit in Northern Ireland.

## Evidence Base (for summary sheets) – Notes

Use this space to set out the relevant references, evidence, analysis and detailed narrative from which you have generated your policy options or proposal.

### References

Include the links to relevant legislation and publications, such as public impact assessment of earlier stages (e.g. Consultation, Final, Enactment).

No	Legislation or publication
1	<i>NHS White Paper: Equity and Excellence: Liberating the NHS</i> DH
2	<i>Healthy lives, healthy people: our strategy for public health in England</i> DH
3	“ <i>New Horizons: Towards a shared vision for mental health</i> ” Consultation Department of Health
4	<i>Vision for Adult Social Care: Capable Communities and Active Citizens</i>

### Evidence Base

Ensure that the information in this section provides clear evidence of the information provided in the summary pages of this form (recommended maximum of 30 pages). Complete the **Annual profile of monetised costs and benefits** (transition and recurring) below over the life of the preferred policy (use the spreadsheet attached if the period is longer than 10 years).

The spreadsheet also contains an emission changes table that you will need to fill in if your measure has an impact on greenhouse gas emissions.

#### Annual profile of monetised costs and benefits\* - (£m) constant prices

	Y <sub>0</sub>	Y <sub>1</sub>	Y <sub>2</sub>	Y <sub>3</sub>	Y <sub>4</sub>	Y <sub>5</sub>	Y <sub>6</sub>	Y <sub>7</sub>	Y <sub>8</sub>	Y <sub>9</sub>
<b>Total Transition costs</b>										
<b>Total Annual recurring</b>										
<b>Total annual costs</b>										
<b>Total Transition benefits</b>										
<b>Total Annual recurring benefits</b>										
<b>Total annual benefits</b>										
<b>Business transition</b>										
<b>Business annual recurring costs</b>										
<b>Business annual costs</b>										
<b>Business transition benefits</b>										
<b>Business annual recurring benefits</b>										
<b>Business total annual benefits</b>										



Microsoft Office  
Excel Worksheet

\* For non-monetised benefits please see summary pages and main evidence base section

# **Evidence Base (for summary sheets)**

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## **A. What is the problem under consideration? Summary of analytical narrative**

### ***Problem under consideration and its underlying causes***

1. Mental ill-health is common with a significant impact on individuals, their families and the whole population. 22.8% of burden of disease in UK is due to mental disorder and self reported injury compared to 15.9% for cancer and 16.2% for cardiovascular disease (WHO, 2008).
2. The cost of mental health problems to the economy is considerable, both in NHS costs and impact on wider productivity. In 2003, annual economic costs of mental illness in England were estimated to be £77.4 billion (SCMH, 2003) and this was recently updated to £105.2 billion (CMH, 2010). In 2008/9, the NHS spent 10.8% of its annual budget on mental health services which amounted to £10.4 billion (DH, 2010). Wider service costs which include NHS, social and informal care were £22.5 billion in 2007 (McCrone et al, 2008). These costs are projected to increase by 45% to £32.6 billion in 2026 (at 2007 prices)<sup>2</sup>. Rising costs reflect (i) a larger population, (ii) an older population, which means more people with dementia, and (iii) rising real wages, which push up the costs of NHS care and the employment costs of mental illness. Rates may also increase at times of economic difficulty. There are also increases in self-harm and suicide in some groups.
3. The causes of mental illness are extremely complex and physical, social, environmental and psychological causes all play their part. We know that problems are unevenly distributed across the population and that having mental ill-health further widens pre-existing inequalities. The impact of mental health problems has wide-ranging and long-lasting effects, including trans-generational impacts which occur more often in groups at higher risk.
4. Mental health is an intrinsic part of wellbeing and not just the absence of mental illness. There is growing evidence that improving wellbeing, including mental wellbeing, increases the resilience of individuals and groups and has a wide range of benefits across society including reduced mental illness and suicide, improved physical health and life expectancy, better educational achievement, reduced health risk behaviour such as smoking, alcohol and drug use, improved employment rates and productivity, reduced antisocial behaviour and criminality, and higher levels of social interaction and participation.
5. Mental ill-health is associated with significant physical morbidity and premature mortality. People with long-term physical conditions and unexplained medical symptoms are also at higher risk of mental health problems. Interventions to improve physical health can prevent associated mental health problems and promote recovery while interventions to improve mental health can prevent physical health problems and promote recovery with associated economic savings.
6. Access to and the quality of services for those with mental health problems is uneven. According to the Adult Psychiatric Morbidity Survey 2007 which surveyed people in private households aged 16 and over, around one quarter (23%) of the adults considered in this exercise screened positive for at least one of the psychiatric conditions being studied, a large proportion of whom did not receive any treatment. We have estimated that around 1.4 million people with high levels of need do not receive services of any kind. This may be because

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<sup>2</sup> This is mainly due to an increase of £9bn in service costs for people with dementia. Dementia has not been covered in this Strategy as it has already been covered in the strategy "Living well with dementia – A National Dementia Strategy" February 2009.

demand for services is low and/or because the supply of services is restricted. Interventions such as IAPT and Early Detection and Early Intervention for Psychosis will help to provide services to people who need them and help address this unmet need partially. As decisions lie at a local level, we are not able to quantify the costs and benefits associated with addressing unmet need fully.

7. Historically, there has been considerably more emphasis on mental health services rather than on the promotion of good mental health and wellbeing and prevention of mental ill health. The Strategy seeks to redress this imbalance, not least because evidence of effective public mental health approaches and interventions has been growing in recent years. This Impact Assessment sets out the evidence base for some of these interventions.
8. As highlighted, the NHS spent 10.8% of its annual budget on mental health services in 2008/9 which amounted to £10.4 billion (DH, 2010). Almost all current public spending on mental health is focused on the results of problems, on crisis intervention and expensive longer-term care and support. Not enough is spent on prevention and early intervention even though we know this works. Mental ill-health affects people early, (50% of cases occur by age 14) and without intervention it can damage educational attainment, employment and a range of future outcomes. Because of the broad range of impacts over a long period some, but not all, of the economic consequences can be calculated. There is growing evidence that outcomes can be improved, whilst still increasing efficiency and making the best use of resources.
9. Mental Health Services are often described as ‘Cinderella’ services. Stigma about mental health problems is pervasive and the Public Attitudes Survey [*Attitudes to Mental Illness 2010 research report DH*] indicates that the majority of people with mental health problems experience stigmatisation on a regular basis. This affects all parts of system, including the commissioning and provision of service, as well as access and take-up, and has been documented over a long period. For instance, there is evidence that mental health services are often run by staff who may be less experienced and may report having a low status in the wider concerns of their organisation.
10. This Strategy shows the interdependence between the cross-Government objectives and the outcomes set out in the three Outcomes Frameworks. We also provide evidence of cost-effective interventions that can be useful for local commissioners in a challenging financial context. Considering the current economic challenges, commissioners are particularly likely to look for evidence-based, cost-effective interventions to ensure best value for the resources they commit to mental health.

### ***Summarise and put into context the analytical narrative***

11. On 2nd September 2010 the Coalition government announced its intention to produce a cross-Government mental health strategy, with the aim of mainstreaming mental health and setting a framework for local delivery to enable better outcomes for individuals and society.
12. The Strategy identifies shared objectives out below:
  - More people will have better wellbeing and good mental health and fewer people will develop mental health problems – by starting well, developing well, working well, living well and aging well.
  - More people with mental health problems will have a good quality of life – greater ability to manage their own lives, stronger social relationships, a greater sense of purpose, improved chances in education and employment and a decent place to live
  - More people with mental health problems will have good physical health, fewer will die prematurely, and more people with physical ill health will have better mental health.

- More people will have a positive experience of care wherever it takes place. Care and support wherever it takes place, should offer access to timely, evidence-based interventions and approaches that give people the greatest choice and control over their own lives, in the least restrictive environment
- Improved services will result in fewer people suffering avoidable harm. People receiving care and support should have confidence that the services they use are of the highest quality and at least as safe as any other public service; and
- Public understanding of mental health problems will improve and fewer people will experience stigma and discrimination as a result of negative attitudes and behaviours to people with mental health problems

13. The Mental Health strategy has been developed alongside three key Outcomes Frameworks, which support the Coalition Government's commitment to achieving change by putting more power into people's hands closer to where they live. It complements "*A Vision for Adult Social Care: Capable Communities and Active Citizens*" in emphasising more personalised preventive services. It reflects the public health approach set out in "*Healthy Lives, Healthy People: Our Strategy for Public Health in England*" and it adopts the principles in the NHS White Paper "*Equity and Excellence: Liberating the NHS*" of a patient-centred, outcomes focused and more empowered NHS. The strategy directly links to the outcomes set out in, or being consulted on for, these documents.
14. It also sets the direction of travel for mental health for the next five years. It does not suggest that problems can be solved completely or overnight, but sets out the evidence on the factors that can improve the mental health and wellbeing of the population and improve outcomes for people with mental health problems by using cost effective interventions. While we know that some people do not receive any services, by continuing to identify issues and intervene early – particularly through early detection and early intervention in psychosis – and the further roll-out of talking therapies (IAPT), we will go some way to reducing these numbers.
15. However, it is important to stress that the Strategy does not mandate the means of achieving any particular objective, so the interventions and good practice examples are to support local implementation and are not compulsory. Many of them are already being implemented locally but local commissioners and providers will be able to accept, or leave, these suggestions based on their assessment of the needs of their local area.
16. This Impact Assessment excludes commitments and announcements that have already been made (e.g. the outcomes and interventions set out in the NHS, Public Health and Social Care outcomes frameworks). It also excludes examples that are already in place but merit a mention in the strategy. Therefore, the focus of this work is on those interventions that the Mental Health Strategy is presenting for the first time.
17. The cost benefit analysis presented in the following sections is based on work undertaken by the London School of Economics (LSE) on behalf of the Department of Health<sup>3</sup>. The analysis is presented at a national level and demonstrates that these interventions are not only highly cost-beneficial, but also expected to be cost saving to the public sector and can deliver important cost savings to the NHS. The evidence base draws on a number of sources, including academic mental health literature and national publications. The key references are set out below:

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<sup>3</sup> Martin Knapp, David McDaid and Michael Parsonage (editors) *Mental Health Promotion and Prevention: the Economic Case*. PSSRU, London School of Economics and Political Science.

McManus S, Meltzer H, Brugha T et al (2009) *Adult psychiatric morbidity in England, Results of a household survey* (Health and Social Information Centre, Social Care Statistics 2007) <http://www.ic.nhs.uk/pubs/psychiatricmorbidity07> This covers adults living in private households, age 16 and over. This excludes people in hospitals and care homes and indicates the existence of considerable unmet need.

*Count Me In 2009*

<http://www.cqc.org.uk/guidanceforprofessionals/mentalhealth/countmeincensus/countmeincensus2009.cfm> Published by the Care Quality Commission (CQC), this report monitors the ethnicity of inpatients and people subject to the Mental Health Act.

*Foresight Mental Capital and Well-being Project "Making the Most of Ourselves in the 21<sup>st</sup> century"* (Government Office for Science 2008) considers the factors that influence an individual's mental development and well-being across the life-course.

Friedli L *Mental Health Resilience and inequalities* (WHO.Europe 2009)

[www.euro.who.int/data/assets/pdf\\_file/0012/100821/E92227.pdf](http://www.euro.who.int/data/assets/pdf_file/0012/100821/E92227.pdf) explores the influence mental health has on outcomes for individuals and communities.

*Health Survey for England 2009* <http://www.ic.nhs.uk/statistics-and-data-collections/health-and-lifestyles-related-surveys/health-survey-for-england> one of a series of annual surveys designed to measure health and health related behaviours in adults and children in England.

*Marmot Review Fair Society Healthier Lives. Strategic Review of health inequalities in England post 2010* [www.marmot.review.org](http://www.marmot.review.org) which proposes the most effective evidence-based strategies for reducing health inequalities in England from 2010.

*Mental Health Minimum Dataset* brings together administrative and clinical information about people using specialist NHS mental health services for adults and older people <http://www.ic.nhs.uk/services/mental-health>

*Helping People through Mental Health Crisis: the role of crisis resolution and home treatment services* (National Audit Office 2007) [www.nao.org.uk/publications/07-08/helping-people-through-mental.asp](http://www.nao.org.uk/publications/07-08/helping-people-through-mental.asp).

Singleton N, Melzer H, Gatward R et al (1998) *Psychiatric Morbidity Among Prisoners in England and Wales* which provides baseline information about the prevalence of psychiatric problems among prisoners. <http://www.statistics.gov.uk/downloads/theme-health/Prisoners-pschMorb.pdf>

University of Manchester 2010 *National Confidential Inquiry into Suicide and Homicide by People with Mental Illness: Annual Report for England and Wales* covers deaths by suicide for the period January 1997 to December 2007, people convicted of homicide between January 1997 and December 2006, and sudden unexplained deaths in psychiatric in-patients for the period March 1999 to December 2007 <http://www.medicine.manchester.ac.uk/psychiatry/research/suicide/prevention/nci/>

WHO (2009) *Global health risks* provides a comprehensive framework to support a description of diseases and injuries and the risk factors that cause them. [http://www.who.int/healthinfo/global\\_burden\\_disease/global\\_health\\_risks/en/index.html](http://www.who.int/healthinfo/global_burden_disease/global_health_risks/en/index.html)

## **B: What are the policy objectives and intended effects?**

18. The mental health strategy aims to improve the health of the population by mainstreaming mental health. It takes a twin track approach of promoting good mental health as an intrinsic to everyone's well-being and health, and improving access to the full range of high quality services for all those with mental health problems. It aims to ensure parity of esteem for mental and physical health issues. It refreshes the evidence presented in New Horizons, and is informed by this, but changes the focus to identifying shared objectives set out below, alongside good practice examples of how the objectives can be achieved by local agencies working together.

*Objective 1: More people will have better wellbeing and mental health and fewer people will develop mental health problems.*

- A child's early experiences lay the foundations for their future life chances and are of particular importance to their health and wellbeing. Support from health visitors and Sure Start Centres for parents, promotion of mental wellbeing and improved awareness of mental health issues in schools and colleges, are all examples of how action by local authorities and central government can make a substantial difference across the life course. Interventions to promote mental health and prevent mental illness are also important in adult and older years

*Objective 2: More people with mental health problems will have a good quality of life.*

- 90% of all people with mental health problems are managed entirely in primary care. Improving the skills of primary care staff can help to identify mental health problems earlier and deliver the most appropriate treatments in a primary care setting. Similarly, meeting the needs of particular higher risk groups such as the homeless who may find the "standard" general practice systems difficult to use can help to promote wellbeing and quality of life.

*Objective 3: More people with mental health problems will have good physical health, fewer will die prematurely, and more people with physical ill health will have better mental health.*

- Having a mental health problem increases an individual's risk of physical illness and premature death with depression increasing the risk of mortality by 50% and doubling the risk of coronary heart disease. Similarly, physical illness increases the risk of mental illness with depression being 7 times more common in those with two long term conditions (NICE, 2009). Increased smoking is the largest single cause of health inequality in those with mental disorder who consume 42% of all tobacco in England (McManus et al, 2010). Effective interventions include improving access to health promotion interventions such as smoking cessation and existing public health screening programmes e.g. breast and bowel cancer screening. Early intervention can prevent the development of physical illness in those with have developed mental illness. Similarly, promoting the mental health of those with physical illness can prevent subsequent mental illness.

*Objective 4. More people will have a positive experience of care wherever it takes place.*

- Choice in mental health care has not featured strongly in the NHS to date and we know that accessing services can present significant challenges particularly to those from higher risk groups. People's experience of care can be improved by making services genuinely personalised so they are accessible for everyone who needs them, regardless of their background or ability. In particular, many people from black minority ethnic backgrounds stay in hospital longer and are more likely to be admitted formally under the Act than those from other ethnic backgrounds. It is appropriate for local services to work with their communities and service users to improve everyone's experience of care. .

*Objective 5. Improved services will result in fewer people suffering avoidable harm*

- It is important that people using mental health services have confidence in the services they use, and that includes confidence that measures are in place to minimise any risk their condition presents to other people. Local systems can do a great deal to ensure that identification of risks

occurs effectively and quickly and that the local culture supports learning and continuous improvement.

*Objective 6 Public understanding of mental health problems will improve and fewer people will experience stigma and discrimination as a result of negative attitudes and behaviours to people with mental health problems*

- Discrimination is damaging and costly for individuals, their families and carers, organisations, communities and society as a whole. A large part of the problems experienced by people with mental ill-health is the associated stigma and discrimination which can stop people from seeking help, keep people isolated and stop them working. We intend to work with Time to Change to agree the best ways of assessing improvements over the lifetime of this strategy, including an annual survey of people's attitudes to mental ill-health.

19. The beneficiaries of the strategy will include people with mental health problems, their families and those who care for them, veterans of the armed services, and the wider population. It will also be of key interest to schools, employers, the NHS, public health, local authorities and the criminal justice system.

## C. What policy options have been considered?

### Option 1 – Do nothing.

20. No additional investment required but the high costs associated with Mental Health will continue. In announcing the development of a mental health strategy early in their new administration, the Coalition Government made it clear that doing nothing was not an option. This acknowledges the high cost of mental illness; the life-course nature of its causes and impact; the clear inequalities experienced by people with mental health problems; and the real opportunity to improve outcomes through a new approach which engages departments across government, but is based in local delivery.

### Option 2: Develop a cross-government mental health strategy.

21. Six strategic high level Objectives and a number of high impact areas have been identified. These are based on the priorities identified by, and agreed with, partner organisations and across government. A number of effective interventions and examples of good practice for local action are given beneath each high impact area. These have been selected using the following criteria. They:

- address key risk factors for poor mental health
- address critical areas of inequalities
- address key factors for improving wellbeing and good mental health
- are based on good evidence of effectiveness and designed to support efficiency savings and value for money.

22. This publication sets out the evidence on the factors that improve outcomes for people with mental health problems including cost effective interventions. However, it is important to stress that as the main thrust of the strategy is to set out objectives, not to mandate the means of achieving them, so the interventions and good practice examples are to support local implementation and are not compulsory. Many of them are already being put in practice in some areas. Commissioners and providers will be able to accept, or leave, these suggestions based on their assessment of the needs of their local area.

23. This Impact Assessment covers some of the interventions set out in the strategy. It is not a comprehensive list and excludes commitments and announcements that have already been made (eg outcomes and interventions set out in the NHS, Public Health and Social Care outcomes frameworks) or that are the lead responsibility for other government departments (ie not DH).

24. The interventions presented in this Impact Assessment are the following:

- Early identification and intervention as soon as mental disorder arises
  - Cognitive behavioural programmes for medically unexplained symptoms (MUS)
  - Collaborative Care in type II diabetes
  - Early Detection and Early Intervention in Psychosis Services
  - Parenting interventions for families with conduct disorder
  - Screening and brief intervention in primary care for alcohol misuse
  - Early diagnosis and treatment of depression at work
- Promotion of mental health and prevention of mental disorder
  - Time banks and community navigators

- Addressing social determinants and consequences of mental disorder
  - Debt advice services
  - Befriending for older people
  - Support for Time to Change to develop a further anti-stigma campaign

25. The IA on extension of Talking Therapies is covered in a separate assessment on “*Talking Therapies: A Four Year Plan of Action*”.

## D. Option 2 Impacts, Costs and Benefits

### *Introduction*

26. The best practice examples presented in this Strategy are based on analytical work done by the London School of Economics.
27. In March 2010, the Department of Health commissioned Professor Martin Knapp and colleagues from the LSE and the Institute of Psychiatry to undertake economic modelling on a range of interventions to:
  - promote mental health;
  - prevent mental illness;
  - intervene early once mental illness has arisen.
28. This work included a review of the available clinical and cost effectiveness evidence, and as far as possible, the LSE made estimates of the costs and benefits of the interventions in terms of savings to the NHS and wider exchequer, benefits to health, and wider economic benefits. Seventeen interventions were looked at and most are presented in the strategy.
29. Each of the interventions is considered in turn in the following sections below. These include, in each case, a brief summary of the underlying problem and proposed intervention, as well as a description of the modelling undertaken by the LSE and the modelling assumptions. Unless indicated in the text, no changes have been made to the LSE modelling methodology or assumptions. Where possible, the cost and benefit results are presented using the outputs from the LSE work.
30. Further, DH has sought to estimate the likely costs and benefits of rolling out the interventions nationally. This process involved, where appropriate, scaling up the results of the LSE work to a national level and aggregating the costs and benefits of annual cohorts across different years. Future costs and benefits have been discounted in line with DH Impact Assessment Technical Guidance and HM Treasury Green Book Guidance, and cost and savings inputs have been uplifted to 2010/11 prices using an appropriate price index.
31. DH has relied on the work of the LSE to provide a basis for the economic case, and therefore, has not checked the validity, suitability, or accuracy of all of the sources, data and assumptions. LSE analysis was completed in a relatively short timescale and the peer review will be undertaken in due course.
32. Figures have been updated using the GDP deflator on the HM Treasury website. To update figures from 2008/9 to 2010/11 prices, the following assumptions were used in line with the IAPT calculations:
  - Pay 6.4%
  - Prices 8.20%
33. Future costs and savings have been discounted by 3.5% per year (QALYs by 1.5%) in accordance with DH IA Technical Guidance. Similarly, we present the opportunity cost of the best practice examples by multiplying costs and savings by 2.4, again in accordance with DH IA Technical Guidance. Figures have been rounded to the nearest million.

## **Early identification and intervention as soon as mental disorder arises**

### **Cognitive behavioural programmes for medically unexplained symptoms (MUS)**

#### **Problem**

34. Medically unexplained symptoms (MUS) are a very commonly encountered problem in primary care. Prevalence data from the Netherlands indicate that 23% of all primary care consultations have sub threshold levels of somatisation disorders and a further 1.2% of individuals presenting to primary care have clinical somatisation disorders (De Waal et al 2004)-around 300,000 individuals in England.
35. Somatisation disorder is a psychiatric diagnosis applied to patients who persistently complain of varied physical symptoms that have no identifiable physical origin. Patients with somatisation disorder will typically visit many doctors in pursuit of effective treatment.
36. A recent estimate of the excess costs and utilisation of health care services in England as a result of MUS, suggests that the costs to the NHS were approximately £3.145 billion per annum in the fiscal year 2008/2009, equivalent to 11% of total expenditure on these services for the working age population. In addition, workforce productivity losses account for another £5.235 billion and deterioration in quality of life £9.348 billion (Bermingham et al, in press). These figures refer to both sub threshold and somatoform disorders.

#### **Proposed intervention**

37. A number of interventions can play a role in treatment. A review of 34 randomised controlled trials looking at interventions to tackle somatoform disorder found that CBT for somatoform and sub-threshold somatoform conditions was effective in 11 of 13 studies identified worldwide (Kroenke 2007). Each CBT session would cost £55 per person, and that a course of treatment would last for 15 sessions of 50 minutes each.
38. The model assumes that GPs will use an e-learning module to enhance their knowledge of the benefits of CBT for people with MUS. As the e-learning module lasts for only 1-hour, the model does not include locum costs. The model assumes that GPs will be trained in the first year and no re-training will take place. We have included the cost of time for GPs to be trained; assuming half of GPs will do the training (around 19,000 GPs) and using the unit cost of GP time (£2.70 per surgery minute) from Unit Costs of Health and Social Care 2009 publication by PSSRU.

#### **Modelling assumptions**

39. A simple three-year linear decision model has been constructed, comparing investment in face-to-face CBT compared to treatment as usual for people with somatoform disorders. The economic analysis looks at costs to the health care system, as well as the impacts on sickness absence from work.
40. The model assumes that benefits are maintained until the end of year 3 and relate to reduced GP consultations, prescriptions, outpatient and inpatient bed days. There are further savings from improved workforce productivity and also QALYs<sup>4</sup> gained.

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<sup>4</sup> The **quality-adjusted life year** (QALY) is used to quantify the health benefits of a medical intervention. The QALY is based on the number of years of life that would be added by the intervention. Each year in perfect health is assigned the value of 1.0 down to a value of 0.0 for death. DH derives its valuation of a QALY from the estimates of the mean willingness to pay (WTP) for a Prevented Fatality employed by the Department of Transport and other government departments. QALYs have a monetary value of around £60,000 to the public.

41. The model assumes that around 50% of the 300,000 individuals with MUS will be offered CBT. We have further assumed that half of them will then take up CBT-around 75,000 people.
42. The effectiveness of CBT is taken from the US study by Allen et al. After 15 months follow up they report that, using the Clinical Global Impression Scale for Somatisation Disorders, 40% of individuals receiving CBT continue to report much improved or very much improved somatisation compared with just 5% of those who receive treatment as usual. On average there was a 22.5% improvement in CGI-SD scores.
43. Those who improve will avoid additional consultations with their GPs per annum: there are 13 excess GP consultations every year for those with full somatoform disorder (Bermingham et al in press). The cost of a GP consultation is taken from the PSSRU Unit Costs of Health and Social Care in 2009 at £31 for a 12 minute consultation. The cost of an A&E visit is taken from the NHS 2008/2009 standard A & E tariff. There are 5.8 excess A & E visits for full somatoform disorder (Bermingham et al in press).
44. Data on excess prescriptions are taken from Bermingham et al. To value the monetary cost of excess prescriptions, data from 2009 on prescribing statistics in the community in England are used. On average, per head of the population in 2009, the annual number of prescription items was 17.1 with a net ingredient cost per item of £9.64 (NHS Information Centre, 2010).
45. Excess hospital bed days are 18.9 for those with somatoform disorders; similarly there are 5.5 outpatient consultations for individuals with somatoform disorders. Costs can be incurred from year 1 onwards.
46. The unit cost of an inpatient bed day is £250 per day, the cost of an outpatient consultation is £100 and a follow up consultation is £70.
47. Beyond the NHS there are potential benefits to society through a reduction in time taken off work as a result of MUS; this has benefits both for employers and also for the public purse through avoidance of the need to pay benefits and avoidance of loss of tax revenues. A previous study in Germany looking at inpatients treated for somatoform disorders indicated that the costs of CBT were more than offset by a reduction in health care utilisation and a 35% reduction in work loss days in a two year follow up (Hiller et al 2003).

#### **Costs and Benefits Results**

48. The following table shows that there are around £110m net savings to the NHS from this intervention in this five year period. There are further productivity gains of around £61m. Finally, there are around 3,000 QALYs gained from the around 75,000 people with somatoform disorders who receive CBT.

**Table 1: Costs and savings associated with CBT provision for people with MUS**

2010/11 prices	2011/12	2012/13	2013/14	2014/15	2015/16	Total
<b>Costs</b>						
CBT awareness training	£1m	-	-	-	-	£1m
CBT cost	£7m	£19m	£37m	-	-	£63m
Cost of GP time	£3m					£3m
<b>Total Cost</b>	£11m	£19m	£37m	-	-	£67m
<b>Opportunity Cost of intervention</b>	£26m	£46m	£89m	-	-	£161m
<b>Savings</b>						
GP savings	-	£1m	£4m	£3m	£2m	£11m
Prescriptions	-	-	£1m	£1m	£1m	£3m
Outpatient consultations	-	£1m	£3m	£3m	£2m	£9m
Inpatient treatment	£4m	£17m	£41m	£36m	£24m	£123m
A&E Care	£1m	£5m	£12m	£10m	£7m	£34m
<b>Total Savings</b>	£5m	£24m	£61m	£53m	£36m	£179m
<b>Opportunity Cost of savings</b>	£12m	£58m	£146m	£127m	£86m	£430m
<b>Benefits</b>						
Workforce productivity	£2m	£9m	£21m	£18m	£12m	£61m
QALYs gained	105	414	1,014	884	573	2,991

## ***Collaborative Care in type II diabetes***

### **Problem**

49. The co-existence of diabetes and depression is linked to the risk of increased use of health services, and could therefore be seen as a substantial economic burden for the health care budget and for society more generally.

### **Proposed intervention**

50. Katon et al (2006) evaluated the incremental cost-effectiveness and net benefit of providing collaborative care compared to usual care over 24 months. They reported that an additional 115 depression-free days over the 2-year period were associated with collaborative care, accompanied by increased total medical costs (US\$515; including intervention costs) in the first year but with a cost saving of US\$1,411 in the second year. NICE have also developed a decision model based on collaborative care in the UK (NICE, 2009).

51. Improved treatment of depression among type II diabetes patients in primary care has economic benefits to patients, health care systems, and employers. Collaborative care, including a case manager, tackles depression in people with diabetes by reducing days with depression symptoms, which leads to reduced service use and associated health care and employment costs.

52. The total cost of collaborative care was estimated as £782 for 12 months (NICE, 2009). The cost of usual care was estimated as £361. Data from the Beating the Blues study was used to calculate health and social care service and employment costs related to the clinical outcome: number of depression free days (McCrone et al., 2004).

### **Modelling assumptions**

53. The prevalence of diabetes in England in the age 17 and over population has been estimated as 2,213,138 for all diabetes (The Health and Social Care Information Centre, 2010). It was assumed that any increase to 2009/10 would be offset by restricting the data to the age 18 and over population. In addition, it was assumed that 98% of cases were type II diabetes based on analysis of data from the 2005 Health Survey for England (National Centre for Social Research and University College London, 2005). Thus, assumed prevalence was 2,168,880 cases.

54. A decision analytic model was constructed using TreeAge, with patients entering the model through receipt of collaborative care versus usual care. It was assumed that all individuals had been screened for depression and that 20% of individuals screened would have depression. In their guidance on the treatment and management of depression in adults with a chronic physical health problem, NICE estimated that 20% of individuals with a chronic physical health problem were likely to have depression (NICE, 2009)-around 430,000 people.

55. As a method of dealing with the likely difficulty in providing the additional health services in collaborative care to the entire population of individuals who are likely to have type II diabetes and depression at any one time, it was assumed that the switch to giving individuals collaborative care would take place over the course of three years. That is, it was assumed that one-third of individuals with type II diabetes and depression would be switched from usual care to collaborative care each year for three years.

56. The model assumes that 88.5% of those who make use of collaborative care would complete the course of treatment – this equates to 127,964 – the remainder 16,628 would fail to complete the course of treatment dropping out in the first month. Furthermore, there is a proportion of people who do not respond to treatment – around 41.1% respond to treatment.

57. The model was developed using a number of different data sources, and in some instances, estimates were based on the only available data. The clinical outcomes (depression-free days) were mainly from American studies<sup>5</sup> - as mentioned above, 115 depression-free days over the 2-year period were associated with collaborative care. Service use and employment costs were derived from the Beating the Blues study in the UK<sup>6</sup>. All costs were reported in UK pound sterling and presented to 2010/11 prices. Results have been discounted using a 3.5% discount rate.

58. QALY gain estimates are based on Katon et al 2005<sup>7</sup> which is the most relevant study from a recent systematic review on collaborative care; the study is based on collaborative care for older people – and it indicates a high number have diabetes. The QALY gain in this study is around 0.1 per annum as a result of effective treatment. QALYs have been discounted using a 1.5% discount rate.

## Costs and Benefits Results

**Table 2: Costs and savings associated with Collaborative Care in type II diabetes**

2010/11 prices	2011/12	2012/13	2013/14	2014/15	Total
Depression free days	700,000	1,400,000	1,400,000	700,000	4,200,000
<b>Costs</b>					
<b>Intervention Costs</b>	£49m	£47m	£46m	-	£142m
<b>Opportunity cost of the intervention</b>	£117m	£113m	£109m	-	£340m
<b>Savings</b>					
<b>Health and Social Care Savings</b>	£1m	£3m	£3m	£2m	£10m
<b>Opportunity Cost of Health and Social Care Savings</b>	£2m	£8m	£8m	£5m	£24m
<b>Benefits</b>					
Lost productivity averted	£2m	£4m	£4m	£2m	£12m
QALY gain	5,259	10,363	10,210	5,030	30,862

59. The table above shows the costs and savings associated with providing collaborative care to 430,000 people with depression and type II diabetes. Although the intervention is associated with large benefits (in terms of QALY gains), it appears to have a low rate of return on investment. One reason for this is that the costs averted from diabetes complications including the productivity losses due to premature mortality have not been factored in. In 2003, the average initial health care costs of an amputation due to diabetes were estimated to be £8,500 and each non-fatal myocardial infarction related to diabetes more than £4,000 (Clarke et al 2003). In sensitivity analysis if, on average costs, modest costs of just £150 per annum could

<sup>5</sup> Katon et al., 2006; Simon et al., 2007

<sup>6</sup> McCrone et al., 2004

<sup>7</sup> <http://archpsyc.ama-assn.org/cgi/reprint/62/12/1313>

be avoided then investment in collaborative care would overall be cost saving from a health and social care perspective after just two years.

## **Early Detection and Early Intervention in Psychosis**

### **Problem**

60. In England, the direct costs for health and social care services was £2bn and total societal cost of schizophrenia was £6.7bn in 2004/05 (Mangalore and Knapp, 2007). According to another recent report in England (McCrone et al, 2008), average direct costs are £10,187 and total costs (including lost employment) £19,078. The same study estimated the average direct costs for bipolar disorder and related conditions to be £1,439 and the total costs £4,570.

### **Proposed intervention**

61. Two types of services were looked at; Early Detection services and Early Intervention teams. Early Detection (ED) services are not routinely provided. The analysis is based on the impact of one specific model (Outreach and Support in South London, OASIS) which aims to identify early symptoms of psychosis and reduce transition to full psychosis. The intervention is applied to young people aged 15 to 35 years old in general population with prodromal symptoms of psychosis (At Risk Mental State-ARMS). Around 35% of people with ARMS will develop psychotic illness within one to two years (Cannon et al, 2009, Yung et al, 2004). However, earlier treatment of ARMS reduces rate of transition to psychosis from 35% to 15%; for every four people treated, one transition to psychosis will be prevented (McGorry et al. 2002; McGlashan et al. 2006).

62. At the same time, provision of EI services is already high. EI teams are multidisciplinary teams including medical professionals (e.g. psychiatrists, psychologists, occupational therapists, community support workers) as well as non-medical/psychosocial workers (e.g. social workers, vocational workers). The target group of these teams are people in the general population aged 15 to 35 years old experiencing a first-episode of psychosis.

### **Modelling assumptions**

63. A simple model was constructed showing savings from Early Detection Services and EI teams compared to Standard Care on health care and social care, lost employment costs and impact on homicide and suicide rates.

64. ED costs are based on the provision of sessions of CBT, psychotropic medication, and clinician contacts. Treatment as usual is assumed to consist of GP and counsellor contacts. One year of ED input is estimated to cost £3089 (2008/9 prices). This cost is derived from the OASIS study (Valmaggia et al, 2009) and includes contacts with psychiatrists, use of medication and provision of cognitive therapy. Assuming 15,763 prodromal cases in England the cost of providing a service for all would be £48.7 million. However, if ED services did not exist there would still be standard care provided. We estimate that this costs £862 per person and £13.6 million for England.

65. The figures below are savings associated with ED services compared to standard care per person:

**Table 3: Health Savings associated with ED services compared to standard care per person**

	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3 onwards</b>
<b>Cost of ED Services</b>	£3,089	£2,043	
<b>Standard Care costs</b>	£862	£3,048	
<b>Net Savings</b>	-£2,228	£1,004	£11,916

66. There are no ED savings in year 1. ED savings in year 2 are all inpatient costs. From Year 3 onwards savings are due to 2364 reduced cases of psychosis (McCrone et al, 2008). 25% of these savings are from informal care including workforce productivity gains, 60% are for the NHS (27% psychiatric inpatient, 3% other inpatient, 2% outpatient, 3% NHS day care, 18% medication, inpatient, 7% community services - which may include some non-NHS) and 15% other. The long-term savings for ED have been estimated using schizophrenia costs. This could be a limitation, but the bipolar disorder cost information is less robust.
67. The figures below show employment gains per person from ED services compared to standard care. From Year 3 onwards, savings are due to 2364 reduced cases of psychosis (based on McCrone et al, 2008).

**Table 4: Wider economic savings from improved productivity associated with ED services compared to standard care per person**

	Year 1	Year 2	Year 3 onwards
<b>ED Services</b>		£99	
<b>Standard Care</b>		£2,466	
<b>Net Savings</b>		£2,367	£9,356

68. Savings from reduced homicide and suicide rates are assumed to appear from Year 4 onwards and are due to the reduced cases of psychosis. We have assumed that people with avoided psychosis would have been treated either by an EI team (67%) or a standard care team (33%).
69. Homicide annual costs are estimated at £54,079 in the year of the homicide and £50,260 in each of the following nine years. It is assumed that 0.17% of patients will commit a homicide without EI whilst with EI the figure is estimated at 0.011% (Nielsen & Large, 2008). The annual savings per person are £4.82 (0.2% NHS, 34.0% other public sector, 25.0% workforce productivity, 40.9% intangible).
70. Suicide annual costs are estimated at £34,412 in the year of suicide and £33,442 in subsequent years. It is assumed that 4% of people with schizophrenia commit suicide and that this happens by the fourth year of their illness. A recent study has demonstrated that suicide attempts in areas with EI services are one third of a third of those in areas without EI teams. We have assumed that the same difference applies to completed suicides – i.e. a suicide rate of 1.3% with EI. The annual savings per person are £110 (2.8% NHS, 28.7% workforce productivity, 68.5% intangible).
71. Regarding EI services, the model assumes 6,900 incident cases of psychosis in England. It has been assumed that two thirds of new patients can currently access these services with £6.4 million gross expenditure to achieve this, or £2.6 million more than for existing standard services. Based on McCrone et al (2009) the annual cost of EI team input plus other community psychiatric services and inpatient care has been estimated at £10,157, with the cost of standard care estimated at £15,517.
72. The figures below are savings per person compared to standard care for EI services. 98% of the savings are for the NHS, the rest is for Social Care. For EI Services, mental health team costs increase but there are savings from reduced inpatient care.

**Table 5: Health Savings associated with ED services compared to standard care per person**

	Year 1	Year 2	Year 3
<b>Cost of EI Services</b>	£10,927	£9,243	£9,243
<b>Standard Care costs</b>	£16,704	£14,242	£14,242
<b>Net Savings</b>	£5,777	£4,999	£4,999

73. There are around £2,000 savings from improved workforce productivity per person associate with EI services. Furthermore, there are savings from reduced homicides and suicides in the same way as described for ED services. The annual saving from reduced homicides is around £86 in the year of the homicide (37.7% public sector – 1.7% NHS, 36.0% criminal justice system, 23.4% workforce productivity, 39.0% intangible and private costs) and in the nine years following homicide around £80 (33.8% public sector – all criminal justice system, 25.1% workforce productivity, 41.1% intangible and private costs).

74. The annual saving from reduced suicide is £917 (2.8% public sector – assume 1.4% NHS and 1.4% other, 28.7% workforce productivity, 68.5% intangible costs) in the year of suicide and in the nine years following suicide is around £892 (0% public sector, 29.6% workforce productivity, 70.4% intangible costs).

#### Costs and Benefits Results

75. The following table shows costs and savings (benefits) for a 10-year period for Early Detection services compared to standard care. This assumes 15,763 new cases each year. The cost of ED services is £2,298 per case in 2008/9 (£2,411 in 2010/11 prices). The intervention is cost saving by year 4 for the NHS, and by year 3 if we look at all public sector.

**Table 6: Costs and savings associated with Early Detection Services for people with ARMS**

£m, 2010/11 prices	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	Total
<b>Costs</b>											
<b>NHS</b>	£38m	£37m	£35m	£34m	£33m	£32m	£31m	£30m	£29m	£28m	£327m
<b>Opportunity Cost of the Intervention</b>	£91m	£88m	£85m	£82m	£79m	£77m	£74m	£72m	£69m	£67m	£785m
<b>Savings</b>											
NHS savings	£ -	£17m	£33m	£48m	£62m	£76m	£88m	£99m	£110m	£119m	£653m
Other public sector savings	£ -	£3m	£6m	£9m	£12m	£16m	£19m	£22m	£25m	£28m	£142m
<b>Total Government Savings</b>	£-	£21m	£40m	£58m	£74m	£91m	£107m	£122m	£135m	£147m	£795m
<b>Opportunity cost of savings</b>	£-	£49m	£96m	£138m	£178m	£219m	£257m	£292m	£324m	£354m	£1,900m
<b>Benefits</b>											
Workforce productivity savings	£-	£32m	£63m	£91m	£117m	£139m	£160m	£180m	£197m	£214m	£1,190m
Intangible savings	£-	£1m	£1m	£2m	£2m	£4m	£5m	£6m	£7m	£8m	£36m

76. The following table shows costs and savings (benefits) for a 10-year period for Early Intervention services compared to standard care. It has been assumed that 2/3 of cases with psychosis already receive services and that EI services will expand by a third to cover the total population; around 2,300 new cases per year. Already from the first year, the intervention appears cost saving.

Table 7: Costs and savings associated with Early Intervention Services for people with psychosis

£m, 2010/11 prices	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	Total
<b>Costs</b>											
<b>NHS</b>	£2m	£ 5m	£7m	£7m	£7m	£6m	£6m	£6m	£6m	£5m	£57m
<b>Opportunity Cost of the Intervention</b>	£6m	£12m	£17m	£16m	£16m	£15m	£15m	£14m	£14m	£13m	£137m
<b>Savings</b>											
NHS savings	£17m	£29m	£41m	£41m	£40m	£39m	£37m	£36m	£35m	£34m	£348m
Other public sector savings	£0m	£0m	£1m	£2m	£10m						
<b>Total Government Savings</b>	£17m	£30m	£42m	£41m	£41m	£40m	£39m	£37m	£36m	£35m	£358m
<b>Opportunity cost of savings</b>	£40m	£71m	£100m	£99m	£99m	£96m	£93m	£90m	£87m	£85m	£860m
<b>Benefits</b>											
Workforce productivity savings	£0m	£5m	£10m	£15m	£19m	£24m	£28m	£31m	£35m	£38m	£204m
Intangible savings	£0m	£1m	£2m	£2m	£3m	£4m	£6m	£7m	£8m	£10m	£43m

## **Parenting interventions for families with conduct disorder**

### **Problem**

77. Conduct disorders (CD) are the most common childhood psychiatric disorders with a UK prevalence of 4.9% for children aged 5-10. There are around 30,000 children aged 5 who have conduct disorders in England.

**Table 8: Prevalence of conduct disorder (Green et al, 2005)**

	<b>Boys %</b>	<b>Girls %</b>	<b>All children %</b>
Age 5-10	6.9	2.8	4.9
Age 11-16	8.1	5.1	6.6
All ages	7.5	3.9	5.8

78. The costs to society are high; childhood behaviour problems are linked to later delinquency and criminality leading to adulthood antisocial personality disorder for about 50% of children with clinical CD. In a study of London school children, costs associated with clinically relevant CD were distributed across many agencies and were ten times as high as those for children with no problems. Potential savings from early intervention have been estimated at £150k per case. The annual cost of crime in England and Wales by adults who had conduct disorder as children and adolescents has been estimated as high as £22.5bn, and £1.1-1.9m for a single prolific offender.

### **Proposed intervention**

79. Many RCTs and systematic reviews have found parent training to have positive effects on children's behaviour and meta-analysis has shown that benefits remain one year later. Longer-term studies show sustained effects but lack control groups. The separate effect of parenting training cannot be identified in multifaceted approaches but these have shown that a long-term impact on CD and criminal behaviour is possible. There are few cost-effectiveness studies but health and social services' costs were found to reduce over time in one trial of the Incredible Years programme. There is some evidence of positive effects of parenting programmes on symptoms of ADHD and educational attainment, prevention of non-intentional child injury, and mother's mental health.

80. Commonly parenting programmes will be group-based lasting 1.5-2.0 hours per week over 8-12 weeks. The costs of parenting programmes were estimated from details of five evidence-based and commonly used programmes submitted to the NAPP Commissioning Toolkit and include staff costs, overheads, materials and additional items such as catering and childcare as well as costs of training and supervision. The median cost of a group intervention was estimated at £952 (range £282-£1,486) per participant, while the median cost of individual interventions – recommended only where group-based provision is not possible- was £2,078 (range £769-£5,642).

### **Modelling assumptions**

81. The model assumes that the intervention is provided at age 5, and is modelled as a time point rather than a time period. Benefits start to manifest at the end of the first period. The model takes account of mortality and that CD will not persist in about 50% of children even without intervention. Rates of effectiveness were modelled using data from 20 RCTs. The model estimates that for children with conduct disorders at age 5 the intervention results in an additional 33% improving to 'no problems', and 5% continue to have sub-threshold conduct disorders. It assumes that those who drop out (up to 44% 39, 40) do not benefit from the intervention and that behaviour changes are not sustained for 50% of children who initially improve, based on the proportion of children who would not improve in the absence of the intervention.

82. Given a take-up of 37% and assuming there is only one child with CD per family, it has been estimated that parenting programmes could be provided to the parents of around 11,000 children with CD. However, there is no evidence to suggest that interventions could be scaled up without incurring further costs as it may be harder to engage those families not currently receiving the intervention. Following the assumption used by NICE that 80% of people will receive group based interventions and 20% will receive individual interventions, the costs of providing the parenting intervention to parents of one cohort of 5-year-olds with CD is tentatively estimated at £12.8m (2008/09 prices).
83. Parenting intervention programmes are currently provided by a variety of sources; 22% of structured parenting programme provision is by generic CAMHS teams, 22% by early years and health visiting services, and 17% of provision by other types of specialist CAMHS including targeted teams, dedicated CAMHS workers working in non-CAMHS services and tier 4 provision. School health services provided 8% of parenting provision and maternity and neonatal services 10% (Barnes et al, 2009). In this analysis, we show separately the cost of the intervention and the potential savings in each area. It has been assumed that around 25% of children with CD are currently receiving services. This is based on service contacts of children who participated in the British Child and Adolescent Mental Health Surveys. Although service contacts are not differentiated by type of psychiatric disorder, conduct disorders are the most common disorders for children and this estimate seems to be generally agreed by various experts in the area.
84. The analysis does not take into consideration how families with children with Conduct Disorders will be identified. This may imply that the cost of the intervention in total may be higher as the costs of identifications are not included. Figures have been discounted by 3.5% per year.

#### **Costs and Benefits Results**

85. The cost of treating a cohort of around 8,000 children is estimated to be around 10.4m in 2010/11 prices. Savings in the public sector result mainly to the NHS, Education and the Criminal Justice System. The Government savings for a 26 period (1 year of intervention and 25 years of savings) are estimated at around £400m with an opportunity cost of around £962m. At the same time, the cost of the intervention is around £180m for the same period. There are further savings to the voluntary sector and wider economic benefits.

Table 9: Cost and savings associated with Parenting interventions for families with conduct disorder

£m 2010/11 prices	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18-2026/27	2027/28-2036/37	Total
<b>Costs</b>									
<b>Cost of the intervention</b>	£10m	£10m	£10m	£9m	£9m	£9m	£73m	£51m	£181m
<b>Opportunity cost</b>	£24m	£24m	£24m	£22m	£22m	£22m	£175m	£122m	£434m
<b>Savings</b>									
NHS	-	£2m	£2m	£3m	£4m	£5m	£70m	£68m	£154m
SSD	-	-	-	-	-	-	£4m	£3m	£8m
DfE	-	£1m	£1m	£2m	£2m	£2m	£28m	£23m	£59m
CJS	-	-	£1m	£3m	£4m	£5m	£82m	£86m	£180m
<b>Total Government Savings</b>	-	£3m	£4m	£8m	£10m	£12m	£184m	£180m	£401m
<b>Opportunity cost of Government savings</b>	-	£7m	£10m	£9m	£4m	£9m	£442m	£432m	£962m
<b>Benefits</b>									
Vol. sector	-	-	-	-	-	-	£1m	£1m	£2m
Lost output	-	-	£1m	£2m	£3m	£4m	£64m	£65m	£139m
Victim costs	-	-	£3m	£7m	£10m	£12m	£217m	£222m	£471m
Other crime costs	-	-	-	£1m	£1m	£1m	£25m	£27m	£55m

## ***Screening and brief intervention in primary care for alcohol misuse***

### **Problem**

86. The overall economic and social costs of alcohol misuse in England in 2006/07 were in the range £17.7 - £25.1 billion (Department of Health, 2008). This includes: costs of £2.7 billion falling on the NHS; output losses of £6.0 – £7.3 billion due to sickness absence, reduced employment and premature death; and costs of alcohol-related crime totalling £9.0 -£15.0 billion. Indeed the full cost of alcohol-related harm for the NHS is larger than shown in these figures, as nearly 10% of the costs allocated to crime actually fall on the health service, mainly covering the costs of treatment for injuries suffered by the victims of alcohol-related violence.
87. It is estimated that 6.6 million adults currently consume alcohol at hazardous levels and 2.3 million at harmful levels (Riley, 2010). Hazardous drinking is defined as alcohol consumption of 21-50 and 14-35 units a week for men and women, respectively, and harmful drinking as above 50 and 35 units, respectively.

### **Proposed intervention**

88. Guidance recently published by NICE on preventing the development of hazardous and harmful drinking emphasises that effective strategies to reduce alcohol-related harm require a combination of measures, including both population-level approaches and interventions aimed at individuals (NICE, 2010).
89. The intervention presented here is the screening of adults consulting their GP using the Alcohol Use Disorders Identification Test (AUDIT), followed by brief advice given by the GP to all those who are screened positive for hazardous or harmful drinking.
90. The model does not take into account any marketing or other initiatives to raise awareness and therefore increase the take up for the intervention.

### **Modelling assumptions**

91. The number of harmful and hazardous drinkers is estimated at 224 and 78 respectively per 1,000 of population. In line with the NICE economic modelling report, it is assumed that the proportion of hazardous and harmful drinkers missed by the screen and so not going on to receive the brief intervention is around 20%. Using the NICE modelling report, it is estimated that the total costs of screening for a sample of 1,000 adults amount to £10,013 in 2009/10 prices, while the costs of the 5-minute intervention for those screened positive come to £7,393. This equates to £17.41 per head of population.
92. A Cochrane review demonstrated the effectiveness of the intervention in primary care settings, with an average reduction in alcohol consumption of 12.3% per individual (Kaner et al., 2007). This is a short-term effect and evidence on its duration is less clear-cut. Again, following the NICE report, it is assumed that the effectiveness of intervention declines linearly to zero after seven years (Purshouse et al., 2009). It is also assumed that the costs of alcohol misuse fall in line with consumption. It is recognised that this is a simplification, as the time profile of savings may well vary by component of cost. In particular, cost savings are likely to accrue more slowly where these are associated with the prevention of chronic alcohol-related diseases. For this reason, and to avoid any exaggeration of benefits, no allowance is made in the analysis for any savings associated with alcohol-related premature mortality.
93. Cost savings are measured over seven years, based on the following estimates of annual per capita costs of alcohol misuse among hazardous and harmful drinkers, calculated by combining data on the national costs of alcohol misuse as given earlier with breakdowns of cost by category of drinker as given in the Sheffield Alcohol Policy Model (Brennan et al., 2009).

**Table 10: Costs associated with alcohol misuse per head, 2009/10 prices**

<b>Drinker category</b>	<b>NHS</b>	<b>Criminal justice system</b>	<b>Output losses</b>	<b>Other costs</b>
<b>Hazardous</b>	258	120	315	639
<b>Harmful</b>	573	224	2,546	1,191

94. Costs and benefits are then uplifted to 2010/11 prices using the relevant pay and prices indices.

**Costs and Benefits Results**

95. The proposed intervention delivers estimated NHS savings of around double the upfront cost, estimated public sector savings of around triple the upfront cost, and estimated overall societal benefits of around 12 times the upfront cost.

**Table 11: Costs of intervention associated with alcohol misuse (present value over seven years)**

<b>Per head of population, 2010/11 prices</b>	<b>Present value over seven years</b>
Cost of intervention	£18.24
NHS savings	£33.53
Public sector savings	£48.05
Overall societal benefits	£213.35

96. It is acknowledged that such screening and advice already happens in some areas. Further, take up is expected to be relatively low, with some groups considered hard to reach or unwilling to undertake screening or receive advice. If screening was carried out for 10% of the approximately 25m working-age adults in England who report to the GP each year<sup>8</sup>, with subsequent advice for those found to be harmful or hazardous drinkers, it could deliver NHS savings of around £84m and around £36m to the Criminal Justice System. The table below presents the estimated year-on-year costs and benefits of such a roll out.

**Table 12: Cost and savings associated with screening and brief intervention in primary care for alcohol misuse**

2010/11 prices £m	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	Total
<b>Cost</b>								
<b>Intervention cost</b>	£46m							£46m
<b>Opportunity cost of the intervention</b>	£110m							£110m
<b>Savings</b>								
NHS savings	£23m	£19m	£15m	£12m	£8m	£5m	£3m	£84m
CJS savings	£10m	£8m	£7m	£5m	£4m	£2m	£1m	£36m
<b>Total Government savings</b>	£33m	£27m	£22m	£17m	£12m	£8m	£4m	£121m
<b>Opportunity cost of the Government savings</b>	£79m	£65m	£53m	£41m	£29m	£19m	£10m	£290m
<b>Benefits</b>								
Workforce productivity gains	£59m	£49m	£39m	£301m	£22m	£14m	£7m	£221m
Other intangible benefits	£52m	£43m	£35m	£27m	£19m	£13m	£6m	£194m

## ***Early diagnosis and treatment of depression at work***

### **Problem**

97. For employers, the potential economic impact of depression and anxiety among their workforce in terms of lost productivity is substantial.
98. The main costs of not intervening occur due to absenteeism and presenteeism (lost productivity while at work). McCrone et al (2008) estimated the average annual cost of lost employment in England, attributable to having depression as £7,230 and for anxiety £6,850 (both at 2005/6 prices). Wang et al (2006) estimate the average, per person, yearly cost of absenteeism and presenteeism in the US, attributable to depression, to be \$40 (in 2004). Kessler et al (2006), also using US data, estimated that major depressive disorder led to 27.2 lost workdays per ill worker per year.
99. The Labour Force Survey suggests that 11.4 million working days were lost in Britain in 2008/2009 due to work-related stress, depression or anxiety (Health and Safety Executive 2009). This equated to 27.5 days lost per ill worker. If depression and anxiety are not treated, additional costs are also likely to be incurred in treating co-morbid physical health problems. Also, in the longer term, many costs unrelated to the workplace may be incurred such as the cost of acute care, impacts on family members and premature death.

### **Proposed intervention**

100. The issue being addressed is untreated depression in the workplace and its effect on workforce productivity. The intervention under study is enhanced depression care, which consists of depression screening and care management for those found to be depressed in the form of CBT. A number of previous studies have shown this intervention to be effective in tackling depression and reducing productivity losses in different workplaces. The intervention is also consistent with an approach currently being implemented in Australia, where productivity returns outweigh the costs of the intervention (Hilton 2007). A similar programme in the US produced annual financial benefits of \$1,800 per employee compared with costs of only \$100– \$400 a year (Wang et al, 2007) (SCMH, 2007). CBT has also been shown in a meta analysis to be effective in reducing the risk of depression in the workplace (Van der Klink et al 2001).
101. The research by the LSE shows that, from a business perspective, the workplace screening for depression and anxiety appears cost saving compared to taking no action; despite incurring costs for screening all employees in the workplace. Benefits are gained through both a reduction in the level of absenteeism and improved levels of productivity in the workplace.

### **Modelling/Cost and benefit results**

102. Although there is some evidence showing that workplace screening for depression and anxiety has a positive impact, further research is needed to quantify these positive benefits.

## **Promotion of mental health and prevention of mental disorder**

### **Time banks and Community navigators**

#### **Problem**

103. Growing attention has focused on initiatives that empower and support individuals and organisations at local level, thereby (among other things) offering ways to galvanise additional resources from within a community. Initiatives of this kind might help to prevent the emergence of some individual and societal needs, and help to meet needs that do arise, while generally making better use of the totality of resources within a community. A number of approaches, concepts and terms have been used for these initiatives: building community capacity, investing in social capital and fostering community development are prominent examples.
104. Developing social capital through projects that build community capacity has the potential to benefit the community at large, as well as providing personal benefits for the individuals, recipients and providers involved in such initiatives. The potential is there to offer a level of personalisation unattainable through traditional service models. The versatility of social capital in responding to individuals' needs gives rise potentially to a wide range of benefits, both within and between community-based initiatives. These potential benefits are not confined to people needing health and social care support, or to those at risk of needing such support in the near future. Rather, they are linked to wider issues about how to improve and sustain neighbourhoods, including issues of equity of access to care and support, and inclusion of marginalised groups. Among the achievements that might result from empowering local communities and groups to initiate action themselves are reductions in antisocial behaviour and crime, greater safety (actual and/or perceived), social engagement, citizen participation and mutuality, improved housing and physical environments, and more support to people who want to move into employment or who are experiencing difficulties with absenteeism. Quite often some external pump-priming funding and perhaps staff support is needed from, say, the health service, a local authority or a charity.

#### **Proposed Interventions**

105. Time banks use hours of time rather than pounds as a community currency: participants contribute their own skills, practical help or resources in return for services provided by fellow time bank members. Based on a Time Dollars model in place in the United States since the 1980s, one of the first UK time banks was established at the Rushey Green Group Practice medical centre in 1999. This scheme currently has over 200 member individuals and organisations contributing services that include befriending, providing lifts and checking up on people following hospital discharge (New Economics Foundation 2002; Rushey Green Time Bank 2009).
106. Since time banks tap into existing resources within a community, running costs are generally accepted to be low in comparison to other community-focused schemes. At the bare minimum, a 'time-broker' is required to coordinate activities between participants, with a computer to record transactions and a physical base from which to operate.
107. Previous evaluations of time bank schemes provide encouraging evidence of improvements in social inclusion. For example, a 2001 survey in the UK found that time banks were more successful than traditional forms of volunteering in attracting socially excluded groups, with a greater proportion of members being disabled, unemployed, on low incomes and from an ethnic minority in comparison to profiles from the 1997 *National Survey of Volunteering* (Seyfang and Smith 2002). The survey findings show that annual household income was below £10,000 a year for 58% of time bank participants, compared to only 16% for traditional volunteers.

108. While benefits such as improved independence, well-being and social inclusion cannot easily be assigned a monetary value, there is a body of evidence to suggest that time banking has the long-term potential to generate savings to budget-holders at local and national level. The evidence is largely qualitative, with the few quantitative data-gathering surveys that have been conducted being limited to relatively small sample sizes. Nonetheless, examples of positive physical and mental health impacts, improved employment prospects and decreased reliance on alternative forms of paid and unpaid support have been attributed to time bank participation.
109. As is typical for programmes in the social capital field, challenges for an economic analysis of time banks arise not only because of the lack of quantitative evidence, but also because of significant variations in the way time banks are administered and credits are exchanged, the kind of services exchanged and the route of access. Each of these components may potentially influence effectiveness and outcomes, and quantifiable evidence particular to an individual time bank cannot easily be generalised.
110. ILSE estimated that the cost per time bank member would average less than £450 per year, but the value of these economic consequences could exceed £1300 per member (conservative estimate).
111. One example of a typical community development programme is the navigator model which has been implemented and reviewed – under a variety of different names – in a wide range of settings and countries (Hudson 2010; PCW 2010; Anderson and Larke 2009; Stalker et al 2008). Despite varying objectives and intervention designs, some key characteristics of navigators can be identified: they are volunteers from the community who have been trained in reaching out to vulnerable groups of people and provide them with emotional, practical and social support and skills. An important part of their role is to inform individuals about locally available services and to signpost and refer on to those services. Navigators typically act at the interface between the community and public services where mainstream support has failed to meet the needs of hard-to-reach groups (Turning Point 2010).
112. Economic benefits of community navigator services might therefore stem from helping people to follow more appropriate pathways through local service and related systems, thus helping them to meet their needs. For example, navigators might help to identify people with debt or benefits problems, help them to access the right information about emotional and practical support that is available locally, and signpost or encourage them to seek specialist advice where needed. Among the advantages could be reduction in employment disruption (as a result of mental health problems, for example) or job loss, fewer GP visits (once an individual's health needs have been assessed and treated), better health and generally greater well-being.
113. LSE estimated that the cost per person supported through such a community navigator service would be a little under £300, to which the costs of visits to a Citizens' Advice Bureau or Job Centre Plus (which was estimated to cost around £180) should be added. On the other hand, people who get this support who are in jobs would be expected to lose less time from work, while some others would be helped to move into paid employment, saving the Exchequer the benefits payments and also contributing to workforce productivity. Another small saving would be fewer GP visits. These economic benefits were estimated to amount to approximately £900 per person in the first year. Quality of life improvement as a result of better mental health could be valued in monetary terms, using standard approaches, to add a further sizeable economic benefit.

#### **Modelling/Cost and benefit results**

114. There is not sufficient evidence to estimate the potential costs/benefits of these interventions. Previous evaluations of community development have tended to focus on processes (such as the numbers of people participating, issues solved, skills developed)

rather than outcomes. Assessments of impact are made more difficult by the necessary flexibility of community development objectives, the harnessing of heterogeneous resources in local communities to identify and creatively to meet local needs, the inherent co-production in many instances, and the cumulative impacts over time (Hills 2004).

# Addressing social determinants and consequences of mental disorder

## *Debt advice services*

### **Problem**

115. The current global financial crisis, coupled with rising unemployment, is contributing to an increase in debt problems among individuals throughout England. Research on the link between debt and mental health suggests the need for interventions to address and prevent mental health problems resulting from this trend. While both low income and debt are associated with mental illness, the effect of income on mental health appears to be mediated by debt (Jenkins et al, 2008); although those with low income are twice as likely to have mental disorder, this relationship was attenuated after adjustment for debt (OR 1.58, 95% CI 1.25–1.97) and vanished when other socio-demographic variables were also controlled. This highlights the importance of addressing debt.

116. Only about half of all people with debt problems seek advice (Pleasant et al 2004). Without intervention, 63% of people with unmanageable debt problems will still face such problems after a 12-month period. Moreover, individuals who develop unmanageable debt over a 12-month period have an 8.4% risk of mental health problems compared to 6.3% in the population without financial problems (Skapinakis, Weich et al. 2006). The vast majority of these mental health problems take the form of depression and anxiety-related disorders; both these conditions are associated with significant health and non-health system costs. Further, it is estimated that as many as one in four people with mental health problems may be in debt.

### **Proposed intervention**

117. The proposed intervention involves face-to-face, telephone or web-based debt advice services.

### **Modelling assumptions**

118. An economic model has been created which follows a hypothetical cohort of people at risk of unmanageable debt over a two-year period. It incorporates data from five elements:

- the link between financial debt and mental health;
- the link between mental health problems and costs (health service use, legal costs and lost workforce productivity);
- the impact of debt advice services on alleviating debt and hence on mental health;
- the cost of debt advice interventions; and
- the cost-effectiveness of debt advice interventions

119. Costs are assumed to be incurred for contact with a debt service in the first year. There is significant variation in the costs per person for debt advice services reported in different studies. The Thoreson Review of the provision of general financial advice services to the general population suggested that the costs for face-to-face, telephone and web-based services would be £34, £21 and £2.10 respectively (Deloitte and Touche 2008). This variation is likely to be influenced by site factors (e.g., salaries, site costs), method of intervention delivery (face-to-face, phone, internet), or population target groups. Moreover, the level of need varies by client and may affect number of visits per client. However, the costs of delivering face-to-face services to some client groups, including people with mental health problems can be much higher, with one review reporting costs between £201 and £377 (Comptroller and Auditor General 2010). The modelling results set out below assume face-to-face advice, at a cost of £270 per person.

120. For those who develop depression and anxiety disorders, additional health and social care-related costs, absenteeism from work and lost employment are incurred in the second year. All mental health problems were assumed to be anxiety and depression disorders as these are the

mental health problems most often reported by persons in financial debt (O'Neill, Prawitz et al. 2006).

121. There will also be savings in terms of avoided stress-related absenteeism and legal costs incurred for those whose debt remains unmanageable in year one. Avoided legal costs are assumed to be primarily in the form of legal aid, and so represent savings to the public purse.

122. For the general population, contact with face-to-face services may be associated with a 56% likelihood of debt becoming manageable (Williams and Sansom 2007) compared with 47% for the telephone (Pleasence and Balmer 2007). Around one-third of problem debt may be resolved without any intervention (Williams and Samson 2007). Further, individuals who avoid unmanageable debts have a 33% reduced risk of developing mental health problems (Skapinakis, Weich et al. 2006). No good data are available on the effectiveness of web-based interventions, and so very conservative estimates have been used both on uptake and effectiveness of this mode of intervention.

### Costs and Benefits Results

123. The costs and benefits of a face-to-face intervention costing £270 per person<sup>9</sup> have been estimated at an England level. This assumes that 4% of the adult population have unmanageable debt problems, of whom 46% would take up debt advice if offered. Benefits, discounted at 3.5% per annum, are estimated over a five-year period, taking the two-year model described above and allowing for longer-term mental health gains.

**Table 13: Cost and savings associated with Debt advice services**

2010/11 prices £m	2011/12	2012/13	2013/14	2014/15	2015/16	Total
<b>Costs</b>						
<b>Cost of Intervention</b>	£246m					£246m
<b>Opportunity cost of intervention</b>	£590m					£590m
<b>Savings</b>						
<b>NHS savings</b>	-	£7m	£7m	£7m	£7m	£28m
<b>Opportunity cost of NHS savings</b>	-	£17m	£17m	£17m	£16m	£67m
<b>Benefits</b>						
Legal savings	£48m	-	-	-	-	£48m
Workforce productivity gains	£4m	£54m	£53m	£53m	£52m	£216m

124. Several important benefits have not been estimated, which would raise the overall benefits substantially. These include debt repayments to creditors and Health and wellbeing gains to individuals.

## ***Befriending for older people***

### **Problem**

125. Social isolation and loneliness are experiences that are often associated with older people and may carry serious consequences for health and well-being, particularly for depression (Cacioppo et al., 2006; McCusker et al., 2007; Beekman, 1997). The prevalence of loneliness among older people has been estimated at between 5% and 16% in the UK (O'Luanaigh and Lawlor, 2008). Loneliness is also associated with cognitive decline in older adults (Wilson et al., 2007). Women tend to experience more loneliness than men, as do non-married older people and those who have experienced bereavement (O Luanaigh & Lawlor, 2008). The quality of social interactions, rather than the quantity of contacts or network structure seems to determine loneliness (Pinquart and Sorensen, 2003).

### **Proposed Intervention**

126. Befriending interventions targeted at older people often set up by the voluntary sector, using volunteers, aim to alleviate social isolation, as well as prevent loneliness and prevent or reduce depression in this group.

127. A number of positive (and potentially cost-saving) outcomes from such an activity can be described. A befriended older person might be assisted to attend the GP regularly so that there is early identification and treatment of health needs. Other needs, for personal care, might be identified earlier. The person would experience less loneliness, leading to lower incidence/severity of depression, a clear saving for mental health services.

128. Current evidence on health promotion interventions that target social isolation is equivocal. Most studies have poor trial designs and there is inconsistency in definition of terms (Findlay, 2003). However, the most recent evidence, a systematic review (Mead et al, 2010), showed that compared with usual care or no treatment, befriending had a modest but significant effect on depressive symptoms in the short term. Other evidence (Cattan et al, 2005) suggests that group interventions may be more successful than one-to-one interventions in alleviating social isolation and loneliness. A study by Stevens (2007) reports a befriending service set up to promote wellbeing and reducing loneliness. The intervention, a series of weekly classes for older women over a 3 month period, aimed to empower participants by helping them to clarify their needs, desires and expectations in friendships and then develop strategies to achieve their desired goals. At follow-up during the year after the programme, a majority had succeeded in developing new or improving existing friendships or significantly reducing loneliness.

129. LSE recent research shows that the effects on prevention of loneliness would reduce use of health service and would mean savings to the institutions involved in the social care of lonely elders. This is based on befriending interventions piloted under the Brighter Futures Group programme (BFG) in Kent, 2006-2008 (evaluated by PSSRU (2009), and using evidence from the Stevens study (2001), with data from Mead et al (2010).

### **Modelling/Cost and benefit results**

130. Although there is some evidence showing that befriending for older people has a positive impact, there is insufficient research data to quantify these positive benefits.

131. Befriending may lead to an increase in the demand for services but we have not been able to quantify the costs (and potential benefits) associated with this intervention.

## ***Stigma and discrimination***

132. Mental health stigma is pervasive in society. The Government will actively work with partner organisations, including the 'Time to Change' programme led by Mind and Rethink, to reduce the social barriers faced by people with mental health problems and improve mental health outcomes. This will mean impacting on behaviours toward people with mental health problems – improving public attitudes and reducing the institutionalised discrimination inherent in many organisations.

133. A systematic review found that stigma and discrimination related to mental illness had financial impacts due to effects on employment, income, public views about resource allocation and healthcare costs (Sharac et al, 2010). It also suggested that interventions which reduced stigma would be economically beneficial.

134. A decision model used to estimate the economic impact of an anti-stigma campaign based on increased use of services by people with depression and subsequent increased work time due to health improvement found that extra economic benefits (employment gains minus service costs) as a result of an anti-stigma campaign compared to the absence of a campaign (McCrone et al, 2009). This extra benefit amounted £421 per person with depression.

135. Time to Change currently use a range of indicators to measure progress in attitudes to mental health in the population at large, amongst employers and in the experience of people with mental health problems. We plan to work with Time to Change to agree the best ways of assessing improvements over the lifetime of this strategy, including an annual attitudes survey.

136. Research findings suggest that anti-discrimination campaigns can provide opportunities for substantial economic benefits and save costs in public services. An economic impact of the Time to Change programme concluded that:-

- The economic benefits of such a campaign outweigh the costs at least eightfold if it only results in 1% more people with depression accessing services and gaining employment if they experience a health improvement.
- If stigma/discrimination is reduced then it is likely that people with psychosis will receive treatment more quickly. If the campaign only accounts for 10% of people receiving early intervention services the savings can be around £5.5 million per year.
- Savings from treating people with psychosis have already been presented earlier in the document (Early Intervention and Early Detection for Psychosis).

137. Apart from economic savings, the qualitative benefits from this work are significant. We know that many suffer in silence, and this can affect their ability to recover fully because they do not seek appropriate treatment in time. Reduced stigma and discrimination is likely to lead to increased volunteering, taking part in (and leading) activities, joining clubs, making friends, and more actively engaging in civic life.

138. Costs associated with reduction in stigma and discrimination are yet to be confirmed as part of the policy process. It is also likely that a reduction in stigma and discrimination will lead to an increase in demand for services. We were not able to quantify these costs in this IA.

### ***Impacts upon Equality and Human Rights:***

139. An analysis of the impact on equality of this strategy is being published separately and is available on the DH website accompanying this Impact Assessment.

#### **Health Impact Assessment**

140. The policy around the development of the Mental Health Strategy is likely to contribute to significant positive impacts on health and wellbeing of the population and is its primary purpose.

#### **Will the proposals have a direct impact on health, mental health and well-being?**

141. The aim of the strategy is to set out a twin track approach of keeping people well and improving the mental health of the population and improving outcomes for people with mental health problems. Six high level mental health objectives have been developed based on a national consensus about what the priorities for change are. They do not form an additional framework but draw on and link to relevant outcome areas, and indicators, described in the Social Care, Public Health and NHS National Frameworks and are focused on improved outcomes and reduced inequalities for people with mental ill-health, those who care for them and those at risk of developing them. The strategy should therefore have a positive impact on mental health and wellbeing.

#### **Will the policy have an impact on social economic and environmental living conditions that would indirectly affect health?**

142. No

#### **Will the proposal affect an individual's ability to improve their own health and wellbeing?**

143. This strategy will help to disseminate information about how an individual can improve their own mental health and well-being, for example by recognising and reducing sources of stress. In addition, increased involvement in decision-making and choice and control over treatment approaches will help individuals of all ages and backgrounds receive the care that is most appropriate and acceptable to them.

#### **Will there be a change in demand for, or access to, health and social care services?**

144. The majority of this Strategy sets out the evidence on the factors that improve mental health outcomes including cost effective interventions. Local Authorities and the NHS will be able to accept, or leave, these suggestions based on their assessment of the needs of their local area.

145. We know that increased use of early intervention may lead to more use of primary care services and a decrease in secondary care services, with an overall reduction in demand for health and social care services as a result.

#### **Rural Impact Assessment**

146. This strategy is unlikely to have an adverse impact on rural areas or people. Local authorities and commissioners of health services are expected to consider the diverse needs of their own population, including that of rural areas. We recognise that the population of rural England is ageing faster than that of urban areas and that can present challenges in terms of more limited social networks and restricted access to services.

147. The ageing rural population also places greater pressure on mental health services particularly in light of the associated incidence of depression and dementia. Services can also be more costly to deliver due to the greater sparsity of rural areas.

## E. SUMMARY AND WEIGHING OF OPTIONS

148. The previous section presents the details of the analytical work undertaken by LSE analysts on behalf of the Department on mental health interventions presented in the Mental Health Strategy. This section brings together the analysis and shows the overall costs, cost savings and benefits of these interventions if they were implemented at a national level. However, these examples are indicative and local areas will decide if they want to implement them or not, or implement alternatives.

149. The price base year is 2010/11 and figures have been discounted to 2011/12. The time period over which we present costs, cost savings and benefits is 26 years; this is because the analysis on parenting interventions for families with children with conduct disorders (the intervention with the longest time period from all the interventions presented in this IA is 26 years-year 1 is the year intervention takes place and then benefits accrue for 25 years). Finally, costs and cost savings are presented as opportunity costs (multiplied by 2.4) according to DH Impact Assessment Technical Guidance.

**Table 14: Summary table of cost and benefits (including savings) associated with the interventions presented in the IA**

(£m, 2010/11 prices)	Costs			Savings		Benefits	
	Total Transition	Average Annual (exc. Transition)	Total Cost	Average Annual (exc. Transition)	Total Savings	Average Annual (exc. Transition)	Total Benefits
<b>CBT for MUS</b>	£9m	£6m	£160m	£17m	£430m	£7m	£179m
<b>Collaborative Care for Diabetes</b>	-	£13m	£340m	£1m	£24m	£71m	£1,852m
<b>Early Detection Services for Psychosis</b>	-	£30m	£785m	£73m	£1,907m	£47m	£1,229m
<b>Early Intervention Services for Psychosis</b>	-	£5m	£137m	£33m	£860m	£10m	£247m
<b>Family Training Programmes for Families with Children with Conduct Disorders</b>	-	£17m	£434m	£37m	£961m	£26m	£666m
<b>Screening and brief intervention in primary care for alcohol misuse</b>	-	£4m	£110m	£11m	£289m	£16m	£415m
<b>Debt Advice Services</b>	-	£23m	£590m	£3m	£67m	£10m	£264m
<b>Total</b>	£9m	£98m	£2,556m	£175m	£4,539m	£187m	£4,852m

150. The table above shows the cost, savings and benefits associated with all of the interventions. The final column shows net benefits (benefits plus savings minus costs<sup>10</sup>).
151. Overall, it can be concluded that the best practice examples presented in the MH Strategy not only have large potential benefits for the economy as whole, but also potential net savings for the Government and more particularly the NHS.
152. The only interventions that do not appear as cost effective are debt services and time to change because not all of the benefits were able to be quantified.
153. For interventions where benefits include QALY gains and productivity gains, we did not include the productivity gains in our calculations to avoid double counting. The QALY calculations include some of these gains already.
154. There may be some overlap between the interventions, and therefore the associated benefits, as they cover different aspects of people's lives (for example, somebody who may use Early Intervention for Psychosis services may also use Debt Advice Services). It is very difficult to disentangle their effects.
155. As mentioned before, this analysis is based on the LSE modelling work which has not been formally peer reviewed yet. It has been led by Professor Martin Knapp who is an eminent academic researcher with a particular interest in mental health, long-term care and social care, focusing particularly on the policy analysis and economic aspects of practice. He has been an adviser to many government departments and other bodies in the UK and elsewhere and to international bodies such as the European Commission and the World Health Organization.

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<sup>10</sup> as said above, costs and savings are presented as opportunity costs

## Annexes

### Annex 1: Post Implementation Review (PIR) Plan

- A PIR should be undertaken, usually three to five years after implementation of the policy, but exceptionally a longer period may be more appropriate. A PIR should examine the extent to which the implemented regulations have achieved their objectives, assess their costs and benefits and identify whether they are having any unintended consequences. Please set out the PIR Plan as detailed below. If there is no plan to do a PIR please provide reasons below.

<b>Basis of the review:</b>  To review existing policy
<b>Review objective:</b> To make a formal assessment of to what extent the strategy has succeeded in meeting the six shared objectives set out on page 1 of this document.
<b>Review approach and rationale:</b> Review of key monitoring data, based on the six objectives and input from key stakeholders in order to take a view about the future of mental health policy.
<b>Baseline:</b>  No legislation is proposed
<b>Success criteria:</b> The strategy sets out its relationship to the three outcome frameworks and it identifies where additional indicators may be needed.
<b>Monitoring information arrangements:</b>  The Cabinet Sub-Committee on Public Health will oversee the implementation of the strategy. The Minister for Care Services will chair a cross sector advisory group which will review the success of the strategy in meeting its objectives, and advise on the potential development of further indicators.
<b>Reasons for not planning a PIR:</b>  Not applicable.

## Annex 2: References used in the analysis

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