



# Economic impact of social care services Assessment of the outcomes for disabled adults with moderate care needs



Final Report, May 2013

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# Executive Summary

# Executive summary

The Other Care Crisis (2013) estimates that social care for disabled adults is underfunded by at least £1.2 billion and 105,000 working age disabled people could lose out on social care and support, as a result of proposed Local Authority funding cuts.

In light of this finding, Deloitte has been commissioned to assess the potential economic impact of providing care to working age disabled people with moderate care needs. The study estimates the economic impact based on four case studies covering current services delivered to disabled adults:

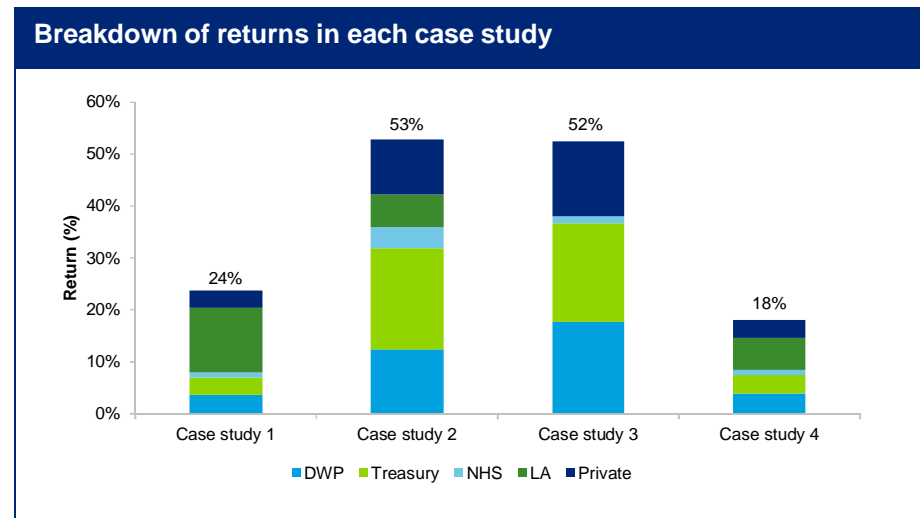
1. Horizons day centre
2. Network Plus housing support service
3. Communicator-guide
4. Inclusion adult day service

The case studies consider the economic position of individuals, carers, local and central government should services be delivered or removed. A range of impacts are estimated including impacts on income, taxation, benefits and preventative impacts. Data has been drawn from existing studies, research and discussions with service providers.

Based on the four case studies, all services are estimated to provide a net positive economic impact. Returns are estimated to range from 18% to 53% and are driven by a range of factors including:

- Income generated from supporting people into employment (this benefit accrues to private users and carers);
- Avoided cost of unemployment benefits paid to people moving into employment (this benefit accrues to DWP);
- Greater taxation receipts, from carers and people moving into employment (this benefit accrues to the Treasury); and
- Prevention of individuals circumstances deteriorating and relying on more costly public services (this benefit accrues to LA and NHS).

	Total benefit per user	Service cost per user	Net Return
Case study 1	£ 12,063	£ 9,744	24%
Case study 2	£ 2,300	£ 1,505	53%
Case study 3	£ 4,995	£ 3,276	52%
Case study 4	£ 9,479	£ 8,028	18%



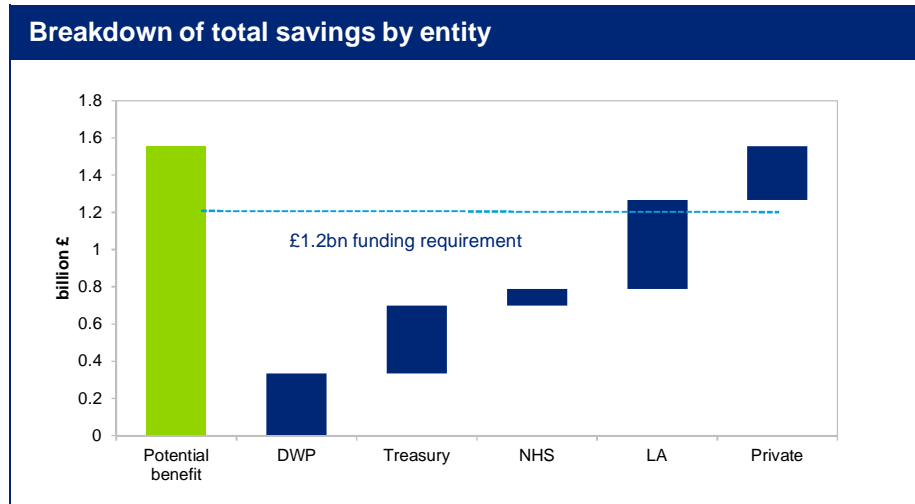
# Executive summary

The separate case study results can be aggregated to estimate an overall expected return for services provided to working age disabled people with moderate needs. Based on weighting the four returns by the demand for services, an overall expected return across all services is estimated to be 30%. The magnitude of this is similar to returns found in other research, for example the National Audit Office's estimation of returns from Supporting people with autism through adulthood (2009).

On the basis of this overall return, funding £1.2 billion of care for working age disabled people with moderate needs could lead to net benefits of £355m. This wider return is significant, suggesting that funding for people with moderate care needs should be carefully considered. The majority of the benefits accrue to Local Authorities, Treasury and both users and carers.

In order to explore further the economic impact of social care on NHS and Local Authority budgets, a further high-level analysis has been conducted estimating the returns from a resource centre service focused on mobility services. A potential return of 39% is estimated, with 68% of this saving attributed to the NHS budget. This demonstrates that some services could have significant impacts on the NHS.

This report has been restricted by some of the information and research available. Specifically, there is currently limited robust primary evidence around the outcomes of social care for disabled people with moderate care needs. It is recommended that future research should consider specifically this group. This would support further analysis of the wider impacts of removing funding.



# Introduction and Policy

# Introduction and scope

## Background...

To build on the findings of The Other Care Crisis report<sup>1</sup>, Deloitte Economic Consulting has been engaged by the group of disability charities comprising Leonard Cheshire Disability, Mencap, The National Autistic Society, Scope and Sense, to estimate the economic impact of providing social care services to disabled adults with moderate needs.

## Scope of the study...

The analysis in the report considers the economic impact of social care services provided to disabled adults assessed as having moderate needs in England. This is based on the estimate provided in the PSSRU (2013) report<sup>2</sup> which considers social care provision to people with moderate needs in England. The estimated cost savings are based on a single year of savings for the financial year 2013. Where required, cost data is converted to 2013 prices based on the consumer price index.

Deloitte has worked with the aforementioned group of charities to assess five representative social services and estimate the incremental benefits and savings through cost prevention. These benefits and savings accrue to a range of institutions, such as:

- Central Government – including HM Treasury and the National Health Service (“the NHS”);
- Local Government; and
- Personal i.e. users of social care services and their families.

The nature of the benefits and savings related to each service has been determined based on discussions with the charities, case studies based on individuals’ experiences and publicly available reports and surveys. Where possible, these benefits and costs have been quantified. However, there are additional benefits which are not quantifiable, either due to the nature of the benefit or lack of data.

## Limitations...

The quantitative analysis is based on the available data at the time of writing. The underlying assumptions are compiled based on a combination of sources including: publicly available reports and surveys, data sets provided by the charities, discussions with service providers, case studies supplied by the service provided, and Deloitte subject matter experts. Where judgment is used to form the assumptions, appropriate caveats are clearly stated and sensitivity analysis is undertaken to reflect the underlying uncertainty. Primary research is beyond the scope of this study.



<sup>1</sup> Scope, Mencap, The National Autistic Society, Sense, Leonard Cheshire Disability, The Other Care Crisis: Making social care funding work for disabled adults in England, 2013.

<sup>2</sup> PSSRU at LSE, Implications of setting eligibility criteria for adult social care services in England at the moderate needs level, PSSRU Discussion Paper DP2851.



# Policy context

## Following on from 'The Other Care Crisis'...

The 2013 report, *The Other Care Crisis*, authored by The National Autistic Society, Mencap, Leonard Cheshire Disability, Sense and Scope, estimates that social care for disabled adults is underfunded by at least £1.2 billion, and that 105,000 working age disabled people are set to lose out on essential social care and support as a result of proposed Local Authority funding cuts.

Pressure on the public purse has led to an increasing number of Local Authorities no longer funding disabled adults who are assessed as having moderate needs, raising the threshold to include only those assessed as having substantial or critical needs. *The Other Care Crisis* reports that between 2010/2011 and 2014/15 Local Authority budgets will have shrunk by 28%, which indicates that social care funding may continue to be threatened.

Disabled adults assessed as having moderate needs have the potential to lead relatively independent lives, but can only do so with the correct support to ensure that their needs are met and their care and support needs do not deteriorate. The same report found that 36% of disabled adults were unable to eat, wash, dress or get out of the house due to underfunding. Furthermore, nearly half of disabled adults reported that the social services that they did receive did not allow them to take part in community life, leaving them feeling socially isolated.

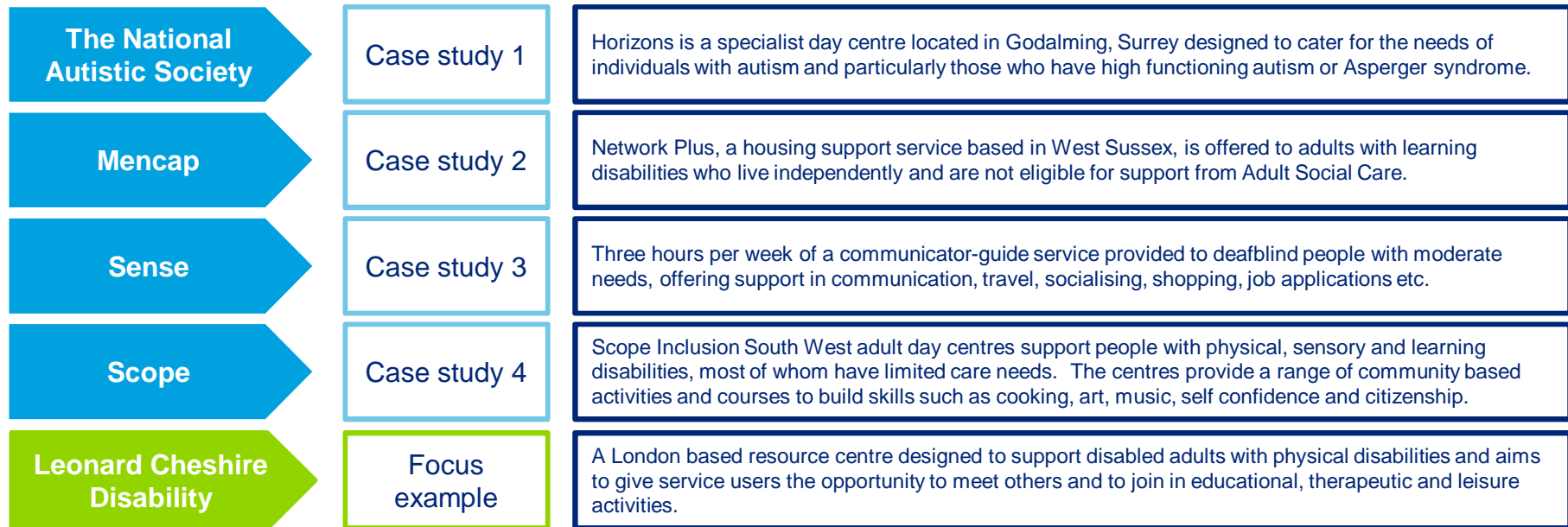
*The Other Care Crisis* finds that, increasingly, disabled adults with moderate needs are not having their needs met until either their care needs have increased or they find themselves in a crisis situation as a result of the initial unmet need. Families and carers also suffer as a result. In such cases both local and central governments can be faced with the higher cost of providing more complex care.

Moderate level social care may have wider benefits such as preventing more serious needs developing (if an individual's support needs were to augment as a result of not having the appropriate care), or, through supporting disabled people and their families to enter the labour market.

This study considers the economic impact of a set of representative social care services targeted at disabled adults with moderate needs. It seeks to quantify the benefits and prevented costs that can potentially be derived from services addressing moderate level needs. The case studies considered are based on specific services and are aggregated to provide an indication of the potential wider system impact.

# Selection of case studies

In order to estimate the potential impact of moderate level social care services, five representative services are used to form four main case studies and a focus example. These services are based on actual services provided by each of the participating charities.



- By selecting a service from each charity, a range of service benefits are identified, which vary in relation to the nature of the services provided and the specific disabilities to which they are targeted.
- The quantitative analysis is based on the costs and benefits of these specific services.
- The selected services are intended to demonstrate a range of economic benefits that can be realised across a range of different types of services.
- A further example focuses on the impacts on the budgets of the NHS and Local Authorities is also included. It is more limited in scope than the four main case studies as it does not comprise the full range of economic benefits that could be realised by the provision of social service.

# Outcomes of social care (part 1)

## Mapping the service pathways...

- A standard assessment framework is applied to each of the case studies. This allows for the benefits and cost savings of each service to be mapped into a 'service pathway'.
- The benefits and savings from prevented cost vary depending on the nature of the service and disability in each case study. For simplicity, they can be categorised into three impact areas: Individual, Carer, and Preventative.
- This slide and the following provide an overview of the benefits and avoided costs estimated by each of the case studies.

	Impact	Description	Case study			
			1	2	3	4
Individual impact	Increase to income and tax contributions	Services can help to support disabled people find and retain employment. Some services may directly target employment support, teach social skills and confidence and provide guidance for applications and interviews. However, other services, which support safe living environments, positive wellbeing and prevent the need for higher care, can also have a positive impact on employment.	X	X	X	X
	Reduction to benefits payments	Successful employment results in an increase to the individuals income, as well as increased payments to the government in terms of tax contributions and reduced expenses in unemployment benefits.	X	X	X	X
Carer impact	Increase to income and tax contributions	Many disabled people with moderate care needs live at home with family or have family who act as carers.	X	X		X
	Reduction to benefits payments	Services may help to allow disabled adults to live more independently and safely in their own homes. This could reduce the amount of support required from family carers and could allow for a proportion of carers to enter employment, earn additional income, pay tax and receive fewer benefits.	X	X		X
	Improved wellbeing	The responsibility of caring for a family member with a disability may be stressful. Without receiving the appropriate level of support the wellbeing of carers can deteriorate due to stress, anxiety and lack of respite.	X	X		X

# Outcomes of social care (part 2)

Providing a few hours of low cost social care to disabled people with moderate needs can potentially prevent the need for more costly interventions and outcomes in the future.

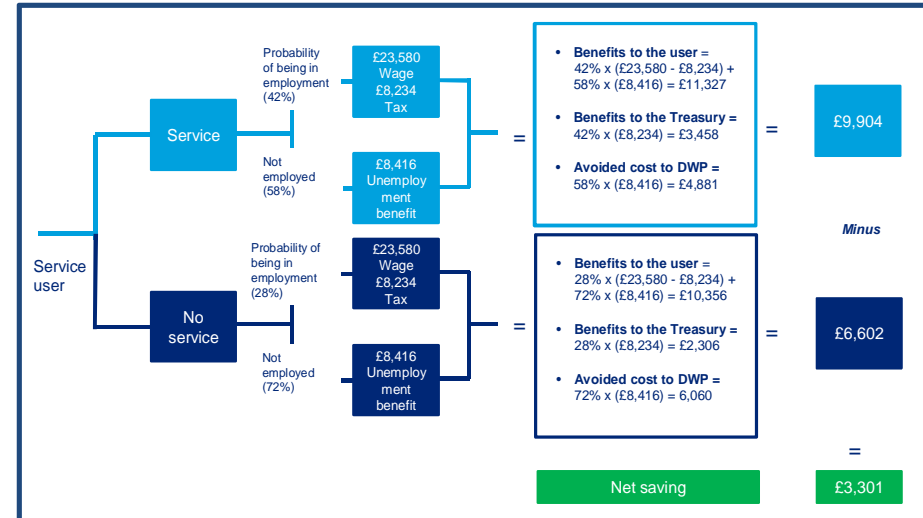
	Impact	Description	Case study			
			1	2	3	4
Preventative impact	Mental health	Isolation and loneliness may be a risk for disabled people when not supported to live active and social lifestyles. Without the support to travel, access day centres and be more independent, individuals' mental health and wellbeing could deteriorate. Mental health problems also induce poorer health outcomes and exacerbating physical illness.	X	X	X	X
	Increased ability to follow a healthy lifestyle	Without the correct support, disabled people could become isolated in their own homes. Social services could help to provide support to exercise and have access to information to follow a healthy diet.		X	X	X
	Missed medical appointments	People with sensory impairments could be at risk of missing medical appointments due to poor communication by the hospital or lack of support to travel to and communicate during the appointment.			X	
	Debt	Disabled people could be at risk of amassing debts for a number of reasons. People with sensory impairment may be unaware of bills due to be paid, or changes to charges due to poor communication by banks. Whilst people with learning disabilities may not have been appropriately explained the terms of financial products such as credit cards or loans.		X	X	
	Crime	Without the correct support, there is potentially an increased risk that people could become involved with crime or exploited by criminals.		X		
	Higher care needs	Without the correct support for people with moderate care needs, which can be met with low level care, they could find their needs augmenting to a higher level of support. It may be that (more costly) support is only provided once needs become substantial or critical.	X	X		X
	Residential care	Providing a few hours of support a week to people with moderate care needs and their families could mean the difference between support being provided comfortably at home and a crisis situation unfolding whereby residential care is required.	X	X		
	GP visits	A low level of support and the correct advice on safe health practices and self care could reduce the need for GP consultations.	X			X
	Crisis – Hospitalisation and admissions for ACSC	Failure to monitor wellbeing in terms of mental health, vulnerability to abuse, safe living environment, or finances can in extreme cases may lead to a crisis situation which may potentially require costly intervention and potentially hospitalisation. Disabilities could also increase the probability of Ambulatory Care Sensitive Conditions which lead to emergency hospital admission but could be avoided with the correct support from social services.	X			X

# Methodology

# Methodology (part 1)

A model has been developed to analyse the potential economic impact of providing support services for disabled adults with moderate care needs across England. The model compares a scenario where different support services tailored to specific disabilities are provided to adults with moderate care needs to a baseline case where no service is provided (the “counterfactual”).

- **Step 1 – identification of service provided.** For each case study, the service provided, the type of users, the challenges that it proposes to address, the average hours the service is provided per week and the cost of the service per hour is classified.
- **Step 2 – benefits of the service and costs of the counterfactual.** A monetary value is attached to each of the possible outcomes that result from users receiving the service. These can be of two types: *direct benefits*, such as increased income to the user or increased tax revenue to the Treasury or *avoided costs*, such as those that would be incurred in the counterfactual were the service not be provided and thus resulting in higher level needs of care; the latter capture *the preventative impact* of the service.
- **Step 3 - probabilities.** The probability of a particular outcome will vary conditional on receiving the service or not, therefore cost data relative to each outcome in a scenario are combined with the probabilities of reaching those outcomes.
- **Step 4 – calculation of expected saving.** The probabilities and cost data are evaluated for the scenario where the service is provided and for the counterfactual. The difference between the two resulting values will then represent the expected total saving or cost from service provision.



The tree diagram above provides a simplified illustration of the steps included in the calculations, taking into account only the impact the service might have on the employment of users. The complete model includes all possible outcomes and their probabilities, as specified in Step 2.

The dark blue branches of the tree represent the counterfactual, or alternative pathway of the service user, if the selected service had not been in place. The probability of the user being employed would have decreased, which results in a lower income from wages to the user, a lower tax revenue for the Treasury and higher unemployment benefits to be paid by the DWP.

The light blue branches indicate the service user pathway. Due to the support received, the user data indicates higher levels of employment, and thus higher benefits and higher avoided costs. In the complete version of the model, these will include for example the avoided cost associated with treating mental health problems that could result if the user were not provided low level care by the service; the probability attached to this outcome would then be lower than in the counterfactual, implying a higher avoided cost.

The calculations to the right of the tree are expected values for the service user, the treasury and the DWP accounting for the probabilities associated with each branch. The monetary value for the user is obtained by subtracting the expected unemployment benefit from the expected income net of tax, in the two scenarios respectively. Similarly, the value for the treasury is equal to the expected value of the tax received from the user if in work and the value to the DWP is the expected avoided cost of paying the user unemployment benefits if unemployed.

## Approach

- The approach used in this study is focussed on the short-term benefits of the scheme. Future research could consider extending the analysis to consider long term impacts, for example whether the schemes continue to have a prolonged impact on people reducing their usage of health and social care.
- Not all alternative pathways in the alternative scenario costing are identified. This is particularly relevant when estimating costs to social care where lower level support is difficult to determine.

## Data collection

Data for the study has been obtained from various sources including:

- Publicly available information, such as secondary research and surveys;
- Discussions with charities’ service managers;
- Charity data sets; and
- Case studies provided by the charities.

A full description of the data underlying each case study is included in the appendix.

# Methodology (part 2)

## Monte Carlo simulation - Accounting for uncertainty

In order to measure the economic impact of the services in each case study a number of assumptions are made where primary evidence was not available. To systematically account for this uncertainty, specific modelling techniques can be employed to establish a distribution around the estimated economic impact. Such tools include the Monte Carlo method.

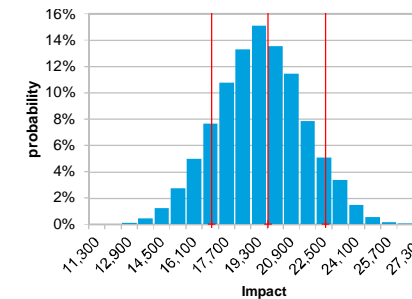
A Monte Carlo approach is employed to account for uncertainty in one or more key assumption or parameter in each case study. The simulations are undertaken using the scientific software TreeAge Pro 2013.

Monte Carlo approaches are used in a wide variety of applications including in science, finance and economic impact analysis. The approach is discussed explicitly in the Green Book (HM Treasury, 2003)<sup>1</sup> as a key tool in economic impact analysis where uncertainty exists in the underlying assumptions or modelling and has been applied, for example, in the National Audit Office's report Supporting people with autism through adulthood (2009)<sup>2</sup>.

The Monte Carlo approach allows the uncertainty for any particular parameter to be considered and the end impact on the overall economic analysis to be quantified.

The graph on the right is only illustrative and represents the distribution of the total economic impact from a given service. On the x-axis is the range of potential impacts with the probability of a particular impact presented on the y-axis.

To interpret this graph consider that the possible impact of the scheme is £20,000. Reading across the y-axis, corresponding to a £20,000 impact, the probability of the impact actually being £20,000 is estimated to be around 13%.



Using this graph the probability of a particular range can also be established. For example, allowing for possible higher and lower impacts we can be 95% certain that the impact is between approximately £17,000 and £22,000. This 95% confidence interval is delimited by the red lines in the graph.

## Methodology - Calculating the blended rate of return for moderate care services

**Step 1** - For each case study, a gross rate of return on the investment in the service is calculated. This is equivalent to the ratio of total benefits accrued from the service to the cost incurred to provide the service. The net rate of return is the gross rate minus one.

**Step 2** - Since the services presented in the four case studies are only a small part of the packages that service users might be receiving, a more comprehensive representation is achieved by calculating a blended rate of return for the entire range of social care services for moderate care needs. This is done by weighting each rate of return calculated in step 1 for the four main case studies by the number of potential users of moderate care services for each specific disability. The number of potential users is the number of disabled adults with 'high moderate' and 'moderate' care needs as estimated in PSSRU, *Implications of setting eligibility criteria for adult social care services in England at the moderate needs level*, 2013. For this exercise, the number of people affected by mental disabilities is excluded due to the nature of the services in the case studies, which do not target these kind of disabilities. The return in case study 3 is also excluded due to the higher uncertainty which it entails. Finally, the weighting assumes that case study 1 accounts for potential users with autism, case study 2 for potential users with learning disabilities excluding autism and case study 4 for potential users with physical disabilities.

**Step 3** - The blended rate of return is then applied to the required investment in social care services to ensure that disabled adults receive the adequate level of support, as estimated in The Other Care Crisis, which amounts to £1.2 billion. It is recognised that the actual returns available from the overall funding requirement could differ from the estimate developed in this report, given the precise nature of the services which could be delivered.

<sup>1</sup> HM Treasury, Green Book, 2003.

<sup>2</sup> National Audit Office, Supporting People with Autism Through Adulthood, 2009.

# Case study dashboard guide

Each case study is supported by a set of three main dashboards. The key below sets out how the key case study information is displayed.

- A** Identifies the service, the users and the challenges faced.
- B** Provides a background description of the service.
- C** Case studies and real life experiences.

**Case Study 3**  
Domiciliary care services for adults with moderate level learning disabilities

For who?	What challenges are faced?	What is the impact of the service?
Adults with learning disabilities and assessed as having moderate needs and receive support whilst living in their own homes. £21,700 per week.	<ul style="list-style-type: none"> <li>Isolation and loneliness</li> <li>Vulnerability to bullying and crime</li> <li>Poor diet and lifestyle</li> <li>Escalating of needs to substantial/critical</li> </ul>	<ul style="list-style-type: none"> <li>Provides support to allow independent living, potentially supporting employment</li> <li>Removes burden from carers</li> <li>Allows for 'check-in' to ensure not in vulnerable situations</li> </ul>

**Network Plus**  
My Network Plus is a housing support service based in the Burges Hill and Haywards Heath areas and is offered to adults with learning difficulties who live independently and are not eligible for support from Adult Social Care.  
Through providing low level care with a few hours of contact a week, Network Plus allows adults with learning disabilities to continue to live independently and safely.  
Network Plus provides a range of services, which meet the varying needs of its users. These services include:  

- basic money advice such as budgeting which helps people getting into debt;
- information and advice on personal conditions to ensure a responsible citizen which could prevent neighbour disputes for example and avoid lifestyles which could lead to legal activities;
- advice to people with young children who are becoming at risk;

However more generally, low level support could be as diverse as:  

- general advice and information
- leisure activities
- accessing the community
- budgeting
- prompting to look after the place the person lives in and advice on general tenancy issues
- prompting to look after themselves
- healthy lifestyles advice
- sign posting to other advice and support agencies
- maintaining contact with families

The Network Plus service is funded by the local authority (West Sussex County Council). Where Mencap provides this type of service they have historically been funded by local authorities. However, it is increasingly less likely that this funding will be provided as some of these activities e.g. leisure are no longer considered as essential.  
**Benefits of Network Plus...**  
Whilst the services provided by Network Plus for adults with moderate needs may be relatively low level, they have the potential to help prevent potentially critical and distressing situations unfolding.  
The benefits from the service could include:  

- diversion from emergency and higher level care
- support systems
- preventing people getting into debt
- avoid people losing their tenancies
- preventing and social or criminal behaviour
- improving physical and mental health
- reducing isolation
- improved quality of life
- improved participation in the community

**Case Study 1**  
Day centre for adults with autism providing education, training and the opportunity to socialise

The benefit of the service to a variety of stakeholders can be calculated based on estimated costs and assumptions as to the likelihood of the service improving outcomes. The full range of assumptions can be found in the Appendix.

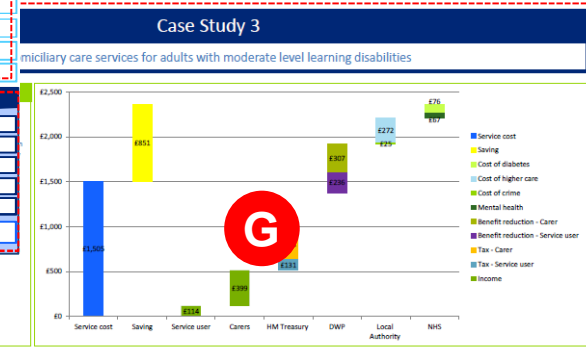
Impact of service to measurable outcomes	Out come	Impact	£ per user
Service user employment	Net tax	HM Treasury	£ 1,139
	Income	Service user	£ 1,114
	ESA/SI	DWP	£ 1,363
Carers	Net tax	HM Treasury	£ 515
	Carer	Carer	£ 563
	DWP	DWP	£ 522
	NHS	NHS	£ 86
Preventative impact	Health	User	£ 50
	Substantial/critical care	LA	£ 1,502
	Residential care	LA	£ 4,841
	GP visits	NHS	£ 93
	Hospitalisation	NHS	£ 273

For each adult assessed as having moderate needs who receives and could potentially receive autism support services, it is estimated that per year...

Total benefits and savings of...	£ 12,063
Based on a service cost of ...	£ 9,744
Provides net savings per user	£ 2,319
Results in total potential return on investment of...	24%

**Total impact per user**

Users and carers	£ 1,677
DWP	£ 1,885
HM Treasury	£ 1,654
Local Authority	£ 6,343
NHS	£ 502
<b>Total benefit</b>	<b>£ 12,063</b>

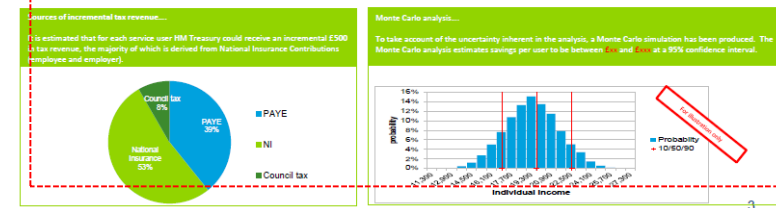


**D** Describes the types of outcomes and provides the incremental monetary value of the service that is associated with each outcome.

**E** Calculates the total saving per user and the return on investment.

**F** Shows how the savings are split between types of stakeholder.

**G** Shows how the savings are split between types of outcome, type of tax and illustrates the output of the Monte Carlo simulation.





# Case studies

# Case Study 1

## Day centre for adults with autism providing education, training and the opportunity to socialise

Which service?	For who?	What challenges are faced?	What is the impact of the service?
2 days per week at Horizons centre. Cost: £ 93.68 per day	An estimated 7,000 moderate needs adults with high functioning autism or Asperger syndrome could access the service	<ul style="list-style-type: none"> <li>• Social skills and communication</li> <li>• Mental health</li> <li>• Accessing the job market</li> <li>• Dependency on family as carers</li> <li>• Risk of higher care needs</li> </ul>	<ul style="list-style-type: none"> <li>• Successfully finding and keeping employment</li> <li>• Independence and healthy lifestyle</li> <li>• Improved social interaction</li> <li>• Reduced dependence on family</li> </ul>

### Horizons day centre

Horizons is a specialist day centre in Godalming, Surrey for adults with autism or Asperger syndrome. Individuals receive support with education and training, and have the opportunity to socialise.

The service was originally opened in 2007 as there was a need for the more high functioning individuals who were already receiving support in Surrey day services. Through the use of SPELL and TEACCH approaches, Horizons day centre helps people with autism across the spectrum to gain in confidence and to become more independent.

**Horizons day centre is opened Monday to Friday and provides a range of services**, which meet the varying needs of its users. These services include:

- communication and social skills training
- support with emotional and behaviour management
- pre-employment and employment support
- cookery
- art and pottery
- money management
- first aid and safety

Moreover, a number of services are offered in the community and could cover activities as diverse as:

- ICT, numeracy and literacy and pre-employment skills at Godalming Business College
- adult education classes, for example in tai chi, pottery and art
- support at work
- leisure activities including swimming, rock climbing, trampolining, skiing and skating
- trips to cafes, pubs and restaurants
- visits to museums, the theatre and cinema

#### A personalised approach

- A key aspect of Horizon's approach is to allow those with autism to take responsibility for building their own programme
- Each person has an individually tailored set of activities that will best enable them to extend their skills and pursue their passions
- Family, carers, friends and staff are all involved in the planning process

#### As a centre specialised to understand autism Horizons:

- Provides learning in an autism specific group environment
- Supports training for individuals to become more independent
- Support staff have a good understanding of ASD and adapt approaches dependent on the individual they are supporting

**Mr Fino (not his real name) is a 23 year old with a diagnosis of ASD and Schizophrenia, with the support of Horizons he has recently got a job volunteering and is now working towards moving out of his family home and into supported living...**

Mr Fino was receiving minimal support from an agency who supports young adults with learning disabilities when he was referred to the NAS Outreach service by his care manager, who carried out an assessment of his needs.

Mr Fino required support to engage in activities and look for suitable jobs. He also needed guidance to gain a better understanding of social rules and to develop his awareness of dangers in the community. Mr Fino also had difficulties understanding boundaries in regards to friendships.

Mr Fino received outreach support for around six months before he started accessing the Horizons day centre. At **Horizons** Mr Fino was able to develop his skills further by attending four sessions a week. These are **Cookery**, **Pathway** (an employment skills group), **Money Management** and **Social Eyes** (to develop a better understanding of social cues/skills).

Mr Fino also attended a 1:1 meeting with the behaviour coordinator once a week to discuss any concerns.

Mr Fino now learns a lot of skills around socialising, social boundaries, employment and money management in a classroom environment at Horizons and uses his Outreach hours to put these into practice.

The staff team who have supported Mr Fino within the service have also carried out a lot of joint working with other agencies and the family to ensure to meet the needs of the individual and all work towards the agreed outcomes for Mr Fino.

Using the gained skills along with consistent support from those around him, Mr Fino has recently got a volunteering job and is now working towards moving out of his family home and into supported living.

# Case Study 1

Day centre for adults with autism providing education, training and the opportunity to socialise

The benefit of the service to a variety of stakeholders can be calculated based on estimated costs and assumptions as to the likelihood of the service improving outcomes. The full range of assumptions can be found in the Appendix.

Service impact	Impact of service to measurable outcomes		Out come	Impact	£ per user
	Service user employment	Horizons improves the chances of successfully finding employment by providing a range of services including the <b>Pathway</b> employment skills course. This consist of guidance with applications, interview skills, social skills and on going support.	Net tax	HM Treasury	£ 1,139
			Income	Service user	£ 1,114
			ESA/IS	DWP	£ 1,363
Carers	Horizons supports people by teaching them skills to live more independent lives. Reduced dependence on family for care allows carers to enter full-time or part-time work. It also reduces the risk of carers developing mental health problems.	Net tax	HM Treasury	£ 515	
		Income	Carer	£ 563	
		ESA/IS	DWP	£ 522	
		Mental health	NHS	£ 86	
Preventative impact	Horizons provides specialist services that target the specific needs of people with autism. The majority of people who access the services have Asperger syndrome or high functioning autism. Each individual is provided with a tailored programme of activities to meet their particular needs. Failure to understand and address needs appropriately can potentially lead to an escalation in an individual's care needs including: <ul style="list-style-type: none"> <li>Needs progressing from moderate to substantial or critical</li> <li>Mental health problems (requiring hospitalisation)</li> <li>Residential care</li> <li>A personal cost of depression (isolation, anxiety)</li> </ul> These more costly service requirements could be avoided by appropriately providing for moderate needs.	Mental health	NHS	£ 50	
		Substantial / critical care	LA	£ 1,502	
		Residential care	LA	£ 4,841	
		GP visits	NHS	£ 93	
		Hospitalisation	NHS	£ 273	

For each adult assessed as having moderate needs who could potentially receive autism support services, it is estimated that per year...

Total benefits and savings of...	-	£ 12,063
Based on a service cost of...		£ 9,744
Provides net savings per user of...	=	£ 2,319
		↓
Results in total potential return on investment of...	=	24%

Total impact per user	
Users and carers	£ 1,677
DWP	£ 1,885
HM Treasury	£ 1,654
Local Authority	£ 6,343
NHS	£ 502
<b>Total benefit</b>	<b>£ 12,063</b>

# Case Study 1

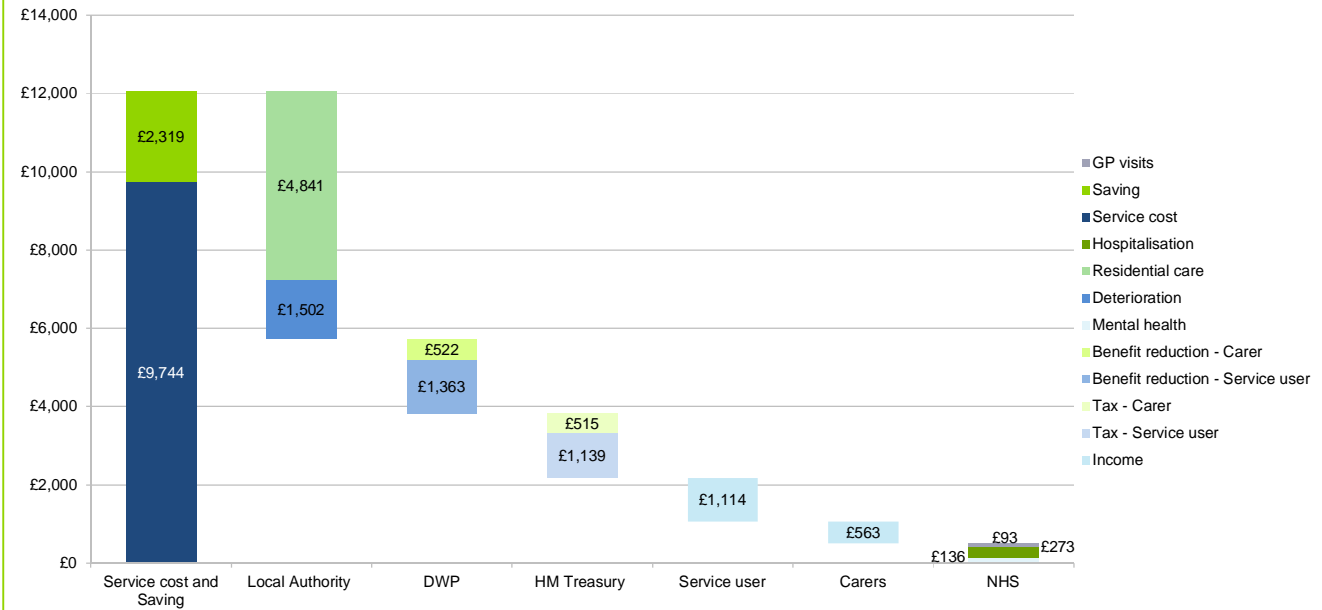
## Day centre for adults with autism providing education, training and the opportunity to socialise

### Allocation of total savings...

The waterfall chart opposite provides a breakdown of the benefits and savings by the outcome and stakeholder who receives the benefit.

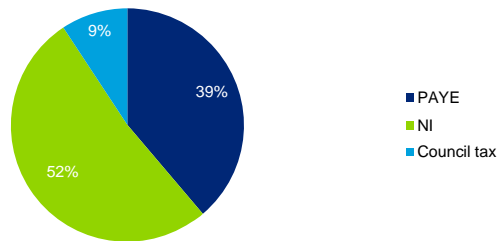
In this case, over 50% of the cost savings are accrued through the prevention of higher care needs.

HM Treasury and DWP together would receive approximately 30% of the savings and the Local Authorities would receive 50%.



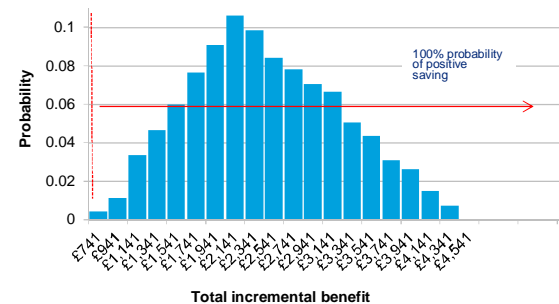
### Sources of incremental tax revenue...

It is estimated that for each service user HM Treasury could receive an incremental £ 1,654 in tax revenue, the majority of which is derived from National Insurance Contributions (employee and employer).



### Monte Carlo analysis...

To take account of the uncertainty inherent to the analysis, a Monte Carlo simulation has been produced. The Monte Carlo analysis estimates savings per user to be positive with 100% probability. Details are provided in the appendix.



# Case Study 2

## Domiciliary care services for adults with moderate level learning disabilities

Which service?	For who?	What challenges are faced?	What is the impact of the service?
1.5 hours per week of domiciliary care at a cost of £ 21.70 per week	Adults with learning disabilities who have been assessed as having moderate needs and receive support whilst living in their own homes	<ul style="list-style-type: none"> <li>• Isolation and loneliness</li> <li>• Vulnerability to bullying and crime</li> <li>• Poor diet and lifestyle</li> <li>• Escalating of needs to substantial /critical</li> <li>• Money management</li> </ul>	<ul style="list-style-type: none"> <li>• Provides support to allow independent living, potentially supporting employment</li> <li>• Supports carers</li> <li>• Allows for 'check-in' to ensure not in vulnerable situations</li> </ul>

### Network plus

My Network Plus is a housing support service based in the Burges Hill and Haywards Heath areas and is offered to adults with learning disabilities who live independently and are not eligible for support from Adult Social Care.

Through the provision of low level care with a few hours of contact a week, Network Plus allows adults with learning disabilities to continue living independently and safely.

**Network Plus provides a range of services**, which meet the varying needs of the people supported. These services include:

- basic money advice, such as budgeting, which could prevent people getting into debt
- information and advice on personal conduct and being a responsible citizen, which could prevent neighbour disputes and avoid lifestyles which could lead to illegal activities
- advice to people with young children, which might prevent children becoming at risk.

However more generally, low level support could cover activities as diverse as:

- |  |   |
|--|---|
| • general advice and information   | • prompting to look after themselves                |
| • leisure activities   | • healthy lifestyles advice                         |
| • accessing the community  | • sign posting to other advice and support agencies |
| • budgeting  | • maintaining contact with families                 |
| • prompting to look after the place the person lives in and advice on general tenancy issues |   |

**The Network Plus service is funded by the Local Authority** (West Sussex County Council).

Where Mencap provides this type of service, they have historically been funded by Local Authorities. However, it is increasingly less likely that this funding will be provided as some of these activities, for example, leisure are no longer considered as essential.

### Benefits of Network Plus

Whilst the services provided by Network Plus for adults with moderate needs may be relatively low level, they have the potential to help prevent critical and distressing situations unfolding.

The benefits from the service could include:

- |  |   |
|--|---|
| • diversion from emergency and higher level care support systems | • improving physical and mental health    |
| • preventing people getting into debt                            | • reducing isolation                      |
| • avoid people losing their tenancies                            | • improved quality of life                |
| • preventing anti social or criminal behaviour                   | • improved participation in the community |

*Elizabeth (not her real name), lived in a charity-run supported living flat on her own in London. When her 7-hours per week of key workers support was reduced she was left unable to cope and as a result had to leave her job...*

Elizabeth used to have 7 hours of key worker support per week to help with managing her bills and shopping. Out of the blue she was told she no longer needed the support, and her hours were reduced to 3 per week. Elizabeth says, "I was really angry". Following this, and a break up of a relationship, she fell into crisis.

"I asked for an emergency meeting because I'd had enough of feeling invisible". It took a year for Elizabeth's support to be increased, and with the support of a local advocacy charity she now has 5 hours support per week, which she feels is enough as she also has a new boyfriend to help support her.

In the meantime, Elizabeth had to leave her part time job. "I did have a job but I left. I was working with disabled people. I left because I couldn't cope. I thought it wasn't fair on the clients. I was going through a bad time, overdosing a lot".

Elizabeth wanted to share her story if it might make a difference and help change politicians' minds. "All they think about is cuts. They don't care about us. It's mostly us that suffer".

Elizabeth won back some of her support. "But I had to fight for that support".

Elizabeth was receiving just a small amount of low cost support which helped her maintain an independent life. She made several attempts on her life and was forced to access medical care. Apart from the obvious moral case, the resulting medical care came at a greater cost to the state than the five hours a week.

# Case Study 2

## Domiciliary care services for adults with moderate level learning disabilities

The benefit of the service to a variety of stakeholders can be calculated based on estimated costs and assumptions as to the likelihood of the service improving outcomes. The full range of assumptions can be found in the Appendix.

Service impact	Impact of service to measurable outcomes		Out come	Impact	£ per user
	Service user employment	Domiciliary services provide support to allow individuals to live independently in a safe and secure environment. By helping individuals cope they are more likely to be able to secure and remain in employment.	Net tax	HM Treasury	£ 117
			Income	Service user	£ 98
			ESA/IS	DWP	£ 236
Carers	Through facilitating independent living, every day activities, preventing an escalation of care needs and crisis situations, domiciliary services reduce the negative impact on family carers. This increases the likelihood that carers will be in employment and furthermore reduce the risk that they will develop stress of mental health issues.	Net tax	HM Treasury	£ 304	
		Income	Carer	£ 366	
		ESA/IS	DWP	£ 307	
Preventative impact	Through providing appropriate services to people with moderate learning disabilities adverse outcomes can be avoided. Such as: <ul style="list-style-type: none"> <li>Loneliness and isolation that can result from losing touch with friends and family</li> <li>Higher need care (substantial/critical) as a result of escalation of needs</li> <li>Accumulating debt</li> <li>Poor personal health due to lack of exercise, poor diet and unsafe living environments</li> <li>Involvement in criminal activity or vulnerability to exploitation and abuse</li> </ul>	Mental health	NHS	£ 51	
		Mental health	NHS	£ 50	
		Higher care	LA	£ 272	
		Debt	HM Treasury	£ 398	
		Healthy lifestyle	NHS	£ 76	
Crime	HM Treasury	£ 25			

For each adult assessed as having moderate needs who could potentially receive domiciliary services, it is estimated that per year...

Total benefits and savings of...	-	£ 2,300
Based on a service cost of...	-	£ 1,505
Provides net savings per user of...	=	£ 795
		↓
Results in total potential return on investment of...	=	53%

Total impact per user	
Users and carers	£ 464
DWP	£ 543
HM Treasury	£ 844
Local Authority	£ 272
NHS	£ 177
<b>Total benefit</b>	<b>£ 2,300</b>

# Case Study 2

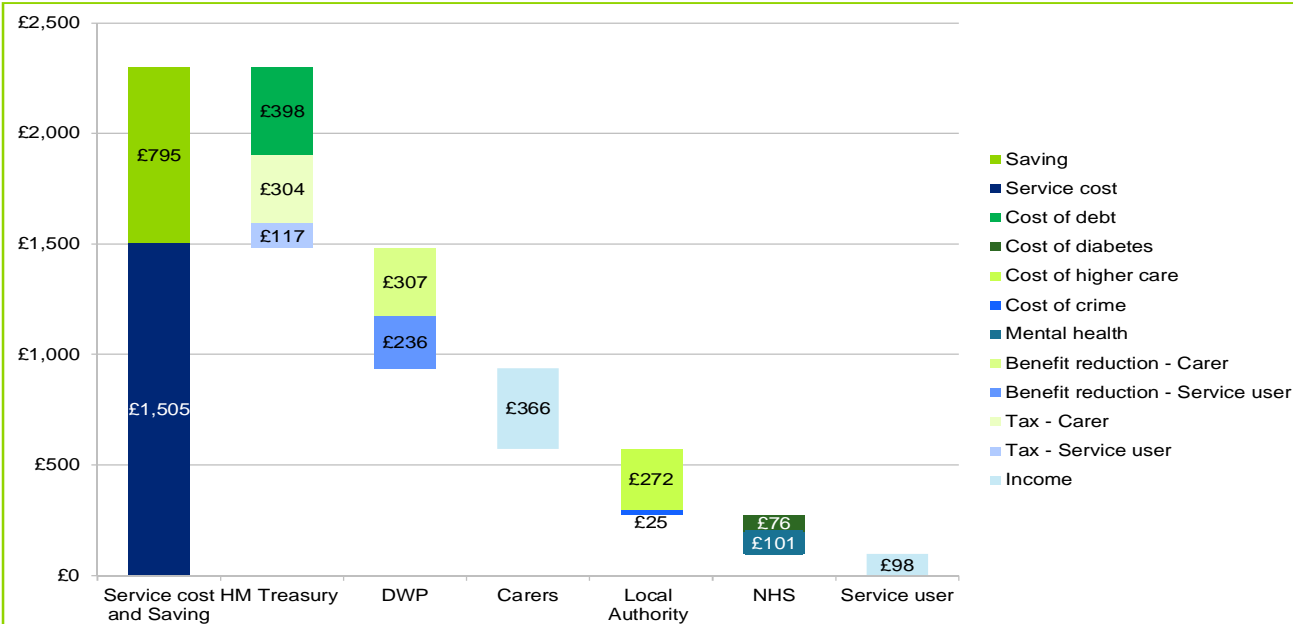
## Domiciliary care services for adults with moderate level learning disabilities

### Allocation of total savings...

The waterfall chart opposite provides a breakdown of the benefits and savings by the outcome and stakeholder who receives the benefit.

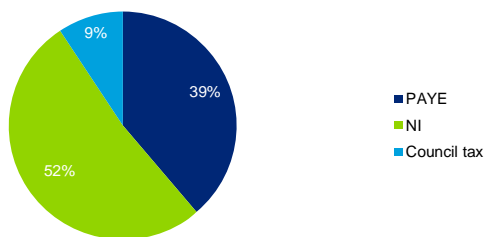
In this case, approximately 20% of the savings are accrued through income benefits and the 17% through the prevention of debt.

Avoided costs that accrue to NHS and LA account for 20% of overall savings.



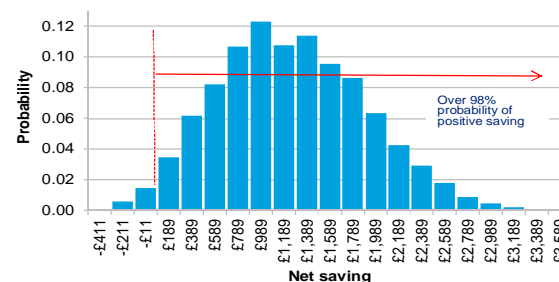
### Sources of incremental tax revenue...

It is estimated that for each service user HM Treasury could receive an incremental £ 844 in tax revenue, the majority of which is derived from National Insurance Contributions (employee and employer).



### Monte Carlo analysis...

To take account of the uncertainty inherent to the analysis, a Monte Carlo simulation has been produced. The Monte Carlo analysis estimates net savings per user to be positive with 98% probability. Details are provided in the appendix.



# Case Study 3

## Communicator-guide service for deafblind people

Which service?	For who?	What challenges are faced?	What is the impact of the service?
3 hours of a communicator-guide per week at cost of £ 21 per hour	Adults with moderate level deafblindness	<ul style="list-style-type: none"> <li>• Travel on unfamiliar routes</li> <li>• Dealing with correspondence and paperwork</li> <li>• Communicating with those unfamiliar with deafblind languages</li> </ul>	<ul style="list-style-type: none"> <li>• Improved social life, avoiding isolation</li> <li>• More active and healthy lifestyle</li> <li>• Avoiding mounting debts and securing benefits</li> <li>• Support to apply for and stay in employment</li> </ul>

### Communicator-guide service

A communicator-guide is specially trained to support people who have acquired deafblindness or people who have developed sight and hearing difficulties later in life, often referred to as dual-sensory loss. They act as the eyes and ears of a deafblind person and provide one-to-one communication support.

The purpose of a communicator-guide is to allow deafblind people to lead independent lives, through provision of support with everyday tasks such as shopping or dealing with correspondence.

For example, after acquiring deafblindness it can be increasingly challenging for people to maintain close relationships and a support network. This is both due to the challenge of taking unfamiliar travel routes and problems with using the phone. This has the potential for people to become increasingly isolated and lonely, which can have a negative impact on mental health. A communicator-guide can help overcome these challenges.

Deafblindness also makes written communication problematic, for example, when correspondence has not been translated into Braille. A communicator-guide can provide support with paying bills, noting appointment dates and applying for benefits.

There are several barriers to seeking employment for deafblind people. A communicator-guide can support the job application process, help with travel to and from interviews as well as ensuring that personal appearance is maintained. Once in employment, by ensuring that other aspects of life are being supported through a communicator-guide, success in employment is more likely.

***Liz was born blind and developed the alternative skills of blindness to allow her to be as self reliant and independent as possible. However, at the age of 26 Liz also lost her hearing. This presented new challenges; Liz explains the value of the support that a communicator guide can provide...***

*“Having been blind for most of my life, and attending a specialist school where a strong emphasis was put on independence and self-reliance, I am competent in the alternative skills of blindness such as reading braille, using a long cane to get out and about and using assistive technology to access computers and printed information.*

*Becoming deaf, at age 26, presented me with many new challenges. Getting out and about is much harder because I've lost the wealth of audio cues that blind people rely on. Communication is a massive problem, especially with strangers. That compounds the difficulties with travelling because I can no longer ask people for directions or information. I am no longer able to enjoy music or take part in goalball and my PhD research presents challenges.*

*I am not the sort to let these things stop me getting on with life. So, despite the difficulties of doing it, I've found ways to continue travelling, continue my PhD by adapting the topic and I have recently got a part time job. As I'm managing to do these things, my needs are considered moderate. **Yet, there are things that I simply cannot do without support and a communicator-guide service would enable me to do them.***

*The technology I use enables me to read some printed information, but not all, and it does not enable me to fill in printed forms. So when I get a bill in print that won't scan, or I have to fill in a form for benefits or a job application, I cannot do it. As a result, I've often paid bills late simply because I couldn't access the information.*

*I do travel but only on limited familiar routes. So, for example, travelling to visit my family or friends who live outside of London is unreasonably difficult. I am also unable to keep in touch with them by phone, only by email.*

*I now get very little exercise. I am no longer able to take part in goalball because it relies on hearing and I cannot go swimming because I can't communicate with the pool staff or other swimmers. I have always been something of an exercise junky and getting so little exercise makes me stressed and miserable.*

*When I was applying for jobs, having a communicator-guide would have enabled me to access more job adverts and to apply for jobs. Now that I have a job, I need to make sure that I am turning up to work well presented, which means I need help with going to the hair dresser or go shopping for clothes. Lack of support could risk my job as could the stress resulting from lack of exercise and difficulties with staying in contact with family and friends.*

*So, whilst my needs may only be moderate, failing to meet those needs means I am increasingly socially isolated, unable to get much exercise, have difficulties with important correspondence and that my job is potentially at risk. All I need is a few hours a week of communicator-guide service.”*



# Case Study 3

## Communicator-guide service for deafblind people

The benefit of the service to a variety of stakeholders can be calculated based on estimated costs and assumptions as to the likelihood of the service improving out comes. The full range of assumptions can be found in the Appendix.

Impact of service to measurable outcomes		Out come	Impact	£ per user
Service impact	Service user employment	A communicator-guide service is highly important in allowing a deafblind person to apply and interview for a new job. Additionally, a communicator-guide contributes to overall improved wellbeing, which is likely to contribute to successfully staying in employment.		
		Net tax	HM Treasury	£ 1,406
		Income	Service user	£ 1,376
		ESA/IS	DWP	£ 1,683
Preventative impact	Preventative impact	A communicator-guide acts as the eyes and ears of a deafblind person and helps them to undertake everyday tasks, which can have a significant positive impact on the wellbeing and quality life of the user. Benefits include:		
		<ul style="list-style-type: none"> <li>Being able to keep in touch with friends and family, avoiding isolation and loneliness, which can negatively impact mental health</li> <li>Support a more healthy lifestyle by assisting in being active and having access to a healthy diet</li> <li>Assistance with bills and other paperwork, avoiding debts mounting</li> <li>Helping keep track of and attend medical appointments</li> </ul>		
		Mental health	NHS	£ 50
		Healthy lifestyle	NHS	£ 76
		Debt	HM Treasury	£ 398
		Missed appointments	NHS	£ 6

For each deafblind adult assessed as having moderate needs who could potentially receive a few hours of a communicator-guide service, it is estimated that per year...

Total benefits and savings of...	-	£ 4,995
Based on a service cost of...		£ 3,276
Provides net savings per user of...	=	£ 1,719
		↓
Results in total potential return on investment of...	=	52%

Total impact per user	
Users	£ 1,376
DWP	£ 1,683
HM Treasury	£ 1,804
Local Authority	£ 0
NHS	£ 131
<b>Total benefit</b>	<b>£ 4,995</b>

Notes: This final result should be considered cautiously in order to account for the greater uncertainty in relation to the assumptions on the employment rate of deafblind people in the model. Nonetheless, the assumptions considered for the model are conservative; in particular, due to lack of data, there is no effect that accrues to the LA in terms of prevention of higher care needs.

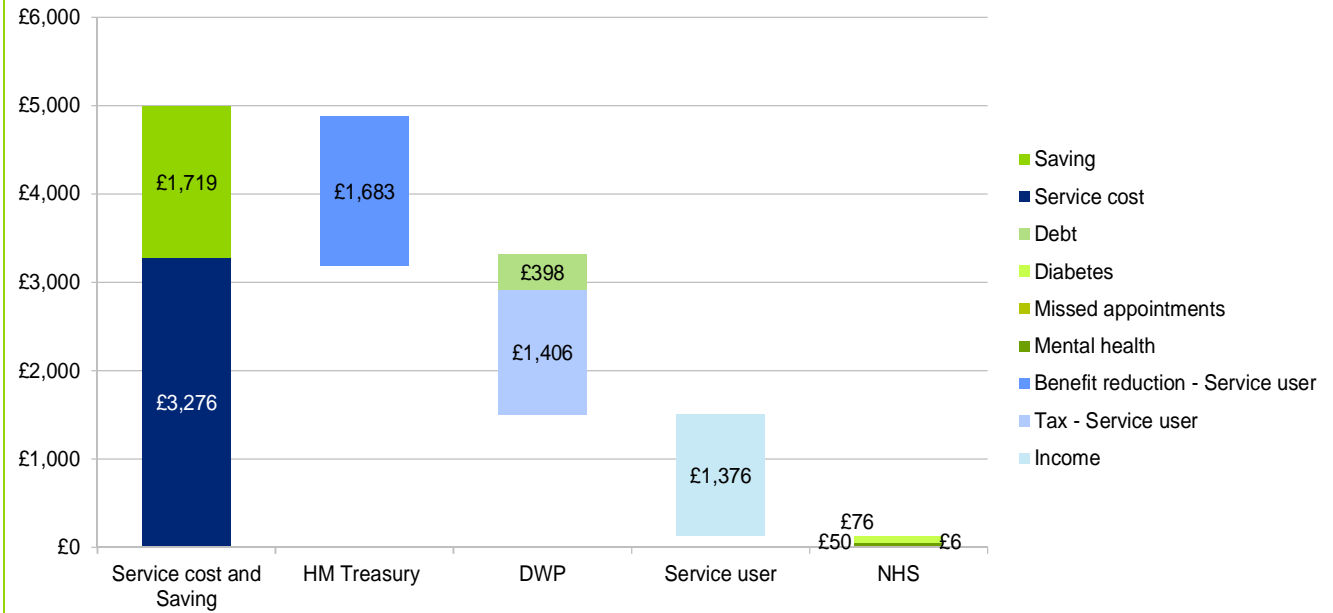
# Case Study 3

## Communicator-guide service for deafblind people

### Allocation of total savings...

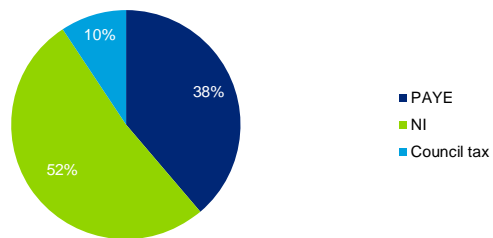
The waterfall chart opposite provides a breakdown of the benefits and savings by the outcome and stakeholder who receives the benefit.

In this case, the savings are approximately equally split between income and tax increase and benefit reduction. The preventative impacts represent 11% of total savings.



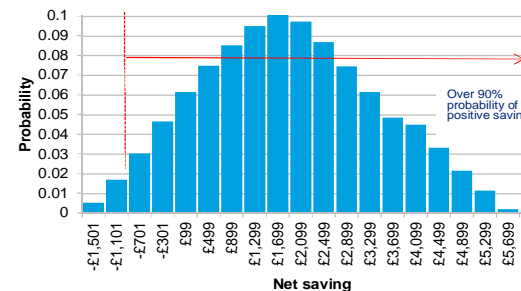
### Sources of incremental tax revenue...

It is estimated that for each service user HM Treasury could receive an incremental £1,804 in tax revenue, the majority of which is derived from National Insurance Contributions (employee and employer).



### Monte Carlo analysis...

To take account of the uncertainty inherent to the analysis, a Monte Carlo simulation has been produced. The Monte Carlo analysis estimates net savings per user to be positive with 90% probability. Details are provided in the appendix.



# Case Study 4

## Inclusion service – adult day centre

Which service?	For who?	What challenges are faced?	What is the impact of the service?
3 days per week at adult day centre. Cost: £ 51.46 per day including travel expenses	Adults with physical, sensory and learning disabilities assessed as having moderate needs.	<ul style="list-style-type: none"> <li>• Social skills and communication</li> <li>• Mental health</li> <li>• Risk of higher care needs</li> <li>• Lack of confidence and independence</li> </ul>	<ul style="list-style-type: none"> <li>• Independence and healthy lifestyle</li> <li>• Improved social interactions</li> <li>• Reduced dependence on family</li> </ul>

### Inclusion Services – adult day centre

The Adult Day Service in Saltash, Cornwall is part of Scope Inclusion service which helps disabled people take part in their communities. The service supports people with physical, sensory and learning disabilities, most of whom have limited care needs.

The centre opened in the early 1980s to help its customers gain work skills such as timekeeping and meeting deadlines. It also offered activities and classes such as music, desktop publishing and basic IT skills. In 2008, it started to focus more on the individual needs of customers and enable them to eventually be in control of their own personal budget.

Today the service offers activities including:

- Cooking
- Art
- Music
- Men's and Women's Health
- Self Esteem and Self Confidence
- Citizenship

Community-based activities such as:

- Bowling
- Boccia
- Gardening
- Sports activities
- Money matters at local shops and cafes

The service supports up to 30 people per day, Monday to Friday. On average, the people supported attend for two to three days per week from 9am to 5pm.

Each user has a set of outcomes that they are supported to achieve and progress is recorded in a "SMART" format. Individuals are offered group support, where each group has at least one achievable objective. These objectives are achieved through working individually, but with consideration for the others in the group.

#### Scope Inclusion Services

- "Scope Inclusion turns exclusion into inclusion, by helping people with disabilities take steps back into the community. It helps keep all options open for disabled people and their families."
- Scope never sets limits on a disabled person's potential. It enables users to develop confidence, independence and new skills. Users are matched with an experienced key worker based on interests, support needs and cultural background.

**Kate ( not her real name) has a physical disability and accesses the Day Service twice a week. Without attending a Day Service Kate would be spending the majority of her time with her mum and not interacting with others...**

Kate has a physical disability and accesses the Day Service twice a week. She lives at home with her mum. Since starting at the Day Service she has developed some of her social skills. In the past she has been reluctant to interact with others. Due to more opportunities within the community she has been able to feel more self-confident in talking and interacting with others. She has also been active in the self-esteem group which has given her more confidence. Without attending a Day Service Kate would be spending the majority of her time with her parent and not interacting as well as she is now.

Debbie has a learning disability and lives at home with her parents and sibling. In the past, she spent five days at the service but has been attending a work placement for over five years and so her time at the service has been reduced to three half day sessions. She joined work-based activities and showed interest in art, IT and cooking. She was also involved in various projects run in conjunction with Plymouth Museum. She proved to be an asset with her cooking and preparation skills and showed an interest in developing those skills. She was accepted on a work placement scheme and placed at a local restaurant that was looking for extra help. Before her work placement started, she was given extra skills development training in time management and writing skills. Debbie's hand writing is legible but not always neat. Without this extra support, Debbie would not have been able to cope on her work placement. She has gained a lot of new skills from working in the restaurant and is now less reliant on 'traditional support services'.

# Case Study 4

## Inclusion service – adult day centre

The benefit of the service to a variety of stakeholders can be calculated based on estimated costs and assumptions as to the likelihood of the service improving outcomes. The full range of assumptions can be found in the Appendix.

Service impact	Impact of service to measurable outcomes		Out come	Impact	£ per user
	Service user employment	Inclusion services include courses which focus on building confidence, skills such as IT, cooking and art, and practical skills for behaviour in the workplace. Together these services contribute to increasing the likelihood that service users will successfully gain and stay in employment.	Net tax	HM Treasury	£ 1,274
			Income	Service user	£ 1,302
			ESA/IS	DWP	£ 1,558
Carers	Inclusion services provide support to carers by providing respite during the hours when the service is used, but also teach service users the skills that could allow them to live more independent and confident lives. As a result, carers are more likely to feel that they can go into employment or increase the hours that they work.	Net tax	HM Treasury	£ 515	
		Income	Carer	£ 563	
		ESA/IS	DWP	£ 522	
		Mental Health	NHS	£ 86	
Preventative impact	Through accessing inclusion services, disabled adults can prevent negative outcomes such as: <ul style="list-style-type: none"> <li>• A deterioration in physical health due to inactivity or poor diet</li> <li>• A deterioration in mental health due to loneliness or lack of confidence</li> <li>• An increase in care needs from moderate to substantial/critical due to inappropriate care</li> <li>• Respite care required when carers are not adequately supported to provide care in the home</li> <li>• Hospitalisation following a crisis situation</li> </ul>	Healthy lifestyle	NHS	£ 76	
		Mental Health	NHS	£ 50	
		Supported living	LA	£ 3,167	
		GP visits	NHS	£ 93	
		Hospitalisation	NHS	£ 273	

For each adult assessed as having moderate needs who could potentially receive access to inclusion services, it is estimated that per year...

Total benefits and savings of...	-	£ 9,479
Based on a service cost of...	-	£ 8,028
Provides net savings per user of...	=	£ 1,452
		↓
Results in total potential return on investment of...	=	18%

Total impact per user	
Users and carers	£ 1,837
DWP	£ 2,080
HM Treasury	£ 1,817
Local Authority	£ 3,243
NHS	£ 502
<b>Total benefit</b>	<b>£ 9,479</b>

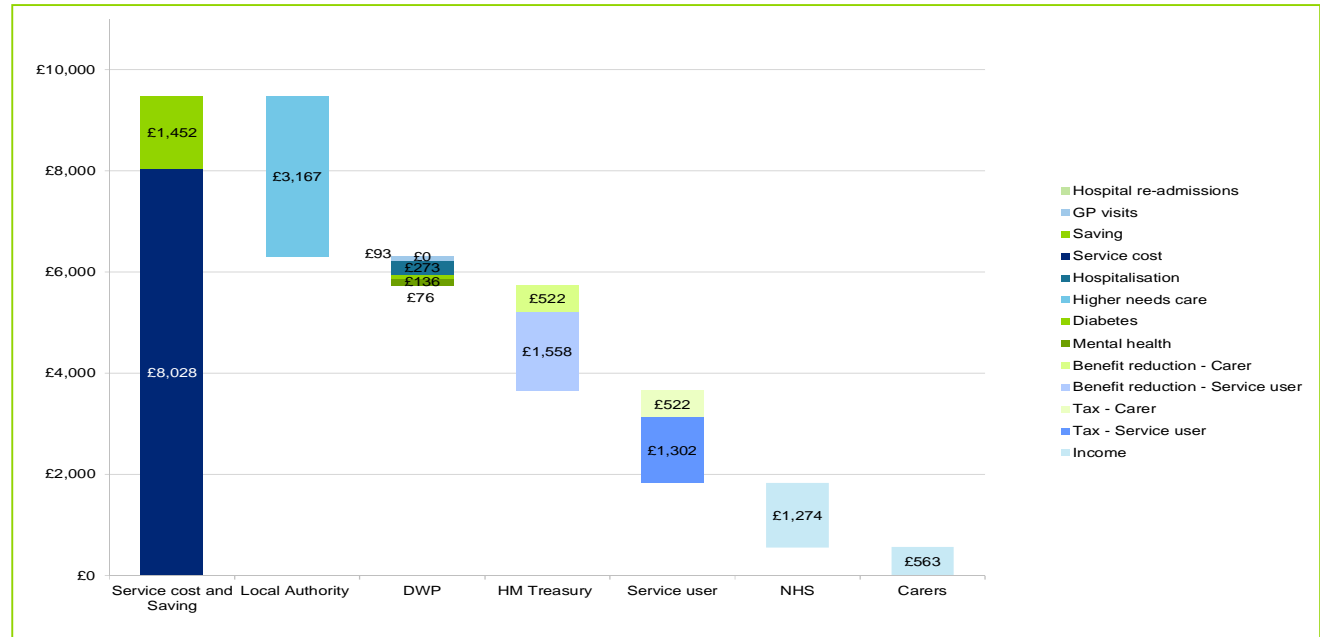
# Case Study 4

## Inclusion service – adult day centre

### Allocation of total savings...

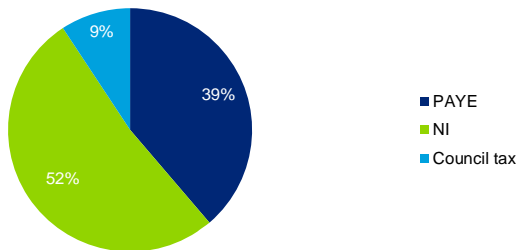
The waterfall chart opposite provides a breakdown of the benefits and savings by the outcome and stakeholder who receives the benefit.

In this case, the preventative impact represent 39% of the savings. The DWP and HM Treasury combined receive 41% of savings, while 34% goes to the Local Authority.



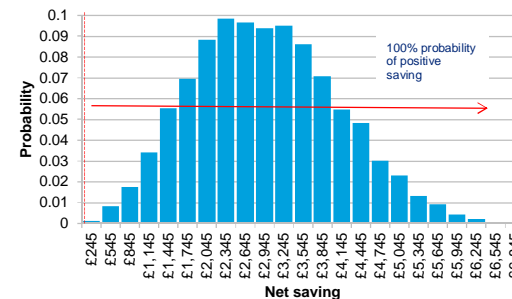
### Sources of incremental tax revenue...

It is estimated that for each service user HM Treasury could receive an incremental £ 1,817 in tax revenue, the majority of which is derived from National Insurance Contributions (employee and employer).



### Monte Carlo analysis...

To take account of the uncertainty inherent to the analysis, a Monte Carlo simulation has been produced. The Monte Carlo analysis estimates savings per user to be positive with 100% probability. Details are provided in the appendix.



# Health and Social Care Focus Example

# Health and Social Care focus example

## Example of Health and Social Care Impacts of Resource Centre

Due to lack of available primary research, the following example does not include the full range of economic benefits that could be realised by the provision of social care services as the four main case studies, namely it excludes the effects of the service on employment and on the carers of disabled people. However, it contributes an important analysis of some outcomes related to NHS and LA costs and shows that a significant return could be achieved by these stakeholders alone. These outcomes are recognised in the literature as being particularly strong for physical disabilities but could potentially apply to other types of disabilities.

### Service overview

A resource centre with focus on mobility services run by Leonard Cheshire Disability is used as an example to allow for focus on the impact that social services can have on the NHS and LA specifically.

### Service overview

Leonard Cheshire runs a resource centre in the South East of England designed to support adults with physical disabilities and which aims to give service users the opportunity to meet others and to join in educational, therapeutic and leisure activities.

The service offers activities including:

- Mobility Training
- Reading
- Cooking
- Discussion Groups
- Art and Music
- Social Events

The service partners with a falls clinic, which is a programme within the centre and consists of a doctor, a clinical physiologist and a community physiotherapist. This programme aims at establishing the causes of the falls and preventing them by planning the correct support.

The service also offers activities in partnerships with local organisations such as the fire service, the primary school and the council; there are also a range of visiting services including a physiotherapist, optician and chiropodist.

There are 61 people accessing the service from Monday to Friday. All services users are encouraged to actively be involved in the running of the centre. They are routinely involved in the service planning and delivery and they can request specific exercise programmes. There is a support group within the centre and for those who wish to be more involved there is the Service Users National Association.

### Economic impact of service

	Impact	£ per user	Attribution	Implication
Access to resource centre	Reduce risk of developing higher care needs	£ 468	Local Authority	Without the correct support people with moderate care needs could find their needs increasing to require a higher level of care. The resource centre provides support through a range of therapeutic and leisure activities that can help to avoid escalation of care needs.
	Avoid cost of higher mental health care needs	£ 719	NHS	Mental health problems induce poorer health outcomes in people with a physical disability and exacerbate physical illness. By providing support for the mental health aspects of physical illness, the resource centre can help prevent the additional cost that the NHS would incur.
	Avoid cost of higher mental health care needs	£ 254	NHS	Ambulatory Care Sensitive Conditions are conditions, such as influenza, pneumonia and infections, for which hospital admissions could be avoided by interventions in preventative and primary care. Disabled people are disproportionately affected by these conditions and the resource centre could provide the correct support and education to prevent them.

### Estimated savings and return on investment

*For each adult assessed as having moderate needs who could potentially receive access to the mobility service, it is estimated that per year the LA and the NHS could receive...*

**Total benefits and savings of...**

£ 1,441

**Based on a service cost of...**

£ 1,040

**Provides net savings per user of...**

£ 401

**Results in total potential return on investment of...**

**39%**

**The 39% return is shared between...**

**Local Authority**

**32%**

**NHS**

**68%**

# Summary of Impacts



# Policy implications and conclusions

Based on the analysis of the case studies, substantial returns are estimated from providing services to disabled people with moderate care needs. Returns are estimated to range from 18% to 53% and are driven by a range of factors including:

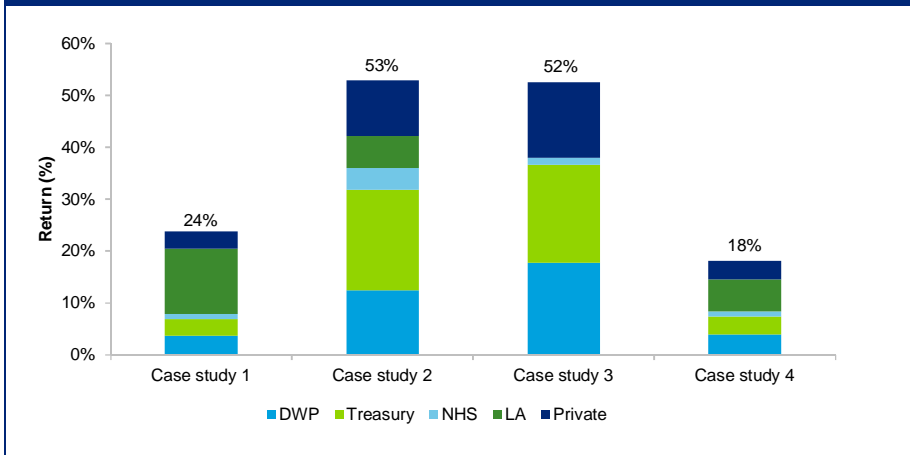
- Income generated from supporting people into employment (this benefit accrues to private users and carers);
- Avoided cost of unemployment benefits paid to people moving into employment (this benefit accrues to DWP);
- Greater taxation receipts, from carers and people moving into employment (this benefit accrues to the Treasury); and
- Prevention of individuals circumstances deteriorating and relying on more costly public services (this benefit accrues to LA and NHS).

Considering the size of demand for each of the services in England, a blended return across the case studies of 30% is estimated. This blended rate suggests that for every £1 pound of expenditure on services, £1.3 is generated in terms of benefits to people, careers, local and central government. The magnitude of this return is similar to other studies, for example the National Audit Office's estimation of returns from supporting people with autism through adulthood (2009).

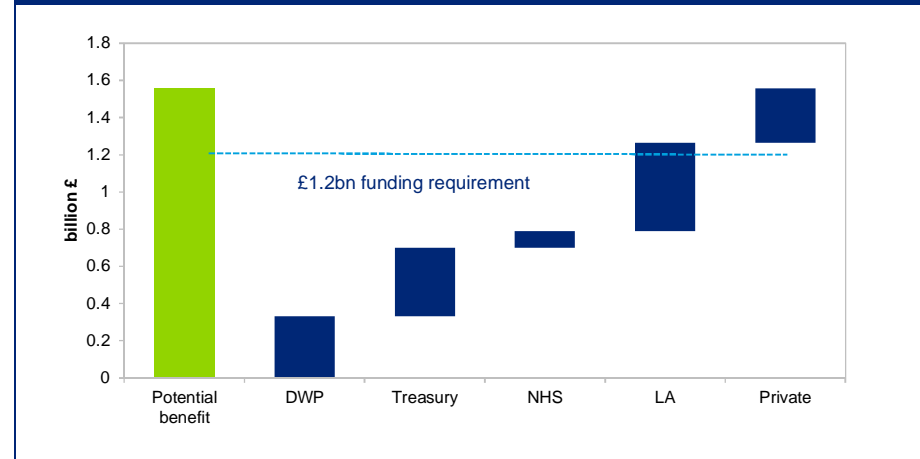
The Other Care Crisis report estimates that there could be a £1.2 billion gap in funding of social care services for disabled adults. On the basis of the blended return of 30% funding this gap could lead to net positive impacts worth £355m. This wider return is significant, suggesting that funding for people with moderate care needs should be carefully considered.

In order to explore further the economic impact of social care on NHS and Local Authority budgets, a further high-level analysis has been conducted estimating the returns from a resource centre service focused on mobility services. A potential return of 39% is estimated, with 68% of this saving attributed to the NHS budget. This demonstrates that some services could have significant impacts on the NHS.

Breakdown of returns in each case study



Breakdown of total savings by entity



# Technical appendix

# Case Study 1

Day centre for adults with autism providing education, training and the opportunity to socialise

		Incremental impact of service	Cost/Benefit	Metric	Value (p.a.)	Attribution
Access to Horizons	Individual impact	<ul style="list-style-type: none"> <li>Employment increases from <b>18% to 34.2%</b></li> <li>Probability of suffering mental health issues decreases by <b>33%</b></li> </ul>	Avg. income	Gross wage + Tax contribution	£ 21,638 + £ 7,345	HM Treasury
			Avg. benefit reduction	Unemployment benefit	£ 8,416	HM Treasury
			Well being	Cost of depression / Mental health issues	£ 332	NHS
	Carer impact	<ul style="list-style-type: none"> <li>Employment increases by <b>20%</b></li> <li>Probability of suffering mental health issues decreases by <b>52%</b></li> </ul>	Avg. income	Gross wage + Tax contribution	£ 24,440 + £ 8,628	HM Treasury
			Avg. benefit reduction	Unemployment benefit	£ 10,346	HM Treasury
			Well being	Cost of depression / Mental health issues	£ 332	NHS
	Preventative impact	<ul style="list-style-type: none"> <li>Probability of requiring higher care decreases by <b>43%</b></li> <li>Visits to GP decrease by <b>31%</b></li> <li>Probability of needing residential care decreases from <b>7% to 0.5%</b></li> <li>Probability of hospitalisation decreases by <b>7%</b></li> </ul>	Higher care needs	Cost of substantial needs day services	£ 223.92 per day/5 days per week	LA
			Increased visits to GP	Cost of GP visits	£ 299	NHS
			Crisis-Residential care	Cost of residential care	£ 74,483	LA
			Crisis - Hospitalisation	Cost of hospitalisation	£ 91,068	NHS
	Adults with high functioning autism who could access the service: approx. <b>7,000</b>					
<b>Cost of Horizons day centre for moderate needs</b>					<b>£93.69 per day, 2 days per week</b>	

# Case Study 1

## Day centre for adults with autism providing education, training and the opportunity to socialise

Variable	Value (per year)	Attribution	Reference
Average wage of disabled person with moderate care needs	£21,638	Private individual	Average wage for disabled in 2012 was £12.15 (Office for Disability issues, Disability Equality indicators, 2012). This is updated to 2013 values and multiplied by the average hours worked by a disabled person, 33 hours per week (Labour Force Survey). This is the average across all disable people in England and it might overstate the average wage for a person using this particular service.
Average wage of carers	£24,440	Private individual	Office of National Statistics.
Average benefits of disabled person with moderate care needs	£8,416	Department of Work and Pensions	NAS.
Average benefits of carers	£10,346	Department of Work and Pensions	NAS.
Cost of depression / Mental health issues	£332	NHS	Knapp M, Bauer B, Perkins M, Snell T (2010). <i>Building Community Capacity: making an economic case</i> , PSSRU Discussion Paper 2772,
Cost of critical needs day centre	£223.92 per day	Local Authority	Horizons day centre cost. Estimation of the yearly value will assume that usage for critical needs is 5 days per week.
Cost of moderate needs day centre	£93.69 per day	Local Authority	Horizons day centre cost. Estimation of the yearly value will assume that usage for moderate needs is 2 days per week.
Cost of residential care	£74,483	Local Authority	National Audit Office, <i>Supporting People with Autism Through Adulthood</i> , 2009. It should be noted that this is a relatively conservative estimate.
Cost of hospitalisation	£91,078	NHS	National Audit Office, <i>Supporting People with Autism Through Adulthood</i> , 2009.
Probability of employment		N/A	National Audit Office, <i>Supporting People with Autism Through Adulthood</i> , 2009. Without the specialist employment support the NAO assumed that 18 per cent of adults with high functioning autism are estimated to be in employment, with two thirds of these being in full-time employment. The NAO then modelled increased employment once that support was in place by using research that looked at employment outcomes for those receiving specialist support.
Without service	18%		
With service	34.2%		

# Case Study 1

Day centre for adults with autism providing education, training and the opportunity to socialise

Variable	Value (per year)	Attribution	Reference
Probability of developing mental health issues as a result of lack of support	33%	N/A	Scope, Mencap, The National Autistic Society, Sense, Leonard Cheshire Disability, <i>The other care crisis: Making social care funding work for disabled adults in England</i> , 2013.
Percentage of Asperger syndrome to suffer from mental health issues		N/A	NAS, <i>The way we are: autism in 2012</i> , 2012. The average, 46%, is used as a measure of incidence of mental health issues in the population receiving the service.
Female	53%		
Male	38%		
Probability of employment for carer increase	20%	N/A	From Carers UK, <i>Valuing Carers</i> , 2011: one in five carers said that they had to give up work because of the lack of suitable services available to look after the person they cared for.
Probability of residential care		N/A	National Audit Office, <i>Supporting People with Autism Through Adulthood</i> , 2009.
Without service	7%		
With service	0.5%		
Probability of hospitalisation given mental health problems	2%	N/A	'Mind for better mental health' provides the statistics that 6 out of 300 people who experience mental health problems in Britain will become inpatients in psychiatric hospitals. <a href="http://www.mind.org.uk/mental_health_az/8105_mental_health_facts_and_statistics">http://www.mind.org.uk/mental_health_az/8105_mental_health_facts_and_statistics</a>
Probability of hospitalisation	0.7%	N/A	The probability of hospitalisation given mental health problems multiplied by the probability of developing mental health problems gives us the probability of hospitalisation without support.
Percentage of carers that say a lack of timely support resulted in person with disability requiring higher support needs in the long term	43%	N/A	NAS, 'I Exist' campaign, 2008.
Percentage of HFA living with a carer	50%	N/A	National Audit Office, <i>Supporting People with Autism Through Adulthood</i> , 2009.

# Case Study 1

Day centre for adults with autism providing education, training and the opportunity to socialise

Variable	Value (per year)	Attribution	Reference
Percentage of population in England affected by 'high-functioning' autism, which includes Asperger syndrome	0.5%	N/A	National Audit Office, <i>Progress in implementing the 2010 Adult Autism Strategy</i> , 2012. One out of 100 adults in England are affected by autism, half of which have also a learning disability and the other half are considered 'high functioning' or have Asperger syndrome.
Population in England between the age of 16 and 64	34.5 million	N/A	Office of National Statistics, <i>Subnational population projections for England</i> , 2012.
Of which 0.5% have HFA of Asperger syndrome	170,000		Note that the estimate of the number of people with high functioning autism varies. However, there is a consensus that at least half of those on the spectrum have high functioning autism or Asperger syndrome.
Percentage of carers that say a lack of timely support resulted in person with disability requiring higher support needs in the long term	43%	N/A	NAS, 'I Exist' campaign, 2008.
Probability of carer experiencing mental health issues	52%	N/A	NAS, <i>The way we are: autism in 2012</i> , 2012.
Identification rate of people affected by 'high functioning' autism	4%	N/A	Identification rate based on the experience of the Liverpool Asperger team. National Audit Office, <i>Supporting People with Autism Through Adulthood</i> , 2009.
Weighted cost of GP visits, per year	£ 299	N/A	Expert Patients Programme. This the cost of a GP visit, £30, and the cost of a GP visit at home, £90, weighted by the number of times a disabled person's visit per year.
Probability of GP visits	31%	N/A	Figures in the literature on training and education on self-care support range from 24% in Montgomery et al (1994) to 69% in Choy et al (1999). We take a conservative estimate of 31% contained in Vickery et al (1988).

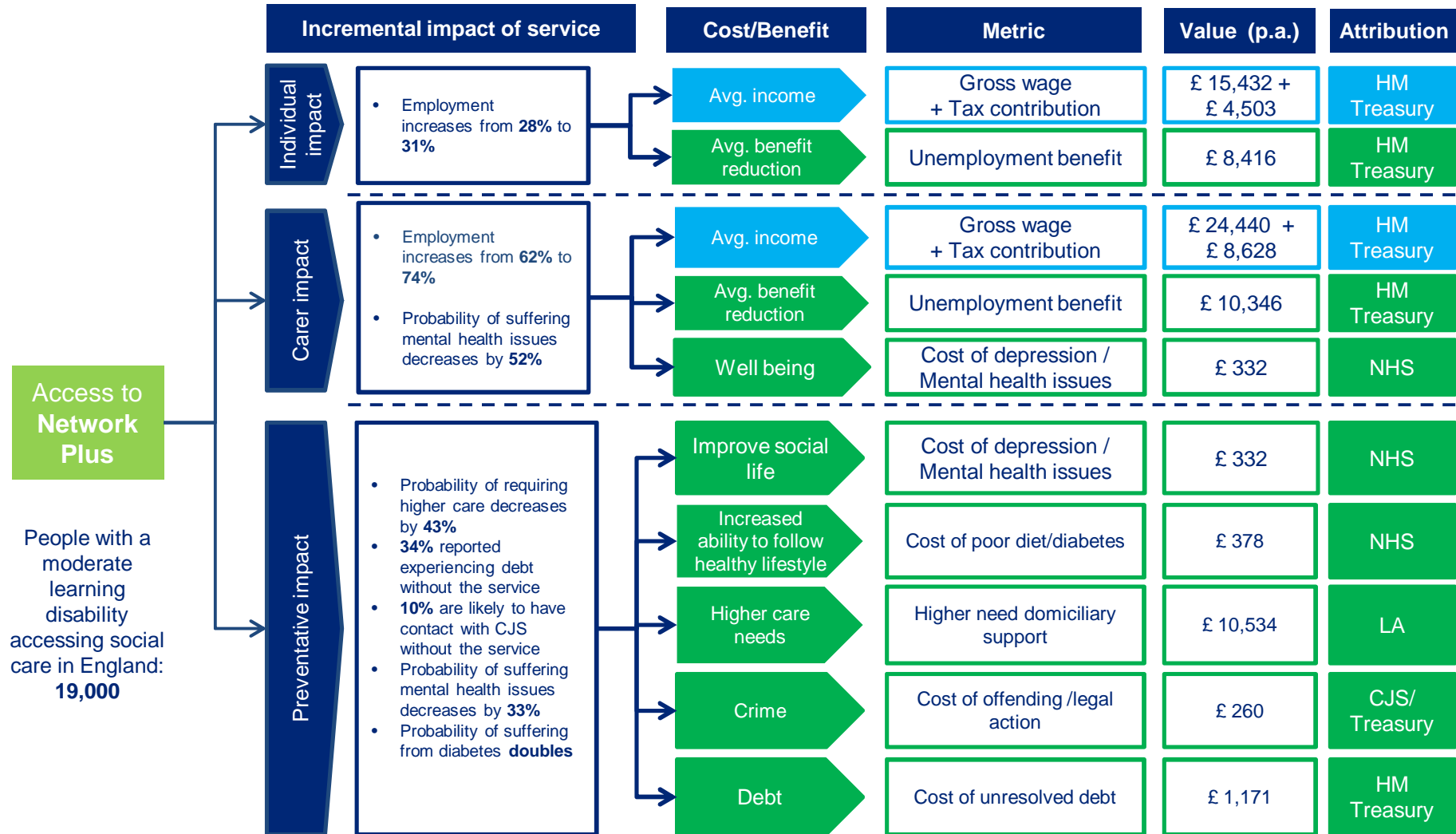
# Case Study 1

Day centre for adults with autism providing education, training and the opportunity to socialise

Variable	Value (per year)	Attribution	Reference
Number of people with 'high functioning autism' that could access the service (or an equivalent service)	7,000	N/A	<p>This figure is estimated as the number of people with autism and moderate needs who would be known to social services and eligible to receive the service.</p> <p>A population of 7,000 has been estimated based on applying the identification rate of people with high functioning autism (4% based on the experience of the Liverpool Asperger team), to the estimated population of adults with high functioning autism (170,000). The estimates on the number of people who have autism and a learning disability (high functioning autism) vary but there is consensus that it is half of the total population of people with autism. Not everyone with Asperger syndrome or high functioning autism will have moderate needs, but given we are assuming a low identification rate, this can be considered a conservative estimate.</p>

# Case Study 2

## Domiciliary care services for adults with moderate level learning disabilities



Cost of Network Plus service for moderate needs

£14.47 per hour, 2 hours per week



## Case Study 2

### Domiciliary care services for adults with moderate level learning disabilities

Variable	Value (per year)	Attribution	Reference
Average wage of disabled person with moderate care needs	£15,432	Private individual	Dr. Stephen Beyer, <i>An evaluation of the outcomes of supported employment in North Lanarkshire (2007)</i> , Welsh centre for Learning Disabilities, Cardiff University, 2008. The average number of hours worked by a disabled adult with a learning disability are 22 and these are weighted against the national average wage. This might not reflect the average wage for a person using this particular service.
Average wage of carers	£24,440	Private individual	Office of National Statistics.
Average benefits of disabled person with moderate care needs	£8,416	Department of Work and Pensions	HMRC and Deloitte Tax team.
Average benefits of carers	£10,346	Department of Work and Pensions	HMRC and Deloitte Tax team.
Cost of Loneliness/ Mental health	£332	Private/NHS	Knapp M, Bauer B, Perkins M, Snell T (2010). <i>Building Community Capacity: making an economic case</i> , PSSRU Discussion Paper 2772.
Cost of higher care service	£10,534	Local Authority	Mencap. For someone who needed daily contact but still lived in their own home. 14 hours per week (1 hour in the morning, 1 in the evening for 7 days) - at a cost of £14.47 per hour.
Cost of Criminal Justice System	£260	CJS/Treasury	Home Office, The economic and social cost of crime against individuals and households, 2003/2004. This represents the average discounted net present value of the cost of enforcing sentences in the years following conviction for minor offences.
Cost to the public purse of an unresolved debt case	£1,171	Individual/Treasury	Pleasence P, Buck A, Balmer N, Williams K, A Helping Hand: The Impact of Debt Advice on People's Lives, Legal Services Research Centre, 2007.
Cost of diabetes	£378	NHS	The total annual cost of diabetes to NHS is reported to be £23.7 billion, which divided by the current population of England gives the cost per capita. <a href="http://www.nhs.uk/news/2012/04april/Pages/nhs-diabetes-costs-cases-rising.aspx">http://www.nhs.uk/news/2012/04april/Pages/nhs-diabetes-costs-cases-rising.aspx</a>

## Case Study 2

### Domiciliary care services for adults with moderate level learning disabilities

Variable	Value (per year)	Attribution	Reference
Percentage of LD adults that are likely to have contact with CJS	10%	N/A	Prison reform trust, No One knows- offenders with learning difficulties and learning disabilities - review of prevalence and associated needs, 2007.
Probability of developing mental health issues as a result of lack of support	33%	N/A	Scope, Mencap, The National Autistic Society, Sense, Leonard Cheshire Disability, <i>The other care crisis: Making social care funding work for disabled adults in England</i> , 2013.
Percentage of Asperger syndrome to suffer from mental health issues		N/A	Scope, Mencap, The National Autistic Society, Sense, Leonard Cheshire Disability, <i>The other care crisis: Making social care funding work for disabled adults in England</i> , 2013.
Female	53%		
Male	38%		The average, 46% is used as a measure of incidence of mental health issues in the population receiving the service.
Probability of employment for carer		N/A	Improving health and Lives: Learning Disabilities Observatory, <i>People with Learning Disabilities in England 2011</i> , 2012 reports that 26% of carers are unemployed. We assume that the respondents are using some kind of service provided by Mencap since they are reached by the survey. Then, employed carers of users of the services are 74%. From the report by Carers UK, <i>Valuing Carers 2011</i> , we find that 50% give up work . Then employment is reduced by 50% if the service is not provided. This gives us 49% of carers are employed without the service.
Without service	62%		
With service	74%		
Probability of employment (moderate learning disabilities)		N/A	Mencap, <i>Learning Disability and Employment</i>
Without service	28%		
With service	31%		Dr. Stephen Beyer, <i>An evaluation of the outcomes of supported employment in North Lanarkshire (2007)</i> , Welsh centre for Learning Disabilities, Cardiff University, 2008. Reports a 49% increase in employment as a result of an employment service in the population of the study. To account for the fact that Network Plus is not an employment specific service we use a conservative estimate of 10% instead. this 10% increase has been applied to the 28% above.
Probability of experiencing debt without the service	34%	N/A	Scope, Mencap, The National Autistic Society, Sense, Leonard Cheshire Disability, <i>The other care crisis: Making social care funding work for disabled adults in England</i> , 2013.

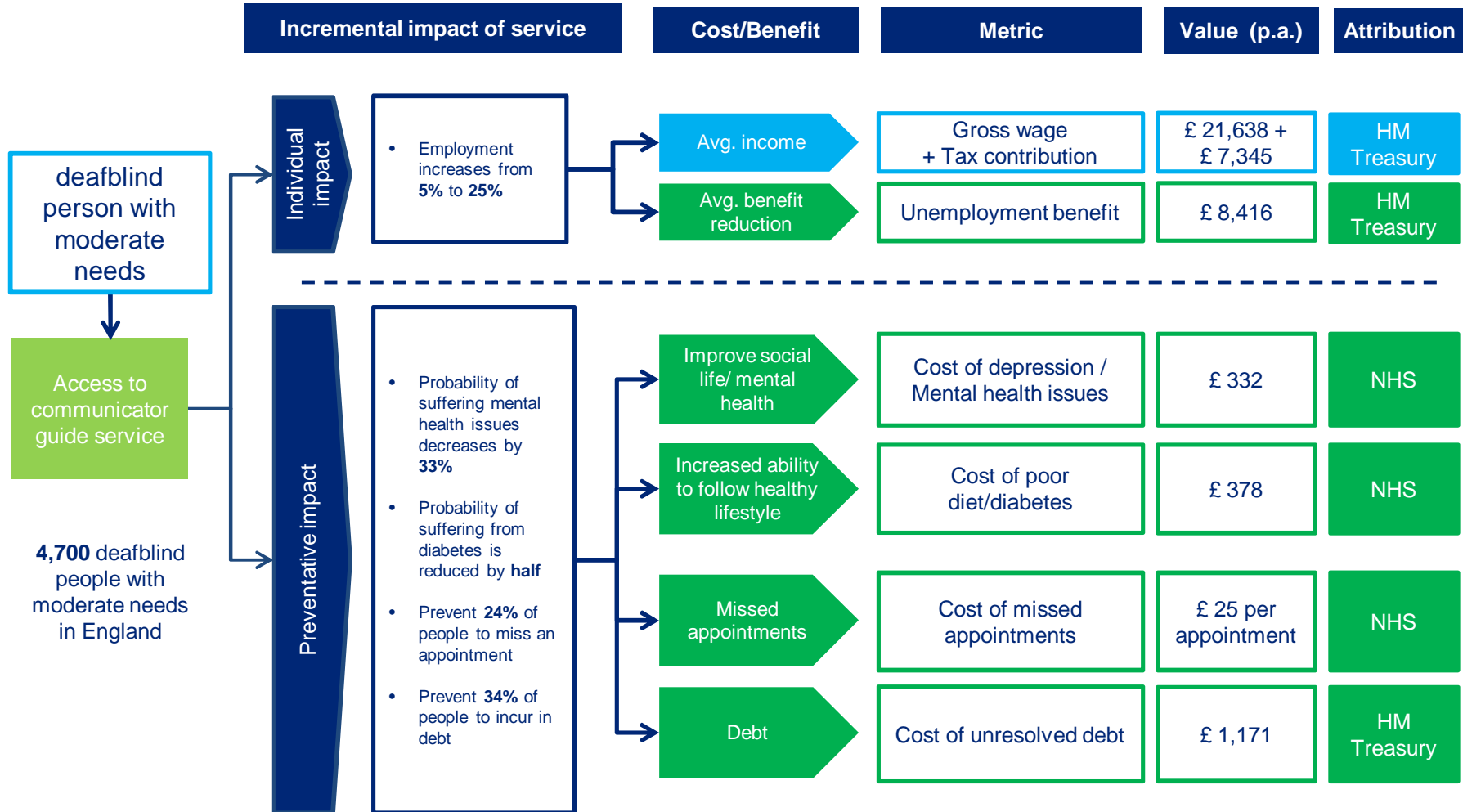
## Case Study 2

### Domiciliary care services for adults with moderate level learning disabilities

Variable	Value (per year)	Attribution	Reference
<b>Probability of suffering from diabetes for people affected by learning disabilities</b> without the service with the service	40% 20%	N/A	<a href="http://www.bedfordshirediabetes.org.uk/guidelines/diabetes-and-learning-difficulties.html">http://www.bedfordshirediabetes.org.uk/guidelines/diabetes-and-learning-difficulties.html</a> These probabilities refer to the prevalence of diabetes and epilepsy in sever and moderate LD respectively.
<b>Number of people with a moderate learning disability receiving LA supported care post-reform</b>	19,000	N/A	PSSRU at LSE, Implications of setting eligibility criteria for adult social care services in England at the moderate needs level, PSSRU Discussion Paper DP2851
<b>Percentage of carers that say a lack of timely support resulted in person with autism requiring higher support needs in the long term</b>	43%	N/A	NAS, 'I Exist' campaign, 2008. This is used for the increase of higher care needs as a result of lack of low level services.
<b>% of LD living with family of friends</b>	29.6%	N/A	Improving health and Lives: Learning Disabilities Observatory, People with Learning Disabilities in England 2011, 2012.
<b>Probability of carer experiencing mental health issues</b>	52%	N/A	NAS, <i>The way we are: autism in 2012</i> , 2012.
<b>Average hours per week for a moderate needs Network Plus service</b>	2 hours per week	N/A	Mencap. The cost will be dependent on what rates the individual Local Authority pays for this kind of service - the Network Plus rate (£14.47 per hour) is what West Sussex CC pay . This is a relatively low rate in the South where most of our hourly rates range from £15 to £17 but you might expect a lower hourly rate in the East (£14.00 to £17.00) and the West and North (£12 to £15).
<b>Average cost of Network Plus service</b>	£14.47 per hour £1,128 per year	Local Authority	Mencap

# Case Study 3

Communicator guide service 3 hours per week on average



Cost of communicator guide service

£21 per hour, 3 hours per week

# Case Study 3

## Communicator guide service 3 hours per week on average

Variable	Value (per year)	Attribution	Reference
Average wage of disabled person with moderate needs	£21,638	Private individual	Average wage for disabled in 2012 was £12.15 (Office for Disability issues, Disability Equality indicators, 2012). This is updated to 2013 values and multiplied by the average hours worked by a disabled person, 33 hours per week (Labour Force Survey). This is the average across all disable people in England and it might overstate the average wage for a person using this particular service.
Average benefits of disabled person with moderate needs	£8,416	Department of Work and Pensions	HMRC and Deloitte Tax team. Assuming the user is single and 25 years of age or above.
Cost of diabetes	£378	NHS	The total annual cost of diabetes to NHS is reported to be £23.7 billion, which dived by the current population of England gives the cost per capita. <a href="http://www.nhs.uk/news/2012/04april/Pages/nhs-diabetes-costs-cases-rising.aspx">http://www.nhs.uk/news/2012/04april/Pages/nhs-diabetes-costs-cases-rising.aspx</a>
Cost of treatment of mental health	£332	Private/NHS	Knapp M, Bauer B, Perkins M, Snell T (2010). Building Community Capacity: making an economic case, PSSRU Discussion Paper 2772. The study measures the costs associated to depression, which were avoided by the provision of befriending services.
Percentage of respondents who had missed an appointment at their GP surgery because of poor communication	24% - Over 10 years 0.29 appointments misses per year	NHS	A Simple Cure, RNID – 2004.
Cost per GP visit missed		NHS	A Simple Cure, RNID – 2004.
Per appointment	£85		
Per year	£25		This is the cost per appointment, £85, multiplied by the probability of missing an appoint in a year, 0.29.

# Case Study 3

Communicator guide service 3 hours per week on average

Variable	Value (per year)	Attribution	Reference
<b>Cost to the public purse of an unresolved debt case</b>	£1,171	Individual/Treasury	Pleasence P, Buck A, Balmer N, Williams K, A Helping Hand: The Impact of Debt Advice on People's Lives, Legal Services Research Centre, 2007.
<b>Probability of experiencing debt without the service</b>	34%	N/A	Scope, Mencap, The National Autistic Society, Sense, Leonard Cheshire Disability, <i>The other care crisis: Making social care funding work for disabled adults in England</i> , 2013.
<b>Probability of suffering from diabetes for people affected by learning disabilities</b>		N/A	<a href="http://www.bedfordshirediabetes.org.uk/guidelines/diabetes-and-learning-difficulties.html">http://www.bedfordshirediabetes.org.uk/guidelines/diabetes-and-learning-difficulties.html</a>
without the service	40%		
with the service	20%		
<b>Probability of developing mental health issues as a result of lack of support</b>	33%	N/A	Scope, Mencap, The National Autistic Society, Sense, Leonard Cheshire Disability, <i>The other care crisis: Making social care funding work for disabled adults in England</i> , 2013.
<b>Probability of employment</b>		N/A	There is no comprehensive research available regarding the employment of deafblind people. These assumptions are therefore based on relevant statistics of related disabilities and discussions with Sense and service users. According to Action for Blind People, employment rate for the blind is 44%. Assuming that deafblind people have additional challenges to overcome we would assume that the potential employment rate would be lower. It is also understood that the most significant barriers to employment for deafblind people are employer attitudes and deterioration of condition. As a result, even with a communicator-guide, high levels of employment are unlikely. However, it is understood that a communicator-guide would be highly valuable, if not essential, to finding and maintaining employment. As a result, discussions with experts from Sense concluded that the assumption of 25% employment with the service is a conservative figure relative to the employment of the blind and 5% employment without the service reflects the fact that most deafblind people would be unable to work without a communicator-guide but there might be some who are already in employment when their condition deteriorates and they continue to stay in employment with out a communicator-guide.
Without service	5%		
With service	25%		

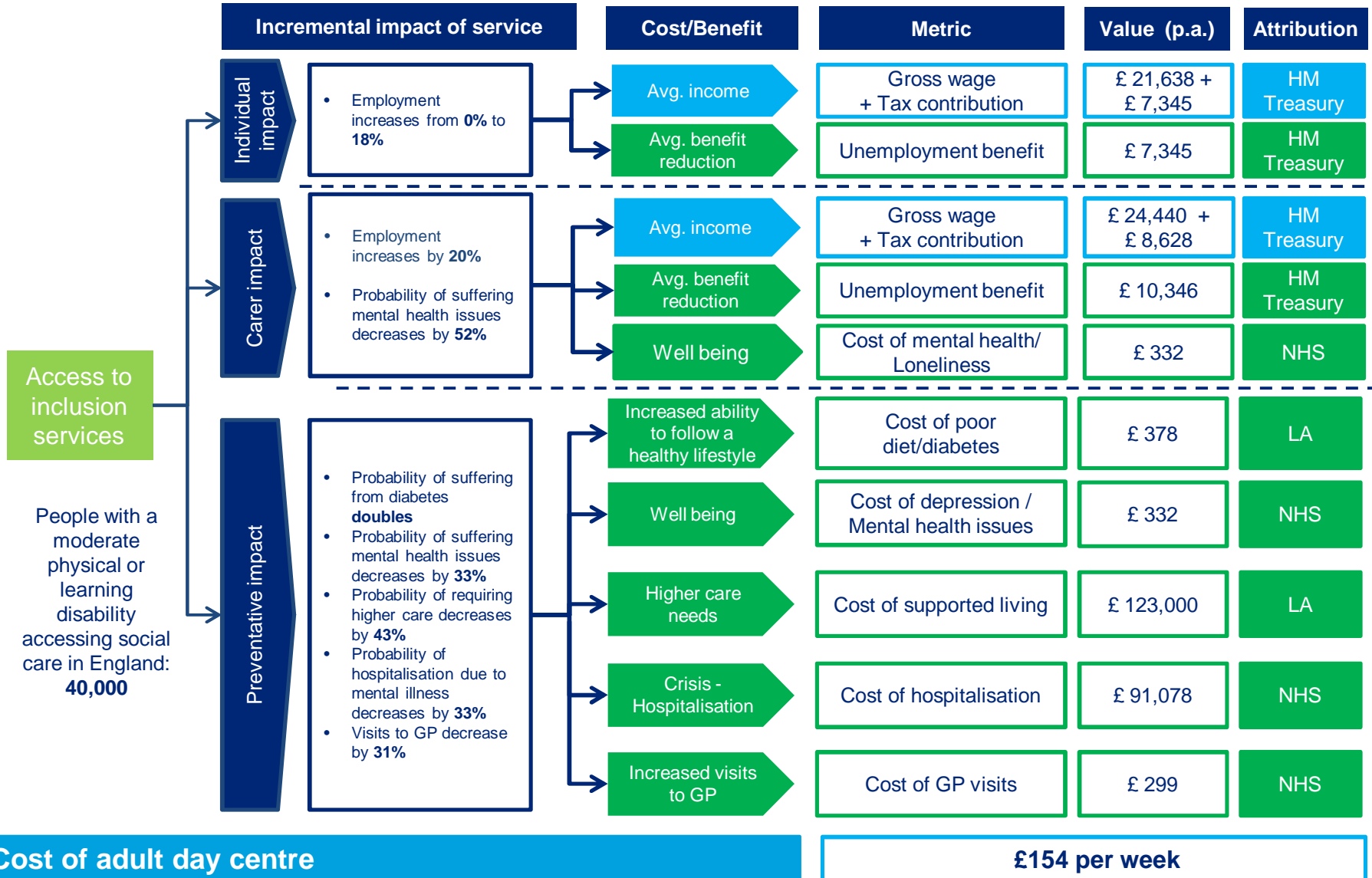
## Case Study 3

### Communicator guide service 3 hours per week on average

Variable	Value (per year)	Attribution	Reference
<b>Average cost of communicator-guide, per hour</b>		Local Authority	Sense.
Per appointment	£21		
Per year	£3,276		
<b>Average hours per week for a moderate needs communicator guide service</b>	3 hours per week	N/A	<p>Sense data suggests: 53 authorities responded to a Sense survey in 2009 about adult services. (England and Wales). Of those which provide at least one person with a communicator-guide service the average number of hours is 5.94 per week. This varies from 1 hour to 20 hours, with only 6 providing an average of 10 or more.</p> <p>Based on discussions with users of communicator guide service an average 2-3 hours per week would be reasonable for a user with moderate needs. This seems reasonable given the survey data.</p>
<b>Estimate of number of people with more severe impairments of both hearing and vision 2010 – 2030 (Lower estimate)</b>		N/A	<p>Centre for Disability Research, Estimating the number of people with co-occurring vision and hearing impairments in the UK, Janet Robertson and Eric Emerson, April 2010.</p> <p>The 'severe' category is likely to include deafblind people with moderate, substantial and critical needs,</p> <p>A conservative assumption that one-third of the 14,000 severe population, or 4,700, are moderate needs has been made for this analysis.</p>
<b>Age 20 – 59, 2010</b>	14,000		

# Case Study 4

## Inclusion service – adult day centre





# Case Study 4

## Inclusion service – adult day centre

Variable	Value (per year)	Attribution	Reference
Average wage of disabled person with moderate needs	£21,638	Private individual	Average wage for a disabled person in 2012 was £12.15 (Office for Disability issues, Disability Equality indicators, 2012). This is updated to 2013 values and multiplied by the average hours worked by a disabled person, 33 hours per week (Labour Force Survey). This is the average across all disable people in England and it might overstate the average wage for a person using this particular service.
Average wage of carers	£24,440	Private individual	Office of National Statistics.
Average benefits of disabled person with moderate needs	£8,416	Department of Work and Pensions	HMRC and Deloitte Tax team.
Average benefits of carers	£10,346	Department of Work and Pensions	HMRC and Deloitte Tax team.
Cost of depression / Mental health	£332	Private/NHS	Knapp M, Bauer B, Perkins M, Snell T (2010). <i>Building Community Capacity: making an economic case, PSSRU Discussion Paper 2772.</i>
Cost of moderate needs day centre	£154.38 per week	Local Authority	Scope adult day centre cost.
Cost of supported living	£123,000	Local Authority	Scope services. This is based on the cost for Supported Living in a flat for a young person with complex needs and includes one to one support during the day, 2 to one support for 3 hours and waking night staff.
Probability of employment			
Without service	0%	N/A	Plymouth Community Resource Service evidence from information on a fixed 2 year project run by Scope and funded through an European Grant. Over 27 people who completed a training program for job placement, 5 remained in employment after 2 years.
With service	18%		
Probability of employment for carer increase	20%	N/A	From Carers UK, <i>Valuing Carers, 2011</i> : more than half said that working was not possible because of the lack of suitable services available to look after the person they cared for.

# Case Study 4

## Inclusion service – adult day centre

Variable	Value (per year)	Attribution	Reference
Probability of developing mental health issues as a result of lack of support	33%	N/A	Scope, Mencap, The National Autistic Society, Sense, Leonard Cheshire Disability, <i>The other care crisis: Making social care funding work for disabled adults in England</i> , 2013.
Probability of hospitalisation given mental health problems	2%	N/A	'Mind for better mental health' provides the statistics that 6 out of 300 people who experience mental health problems in Britain will become inpatients in psychiatric hospitals. <a href="http://www.mind.org.uk/mental_health_az/8105_mental_health_facts_and_statistics">http://www.mind.org.uk/mental_health_az/8105_mental_health_facts_and_statistics</a>
Probability of hospitalisation	0.7%	N/A	The probability of hospitalisation given mental health problems multiplied by the probability of developing mental health problems gives us the probability of hospitalisation without support.
Percentage of carers that say a lack of timely support resulted in person with autism requiring higher support needs in the long term	43%	N/A	NAS, 'I Exist' campaign, 2008. This is used for the increase in need of supported living as a result of lack of service.
Cost of diabetes	£378	NHS	The total annual cost of diabetes to NHS is reported to be £23.7 billion, which, divided by the current population of England gives, the cost per capita. <a href="http://www.nhs.uk/news/2012/04april/Pages/nhs-diabetes-costs-cases-rising.aspx">http://www.nhs.uk/news/2012/04april/Pages/nhs-diabetes-costs-cases-rising.aspx</a>
Probability of suffering from diabetes for people affected by learning disabilities		N/A	<a href="http://www.bedfordshirediabetes.org.uk/guidelines/diabetes-and-learning-difficulties.html">http://www.bedfordshirediabetes.org.uk/guidelines/diabetes-and-learning-difficulties.html</a>
without the service	40%		
with the service	20%		
Percentage of adults with physical disabilities with moderate needs attending day service	32.6%	N/A	Scope.

# Case Study 4

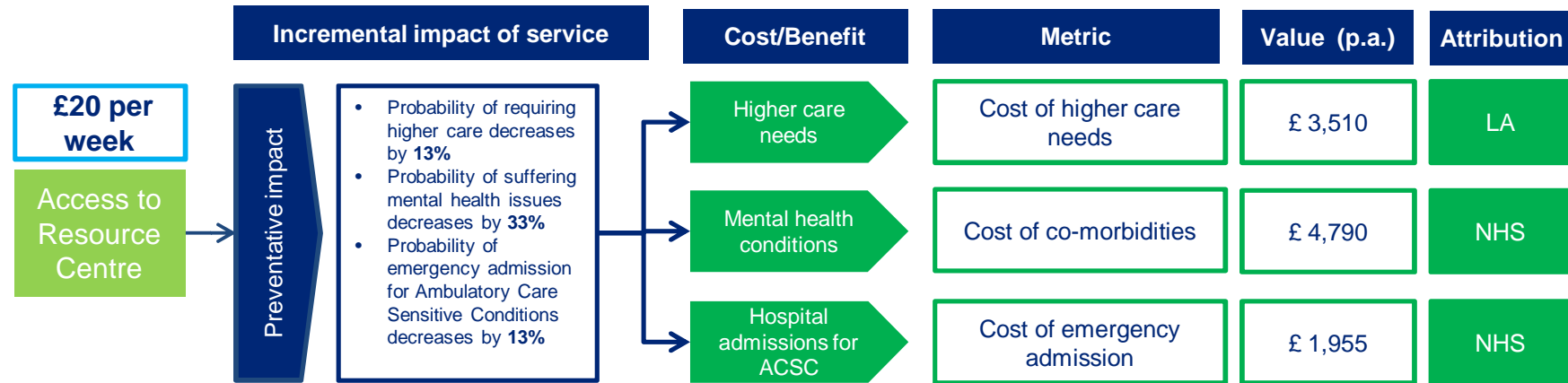
## Inclusion service – adult day centre

Variable	Value (per year)	Attribution	Reference
Probability of carer experiencing mental health issues	52%	N/A	NAS, <i>The way we are: autism in 2012</i> , 2012.
Percentage of HFA living with a carer	50%	N/A	National Audit Office, <i>Supporting People with Autism Through Adulthood</i> , 2009. We assume the same percentage applies as an average across disabilities.
Weighted cost of GP visits, per year	£ 299	N/A	Expert Patients Programme. This the cost of a GP visit, £30, and the cost of a GP visit at home, £90, weighted by the number of times a disabled person's visit per year.
Probability of GP visits	31%	N/A	Figures in the literature on training and education on self-care support range from 24% in Montgomery et al (1994) to 69% in Choy et al (1999). We take a conservative estimate of 31% contained in Vickery et al (1988).
Number of disabled people with learning or physical disabilities and with moderate care needs receiving LA supported care post-reform	40,000	N/A	PSSRU at LSE, Implications of setting eligibility criteria for adult social care services in England at the moderate needs level, PSSRU Discussion Paper DP2851

# Health and Social Care focus example

## Example of Health and Social Care Impacts of Resource Centre

The calculations of the impacts of this case study deliberately exclude the impact of increased employment and the effects on carers and families and are limited to impacts accruing to Local Authorities and to the NHS. The latter impacts could potentially apply to the other case studies as well.



# Health and Social focus example

## Example of Health and Social Care Impacts of Resource Centre

Variable	Value (per year)	Attribution	Reference
<b>Cost of hospital admission for Ambulatory Care Sensitive Conditions in adults with learning disabilities, cerebral palsy and hydrocephalus</b>		NHS	<a href="http://www.institute.nhs.uk/quality_and_service_improvement_tools/quality_and_service_improvement_tools/length_of_stay.html">http://www.institute.nhs.uk/quality_and_service_improvement_tools/quality_and_service_improvement_tools/length_of_stay.html</a> ; Department of Health, NAO. "Transforming NHS ambulance services", 2011; <a href="http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationPolicyAndGuidance/DH_132390">http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationPolicyAndGuidance/DH_132390</a> ;
Hospital bed	£ 225 per day		
Ambulance	£ 225		
A&E cost	£ 110		
Average length of stay	7.2 days		Glover and Evison, Admissions that should not happen, Department of Health, 2013.
<b>Decrease in emergency admissions for ACSCs</b>	13%	N/A	The Kings Fund, Emergency Hospital Admissions for ACSC: identifying the potential for reductions, 2012. This paper finds that for the general population admission could be reduced by between 8 and 18 per cent; we use the midpoint of these values.
<b>Increased cost of mental health issues for a person with a long-term physical condition</b>	£ 3,910 - £ 5,670	NHS	The Kings Fund, Long-term conditions and mental health – The cost of co-morbidities, 2012.
<b>Probability of developing mental health issues as a result of lack of support</b>	33%	N/A	Scope, Mencap, The National Autistic Society, Sense, Leonard Cheshire Disability, <i>The other care crisis: Making social care funding work for disabled adults in England</i> , 2013.
<b>Cost of higher care service</b>	£ 3,510	Local Authority	Leonard Cheshire Disability. Based on 5 hours of care per week at a cost of £ 13.50.
<b>Probability of higher care service</b>	13.3%	Local Authority	Assuming 10 out of 75 people attending the service would require more expensive services, for example requiring an hour of care at home a day

## Probability distributions for Monte Carlo simulations

Variable	Distribution	Case study	Reference
Probability of employment for user with the service	Triangular(0.28,0.31,0.42)	2	The lower bound is taken from Mencap, Learning Disability and Employment. The upper bound is obtained from the 49% increase contained in Beyer (2007), while the middle value assumes a conservative increase of 10%.
Probability of employment for user with the service	Triangular(0.10,0.25,0.44)	3	The upper bound is taken from Action for Blind People. The lower bound is the employment without the service as estimated by with the relevant stakeholders at Sense and the middle value assumes a conservative estimate.
Probability of employment for user without the service	Triangular(0,0.05,0.10)	3	These were estimated by the relevant stakeholders at Sense.
Probability of employment for user with the service	Triangular(0.18,0.18,0.342)	4	The middle value is taken from evidence of Plymouth Community Service. The upper bound and lower bound are the rate of employment after and before the provision of social services in NAO (2009) respectively.
Probability of employment for user without the service	Triangular(0,0,0.18)	4	The middle value is taken from evidence of Plymouth Community Service. The upper bound is the rate of employment before the provision of social services in NAO (2009).
Probability of employment for carer with the service	Triangular(0.62,0.74,0.93)	1, 2, 4	The lower bound is the average of male and female carers who are employed as in the Other Car Crisis (2012). The middle and upper bounds are obtained by applying a 20% and 50% increase respectively, as in Carers UK (2011).
Probability of residential care with the service	Beta (203,1)	1	National Audit Office, <i>Supporting People with Autism Through Adulthood</i> , 2009.



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