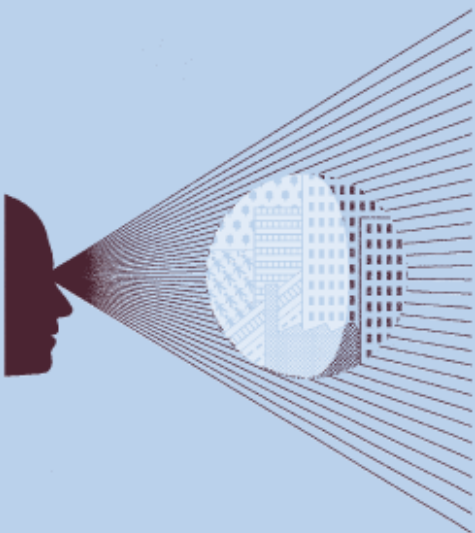


Impact of Centrepoint's intervention for homeless young people

A cost–benefit analysis

Prepared for
Pro Bono Economics



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Foreword

Centrepoint approached Pro Bono Economics for help with a cost-benefit analysis of their services. PBE invited economist volunteers from Oxera Consulting to scope the project, and Fod Barnes, a senior adviser, quickly identified the need to try to understand what would have happened to the young people who come to Centrepoint without the charity's intervention. The team (Fod with Avantika Chowdhury and Amitoj Gill) were able to model the likely path that homeless young people would follow without any intervention, in a number of areas including employment, substance misuse, crime as well as health, and to use this information to assess the benefits of early intervention.

All social cost-benefit analysis is based on a set of assumptions, and the ones Oxera have made are conservative, and explained in detail in the full report. Transparency around assumptions, rigour and consistency are paramount to the work of PBE and we are delighted to work with Oxera, whose approach places emphasis on these same principles.

Overall the analysis highlights the value of intervening early in the lives of homeless young people and underlines the importance of the services that Centrepoint provides. The resulting figure, an estimated £2.40 benefit to the public purse for every £1 spent on services, is powerful information, and we hope this report supports the charity in its mission to improve the lives of young people facing homelessness.

Our thanks go to Fod, Avantika and Amitoj at Oxera, and to Paul Anand for his peer review.

Andy Haldane, Founding Trustee of Pro Bono Economics

Executive summary

The scale of youth homelessness in the UK is significant. According to the National Statistics on Statutory Homelessness, around 17,000 households headed by 16–24-year olds were statutory homeless in 2011. These figures include only those deemed to be in ‘priority need’, such as households with dependent children, disabled people and care leavers.¹ Research on youth homelessness finds that around 78,000–80,000 people under the age of 25 experienced homelessness in 2008/09. The total number of all homeless people is likely to be considerably higher because many are often not counted and are therefore ‘hidden homeless’, such as ‘sofa-surfers’ (who stay temporarily with other people).

Homelessness is therefore generally seen as worthy of intervention by the state and charitable organisations. In addition to the undoubted negative effect on the quality of life of the homeless individual, substantial costs are incurred at a societal level, including both direct expenditure in providing support and the costs of adverse outcomes, such as crime, mental health problems, drug abuse and lower employment. As a result, in the UK around £1 billion of annual government spending is targeted at either the causes or the effects of homelessness. Within this general framework, Centrepunkt Soho (henceforth Centrepunkt) provides services and interventions aimed at young people between 16 and 25 who find themselves homeless across London and North East England.

The purpose of this research is to analyse, as far as possible, the impact of these specific interventions within a conventional economic cost–benefit analysis (CBA). In doing so, this report also seeks to inform decision-making in the area of homelessness policy and, in particular, in relation to policies for the young homeless. As such, the focus is on a traditional CBA in order to ascertain whether each £1 that Centrepunkt spends on interventions now is higher or lower than likely future public expenditure, should this intervention not take place at the current point of time. In fact, the CBA assumes that if Centrepunkt does not intervene now, the same intervention would be carried out by another organisation at a later date. Thereby it primarily captures the benefits of early intervention through the early reduction of crime and other problems, and through higher employment and taxes.

The analysis suggests that £1 spent by Centrepunkt in intervening during the early stages of homelessness, compared with a similar intervention at a later stage, results in potential costs avoided by the public purse of £2.40. This equates to a net benefit of at least £19,900 per young homeless person. Sensitivity analysis around certain of the assumptions indicates that the benefits to the public purse could range from £2.21 to £2.48.²

The potential avoided costs and potential benefits as quantified in this report arise from improved education and lower barriers to securing employment and wages, and thereby higher tax revenue to the Exchequer; less involvement in crime leading to lower costs of the criminal justice system; fewer health problems leading to lower burden on the public healthcare system; and a lower drain on welfare benefits.

¹ ‘Care leavers’ refers to young people who have been looked after by local authorities, for example being placed in foster care or in children’s homes.

² A similar review of the Supporting People programme, which covers housing-related services provided to vulnerable people (including the homeless, older people, teenage parents, women at risk of violence, etc), found that the programme provided £3.41 billion of benefits per year for £1.61 billion of investment. The study compared the costs of support provided under the arrangements of the Supporting People programme with the best alternative. In the case of homeless people, these costs include the costs of repeat homelessness, crime, drug treatment and hospital admissions. See Department for Communities and Local Government (2009), ‘Research into the financial benefits of the Supporting People programme, 2009’, July.

Throughout the analysis, conservative assumptions have been adopted wherever possible. Furthermore, this report has not explicitly accounted for various other benefits when estimating the £2.40 of benefits, such as those due to reduced housing costs and reduced costs to victims of crime. Evidence indicates that these benefits are likely to be substantial. The analysis also ignores the benefit to the young persons themselves from any improvement in their quality of life as a result of their receiving help from Centrepont.

From a societal perspective, therefore, this analysis is likely to underestimate significantly the benefits of Centrepont intervention. Overall, the analysis highlights the importance of intervening in the lives of homeless people at an early stage and thereby preventing escalation of conditions which may prove very costly for both society and the individuals if left to be tackled at a later stage.

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1 Introduction

In general, policy-makers want to undertake evidence-based policy interventions, if for no other reason than this should increase the probability that the policy intervention will actually achieve its objectives.³ However, this does require the evidence. This report is designed to inform decision-making in the area of homelessness policy, in particular in relation to policies designed to intervene early with young homeless people in the UK (under the age of 25).

Homelessness refers to the condition of not having a permanent home and can exist in a number of forms including rough sleeping (sleeping on the streets), sofa-surfing (staying temporarily with various people), and living in temporary and/or unsafe accommodation. Depending on their precise circumstances, homeless people may be considered 'statutory homeless', in which case they are legally entitled to housing from local authorities, or not statutory homeless, and may or may not receive some housing support from the local authority. In order to be accepted as statutory homeless, a household must be found to be both unintentionally homeless and in a 'priority need' group, such as households with dependent children, households fleeing domestic violence, people with disabilities, care leavers, and those under 18. According to the National Statistics on Statutory Homelessness, around 17,000 households headed by 16–24-year olds were statutory homeless in 2011.⁴ However, this excludes a significant number of people who would be considered homeless. Research on youth homelessness suggests, for example, that around 78,000–80,000 young people experienced homelessness in 2008/09 in the UK.⁵ The number of all homeless people, including the 'hidden homeless' such as sofa-surfers, is likely to be considerably higher.⁶

Homelessness is generally seen as an issue that is worthy of intervention by the state and charitable organisations. In the UK around £1 billion of annual government spending is targeted at either the causes or the effects of homelessness.⁷ This spending covers bed and breakfast accommodation, leased and hostel accommodation, as well as grants to the voluntary and community sector. In addition, charitable institutions spend significant amounts addressing the same issues. These are not insubstantial sums, and at a societal level the costs of homelessness—in terms of both direct expenditure and the costs of related adverse outcomes, such as crime and drug or alcohol dependency—are considerable.⁸

Within this general framework, Centrepont Soho (henceforth Centrepont) provides services and interventions aimed specifically at young people between 16 and 25 who find themselves homeless across London and North East England.

³ For example, see Reuter, P. and Stevens, A. (2007), 'An Analysis of UK Drug Policy, A Monograph Prepared for the UK Drug Policy Commission', April; available at http://kar.kent.ac.uk/13332/1/analysis_of_UK_drug_policy.pdf, accessed January 2013; and Department for Business Innovation and Skills (2011), 'The long term effect of vocational qualifications on Labour Market Outcomes', June.

⁴ See https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/153744/Table_781.xls, accessed June 2013.

⁵ Quilgars, D., Fitzpatrick, S. and Pleace, N. (2011), 'Ending youth homelessness: possibilities, challenges and practical solutions', July; available at <http://www.york.ac.uk/media/chp/documents/2011/EndingYouthHomelessness.pdf>, accessed January 2013.

⁶ For example, a survey of single homeless people conducted by Crisis, a national charity working with homeless people, found that 62% of all those surveyed were hidden homeless—ie, the local authority had no statutory duty to house them and they were living outside mainstream homelessness provision, staying with friends or rough sleeping. Crisis (2011), 'The hidden truth about homelessness: experiences of single homelessness in England', May, p. 12. Other estimates of the number of rough sleepers are available from CHAIN, a database that regularly tracks and publishes reports on the movements of all known rough sleepers in London. See <http://www.broadwaylondon.org/CHAIN/Reports.html>, accessed January 2013.

⁷ National Audit Office (2005), 'More than a roof: Progress in tackling homelessness', February 23rd.

⁸ A study by the New Policy Institute of the costs of homelessness estimated the number of single homeless people at 310,000–380,000 in 2003, and the associated costs at £4,500 for low-cost scenarios, up to £83,000 for high-cost scenarios. New Policy Institute (2003), 'How many, how much? Single homelessness and the question of numbers and cost'.

The purpose of the research presented in this report is to analyse, as far as possible, the impact of these specific interventions within a conventional economic cost–benefit analysis (CBA). The study finds that Centrepoin’s intervention in the early stages of homelessness saves substantial amounts of public expenditure that would otherwise have been incurred due to the adverse impacts of homelessness. Early intervention enables people to work and pay taxes; reduces the amount of benefits payments made to people; reduces involvement in crime and the resultant costs on the criminal justice system; and improves physical and mental health, reducing the burden on the public healthcare system.

The focus here is on exploring and quantifying the benefits of this early intervention by Centrepoin. The CBA assumes that if Centrepoin does not intervene now, the same intervention would be carried out by another organisation at a later date. Thus the CBA captures the impact of this delay in terms of additional costs and forgone benefits as described above. In fact, many of those homeless people who receive help from Centrepoin may not get help from anyone even at a later stage. These costs are not captured in this study. Thus, this quantification should be seen as an underestimate of the benefits to the public purse of Centrepoin’s activities.

Furthermore, this analysis does not capture the benefit to the young people themselves from any improvement in their life as a result of their receiving the intervention by Centrepoin. This is not because these benefits do not exist, simply that they are difficult to measure and have been excluded from the scope of this report. From a societal perspective, therefore, this analysis is likely to underestimate significantly the benefits of Centrepoin’s intervention.

1.1 Services provided by Centrepoin

Centrepoin has been providing a range of services to homeless young people aged 16–25 across London and North East England for over 40 years. Oxera understands that this includes the provision of accommodation (including emergency night shelters, foyers and flats) where the young people (or its ‘clients’) stay for up to two years, as well as educational, emotional and health support. In providing these services, Centrepoin works with former rough sleepers as well as other homeless young people. Between April 2010 and March 2011, it provided support to around 1,200 homeless young people, including around 280 rough sleepers.⁹ Its services include the following.

- **Housing services:** short- and long-term accommodation, including emergency shelters with stays up to nine nights, and foyers and semi-independent flats with stays up to two years.
- **Support and development services:** Every young person at Centrepoin also has a support worker to provide them with a needs assessment and practical support to help them access the services they need. The support worker also helps to reconnect the young person with their home where appropriate, and to assist them in building life skills.
- **Learning services:** Centrepoin’s specialist learning team offers learning and work advice, such as CV preparation, interview skills, job search, financial literacy and vocational guidance. It also delivers accredited workshops that help young people to learn the skills they will need to live independently.
- **Health services:** Centrepoin’s health team offers expert advice to young people around drugs, alcohol, healthy living and sexual health. The team also includes trained psychotherapists who provide counselling for those with poor mental health and well-being.

⁹ Centrepoin (2011), ‘Financial Statements 2011’.

- **Influencing local and national policy:** Centrepoint works to influence national and local government policy to the benefit of homeless young people. This involves raising awareness among policy-makers of the challenges that homeless young people face, and working with national and local government to identify policy responses to tackle these problems.
- **Other services:** such as securing volunteering opportunities for young people both within and outside Centrepoint, and developing youth educators who educate other young people about the realities of homelessness. Centrepoint also works with local authorities and other providers to secure move-on accommodation in the private rented sector.

Box 1.1 Selected programmes undertaken by Centrepoint in 2010/11

In 2010/11, Centrepoint undertook a number of programmes focusing on housing and the learning and development needs of its clients. For example:

- the London Borough of Redbridge initiated a Places of Change development with £0.8m of funding. Opened in summer 2011, the development provides 12 bed spaces of move-on accommodation. In addition, 37 properties were acquired in the Borough with funding of £3.5m, which will also provide high-quality move-on accommodation;
- under the Centrepoint LifeWise approach, development programmes led to 1,683 accreditations for taking part in workshops, which focused on helping young people develop their independent living skills and improving their chances of securing employment;
- the Centrepoint Parliament and Youth Educators Programme delivered training at ten Centrepoint staff inductions and ten arrears training sessions. Through the Centrepoint Parliament, 14 young people received Open College Network accreditation and seven young people received accreditation by completing Level 3 PTTLs ‘Train the Trainer’ awarded by Qualifications Credit Framework, which is the equivalent of an A level.

1.2 Objective of this study

This study focuses on assessing the impact of the intervention implemented by Centrepoint and quantifying the scale of public costs avoided relative to the costs incurred by Centrepoint for this intervention and the usually higher cost associated with delaying the same intervention. The assessment relies on qualitative evidence such as case studies of young people at Centrepoint and the views of Centrepoint staff who are in close contact with young people, as well as quantitative evidence provided by Centrepoint. Where reliable data was not available, assumptions have been made, informed by the experience of Centrepoint staff or by data from publicly available sources. The main data sources used in the report include: the University of Sheffield’s FOR-HOME study on recently resettled homeless people, the National Audit Office’s report on the costs of youth crime on the criminal justice system, Office for National Statistics data on wages by age and occupation, and the Department for Education’s research into costs of treating families with multiple problems.¹⁰ Throughout the report, the general approach is intentionally conservative, with the key assumptions being tested using sensitivity analysis.

The report is organised as follows: section 2 provides some background on homelessness and its causes and plausible implications for society, and illustrates how Centrepoint may

¹⁰ Details on these and other sources are provided in the appendix to this report.

benefit society. The analytical framework adopted in this study is set out in section 3, followed by the results of the CBA in section 4; and section 5 concludes. Detailed methodologies and data that have been used to arrive at the results are discussed in the appendix.

2 Background to homelessness and the benefits of intervention

The scale of youth homelessness in the UK is significant. A 2011 study estimated that there were around 78,000–80,000 young people aged between 16 and 24 years who were homeless in 2008/09.¹¹ This included statutory homeless people—those that a local authority has accepted as being owed a ‘main homelessness duty’¹²—as well as non-statutory homeless people.¹³ A survey conducted by Crisis, a national charity working with homeless people, estimated that the majority (62%) of single homeless people were non-statutory homeless (the local authority had no statutory duty to house them) and they were staying outside mainstream homelessness provision.¹⁴

Furthermore, recent evidence shows that homelessness—in particular, rough sleeping—is on the increase in London and across the UK. Around 5,678 people (of all ages) were known to have slept rough in London in 2011/12, a 43% increase over the previous year. The duration of rough sleeping is also on the rise: more than 20% of the rough sleepers in London had been sleeping rough for two or more years, a rise of 11% over the previous year. Of the total of rough sleepers, 11% were aged below 25 years, with 58% being between 26 and 45 years old.¹⁵

2.1 Nature of the needs of homeless young people

The causes of homelessness are difficult to pin down, not least because there is rarely one clear reason, but also because gathering information from such disengaged members of society is challenging. The FOR-HOME study (2011) surveyed 400 recently resettled homeless people, and found that the most common reasons for homelessness given by this sample was relationship breakdown with friends, family, parents or partners.¹⁶ This is supported by research with young people at Centrepoin in 2009: 58% of young people at Centrepoin had to leave home because of arguments, relationship breakdown or being told to leave.¹⁷ Crisis research in 2008 indicated that, for homeless women, the most common reasons were physical or mental health problems and domestic abuse.¹⁸

Homelessness and rough sleeping are commonly associated with multiple support needs. According to the CHAIN database, in 2011/12, 47% of rough sleepers had alcohol problems, 29% had drug abuse issues, and 43% suffered from mental health problems. It also showed that 34% of rough sleepers have been in prison at some point.¹⁹ It is likely that the multiple conditions reinforce each other. For example, mental health problems can lead to higher likelihood of substance abuse, and vice versa. This may cause tenancy problems

¹¹ Quilgars et al. (2011), op. cit.

¹² Local authorities have a duty to offer accommodation to the statutory homeless. This includes those in priority need (eg, families with dependent children, pregnant women and those who are assessed as vulnerable) and those not found to be intentionally homeless.

¹³ To be counted as ‘statutory homeless’, one must either lack a secure place in which one is entitled to live, or not reasonably be able to stay in one’s current accommodation, and have to meet additional criteria for the local authority to provide housing. The non-statutory homeless people include single homeless people who are not entitled to housing, and people who do not apply for housing (and may instead stay with friends or sleep rough).

¹⁴ Whereas mainstream housing provision includes hostels and night shelters, accommodation used by the hidden homeless comprises squatting, staying with friends and family, or sleeping rough. Crisis (2011), ‘The hidden truth about homelessness. Experiences of single homelessness in England’, May.

¹⁵ Crisis website, Rough sleeping section, available at <http://www.crisis.org.uk/pages/rough-sleeping.html>, accessed January 2013.

¹⁶ Crane, M., Warnes, T. and Coward, S. (2011), ‘The FOR-HOME Study: Moves to Independent Living; Single Homeless People’s Experiences and Outcomes of Resettlement’, Sheffield Institute for Studies on Ageing, University of Sheffield, available at <http://www.kcl.ac.uk/sspp/kpi/scwru/pubs/2011/craneetal2011forhomefinalreport.pdf>, accessed January.

¹⁷ Centrepoin (2009), ‘Family Life: the significance of family to homeless young people’.

¹⁸ Crisis website, <http://www.crisis.org.uk/pages/causes-consequences.html>, accessed January 2013.

¹⁹ CHAIN (2012), ‘Street to Home Annual Report 2011/2012’, available at http://www.broadwaylondon.org/CHAIN/Reports/S2H_201112.pdf, accessed January 2013.

and increase the likelihood of anti-social behaviour, which in turn may cause eviction, perpetuating homelessness.

The prevalence of multiple needs also implies that long-term rehabilitation is not limited to accommodation issues, as young people need other support, such as education and training, in order to gain employment and continue independent living. This feature of multiple needs is also relevant for Centrepoint's clients: a survey of its clients in 2010 showed a strong correlation between drug abuse and mental health problems, with 47% of those with mental health problems using drugs (relative to 18% overall). Similarly, they are less likely to be working and more likely to be involved in crime.²⁰

2.2 Potential benefits of intervention

Homelessness can impose a wide range of costs on society, in terms of both public resources and intrinsic costs of quality of life, and Centrepoint and similar organisations that intervene in homeless people's lives potentially deliver substantial benefits to society.²¹ For example, through its housing and support and development services, Centrepoint assists young people to overcome the hurdles posed by multiple exclusion problems. Arguably, the absence of such intervention could perpetuate these adverse conditions and cause increased negative outcomes, such as crime and drug abuse. This would lead to two types of cost: 1) the costs borne by the young people through outcomes such as lower quality of life and premature illness; and 2) the costs imposed on society through activities such as higher levels of crime. Young people can become involved in petty theft and shoplifting, or in more serious offences such as drug abuse and violence. These would in turn lead to increased incidence of prison sentences and hospital emergency visits, thereby imposing a significant burden on public funds.

This is also indicated by eight detailed case studies provided to Oxera by Centrepoint. Of these eight cases, four young people had been involved in substance abuse, including class A drugs such as heroin; two had served multiple jail terms; and seven have mental health problems, including depression and suicidal tendencies. They also suffered from other offending behaviour and anger-related problems.

These case studies also show how Centrepoint intervened in the lives of these young people and involved them in various courses and projects during their stay. Box 2.1 below sets out two such cases.

²⁰ Centrepoint (2010), 'The changing face of youth homelessness: trends in homeless young people's support needs'. http://www.centrepoin.org.uk/media/11287/the_changing_face_of_youth_homelessness_-_final_report.pdf. For an overview of the multiple needs of homeless people, see, for example, Crisis (2004), 'Lost Voices, The invisibility of homeless people with multiple needs'; available at <http://www.crisis.org.uk/publications-search.php?fullitem=134>, accessed January 2013.

²¹ Albeit different organisations may have a different focus (eg, in terms of age or type/severity of needs). Centrepoint focuses on young people below the age of 25 and aims to tackle the impact of homelessness early on before increased entrenchment and severity.

Box 2.1 Sample case studies of Centrepoint clients

Jake,²² a Centrepoint client, suffered from depression due to lack of productivity in his life. One of Centrepoint's hostel services referred him to the in-house learning team.

Jake became involved in a number of activities during his time at Centrepoint, including football coaching for children; a work placement at a big clothes retailer through Workwise; and cooking workshops to assist him to interact with other clients and be independent.

Initially, Jake did not want to engage with the health team. At Centrepoint, Jake became a part of the mentoring scheme with the 'Rada Getting Into Drama Course' and was allocated a mentor through this scheme. He also attended various Lifewise workshops, including Dealing With Debt, in order to prevent him from accumulating arrears.

Tom, another Centrepoint client, had been addicted to heroin since the age of 15 and was shoplifting in order to fund his addiction. Tom had also been in and out of prison since the age of 14 for theft-related offences.

He received a range of support services while at Centrepoint:

- he was linked in with the health team, a counsellor, and the drugs and alcohol worker. He was supported through taking Subutex (a replacement for heroin) to help him manage his drug addiction;
- he was also linked in with the learning team, who helped him access a plumbing course;
- he is attending various Lifewise workshops, including Moneywise, Dealing with Debt, and Managing Your Home, to assist his move to independent living;
- he also attended anger management sessions.

Without Centrepoint's intervention, these young people would have been likely to impose additional costs on society. This increased cost can come in the form of additional expenditure (eg, the cost of additions to the prison population), or forgone revenue (eg, the loss of taxes that would be paid as an employee). The potential categories of costs are as follows.²³

- **Decreased education and employment:** as discussed in section 1, Centrepoint provides face-to-face support and development services to young people to assist them in education as well as training, and subsequently to gain stable employment. The services also involve CV preparation, interviews, and financial literacy and debt management, which help young people to gain, and more importantly to continue with, stable employment. Without this intervention, the majority of homeless young people would remain NEET (not in education, employment or training) and therefore unemployed. The lower education and employment in turn would imply a loss of potential wage earners and consequently a loss in tax revenues.
- **Increased costs of welfare benefits:** the lower level of education and employment also imply a higher burden of welfare benefits on the public purse. The majority of young people at Centrepoint draw on benefit claims while homeless, and without its services to support them into education and work, would be likely to continue to claim these benefits for a long period of time.
- **Increased crime:** due to their financial situation, homeless people may, and often do, turn to crime as a means to fund survival. This can involve robberies (typically muggings), as well as shoplifting, stealing to order for criminal gangs, and prostitution. For example, a survey of around 440 homeless people in England, conducted by Crisis in 2011, showed that 30% of respondents had shoplifted in order to fund a night in a

²² Young people's names have been changed throughout this report to protect identities.

²³ These categories are based on a generic case study prepared by Centrepoint.

hotel or bed and breakfast.²⁴ A survey by Centrepoin in May 2010 also found that 20% of around 670 clients surveyed had a history of offending, and that 17% were involved in, or affected by, gang crime (which often involves significant costs to society).

The costs of crime are incurred through the crime itself (eg, damage to the victim and property), and through subsequent court proceedings, prison sentences, the enforcement of community sentences, and the provision of probation services (albeit not all incidents impose all of these costs, depending on the type of crime).

- **Increased drug and alcohol abuse:** homeless young people are also likely to impose significant costs to society through substance abuse, especially because the condition is likely to worsen over time if not addressed. The 2010 survey of Centrepoin clients found illegal drug use by 28% of the respondents (16–17-year old clients were more likely to misuse drugs, with 37% doing so). This is also consistent with the Crisis survey, which found that 32% of the respondents were dependent on drugs.

Without intervention at an early stage, the incidence rate is therefore likely to increase. In turn, this would mean greater need for drug intervention programmes (DIP) and counselling services, and, at the extreme stages, would impose significant costs through residential treatments. Accommodation and counselling provided to drug users at an early stage has been shown to prevent escalation and avoids direct costs. Such intervention also avoids indirect costs—eg, through decreased crime due to decreased drug dependency. (This is discussed further below under multiple exclusion needs).

- **Deterioration of mental health:** young people who are homeless may also be more prone to mental health problems relative to the average population. For example, the stress and instability of homeless life can exacerbate pre-existing mental health problems; similarly, other issues such as drug misuse may also be associated with a deterioration of mental health.²⁵ As with drug abuse, without intervention these conditions could worsen and in turn lead to higher public health costs through visits to hospital accident and emergency (A&E), the use of crisis mental health teams and potentially due to the increased need to be hospitalised.
- **Deterioration of sexual health:** homeless young people are also more likely to get involved in prostitution and other risky sexual behaviour in order to fund or find somewhere to stay. This increases their risk of contracting sexually transmitted diseases. The Crisis report highlighted that of the women surveyed, 20% engaged in prostitution in order to fund a night in a hotel or bed and breakfast. This deterioration of sexual health in turn imposes considerable costs of treatment on public health services.
- **Deterioration of physical health:** homeless people tend to experience significantly poorer health, for a variety of reasons. Poverty means that many young people are unable to look after themselves properly, for example, due to being unable to afford enough to eat. In the case of people sleeping rough, exposure to the cold can result in conditions such as chronic asthma or frostbite. In addition to making visits to A&E more likely and thereby increasing health service costs, this also has implications for welfare benefits, as the young people may be declared unfit for work and end up drawing benefits for a longer period of time, rather than recovering from their health problems and returning to regular working life.

Each of these categories is associated with costs to the relevant public authorities, depending on the degree of the problem. Table 2.1 sets out the potential outcomes along with the associated costs. Not all of these costs are considered and quantified in this report.

²⁴ Crisis (2011), 'The hidden truth about homelessness: Experiences of single homelessness in England', Available at http://www.crisis.org.uk/data/files/publications/HiddenTruthAboutHomelessness_web.pdf, accessed January 2013.

²⁵ Evidence indicates a positive correlation between higher drug abuse and increased mental health problems, albeit the direction of causation may go either way; see section 2.3 for a further discussion of these 'multiple needs'.

For example, where a young person is engaged in incidents such as mugging or violent crime, this has an impact on the victim of the crime—through short-term treatment costs or medium- to longer-term physical disabilities and mental health issues. Although Centrepoin’s intervention would avoid such costs, these are not explicitly accounted for in the modelling of the benefits in this report with a view to being conservative.²⁶

Table 2.1 Likely outcomes and costs imposed by Centrepoin’s clients without intervention

Cost category	Costs imposed on:	Explicitly modelled in this report?
Higher welfare benefits	Public welfare system	✓
Lower employment and taxes	Exchequer	✓
Higher crime	Cost to victim	x
Higher crime	Criminal justice system, police costs	✓
Higher substance abuse	NHS, A&E, other support services	✓
Deterioration of mental health	NHS, A&E, other support services	✓
Deterioration of physical health	NHS, A&E, public welfare system	x ¹
Deterioration of sexual health	NHS, A&E	x ¹

Note: ¹Sexual health and physical health impacts were not taken into account due to lack of reliable data. Source: Oxera.

Furthermore, this report does not quantify the effect of the interaction of the different outcomes—ie, the effect of multiple exclusion needs, as discussed below.

2.3 Multiple exclusion needs

As noted in section 2.1, there is widespread evidence indicating that homelessness is almost always associated with multiple needs. This is also observed among Centrepoin’s clients. For example, 20% of all 670 young people surveyed had a criminal conviction in their past; however, this proportion was 45% among those using drugs, and 28% for those with mental health problems. Similarly, 17% of all surveyed were involved in gang crime: 36% for those using illegal drugs, and 25% for those with mental health problems.

In addition, around 45% of clients were in education or training at the time of the survey; this figure was lower at 35% and 28% among those with mental health and drug misuse problems respectively. Similar interactions are also relevant to crime rates; for example, drug users may be particularly likely to have repeated prison sentences if their conditions are not addressed. That said, these statistics do not necessarily demonstrate the direction of causality—eg, it is not clear whether drug abuse causes the lower education rate, or vice versa. Nonetheless, the evidence clearly indicates the existence of multiple exclusion needs for homeless people. It is therefore particularly important to address all these problems early and altogether, which reduces the probability of any one need leading to another need, thus preventing escalation of the degree and number of needs for a single young person.

This report does not measure the impact of the multiple exclusion need, primarily due to a lack of data on the joint incidence of such needs, and suitable control groups required to measure this impact. Instead, the report focuses on the cost imposed by individual needs; the overall approach taken is therefore very conservative.

²⁶Some of these costs (eg, victim costs) have been estimated by the Home Office study on crimes. However, the Home Office uses average costs which include high fixed costs of, for example, prisons and other services. The cost estimates used in this report seek to exclude overheads as far as possible.

3 Analytical framework for the assessment

The methodology adopted to quantify the net benefit delivered by Centrepoint involves comparing the likely outcomes for the average Centrepoint client after the intervention (this is called the 'factual' scenario) with the likely outcome relevant to the client without the intervention (or the 'counterfactual' scenario).²⁷

A crucial step in this analytical framework is to determine what the likely outcome without Centrepoint intervention (or the counterfactual) is.²⁸ This is demonstrated by Figure 3.1, which illustrates the alternative paths a young person may follow in the factual and the counterfactual. For example, if Centrepoint did not intervene at time T1, the young person could have continued being homeless for a long period of time, imposing increasing costs on society; alternatively, another similar organisation could have intervened after a limited number of years, thereby limiting the cost imposed on society. The two alternative counterfactual outcomes have very different implications for the net benefit delivered by Centrepoint.

- **Factual pre-intervention period:** since the start of homelessness up to the point of Centrepoint's intervention, the young person imposes some cost on society—eg, through minor offences. This is denoted by level A. For the purposes of the stylised example, this cost is constant over a limited period, while in reality this cost would increase as the time being homeless increases.
- **Factual post-intervention period:** When Centrepoint intervenes, if the person is rehabilitated on a permanent basis, they impose no cost to society in future; this is denoted by D in Figure 3.1. This implicitly assumes the benchmark to be a person not involved in crime and not suffering from any condition, such that no cost is imposed on society.²⁹ (Although there may be cases where the rehabilitation is not successful or not sustained, and the young person returns to being homeless, in which case the cost to society D will be positive on average.)
- **Counterfactual:** Figure 3.1 also shows the two potential outcomes in the counterfactual. Without Centrepoint's intervention, the young person is likely to have continued to be homeless, at least for a limited amount of time, and is likely to have imposed a higher cost (level B) due to increased entrenchment of this state of being homeless. Following this stage of moderate entrenchment there could be two possible long-term outcomes:
 - **no intervention:** the young person may have continued to be homeless, thereby leading to increased entrenchment and even higher costs to society (level C1) for a long period of time. The path followed in this counterfactual would be A, B, C1 instead of A, D with Centrepoint's intervention (this is illustrated by the figure on the left-hand side);

²⁷ Information on the characteristics of clients while they are being treated by Centrepoint has been obtained from Centrepoint's survey of all the clients using its services on May 25th 2010. However, as Centrepoint does not gather long-term information on its clients after they leave, this report has had to rely on other sources to determine the incidence of problems likely to be faced by its clients after intervention and in the absence of intervention. A useful source of information for this purpose has been the FOR-HOME study, which covers homeless people of all ages across six homelessness service providers (including Centrepoint).

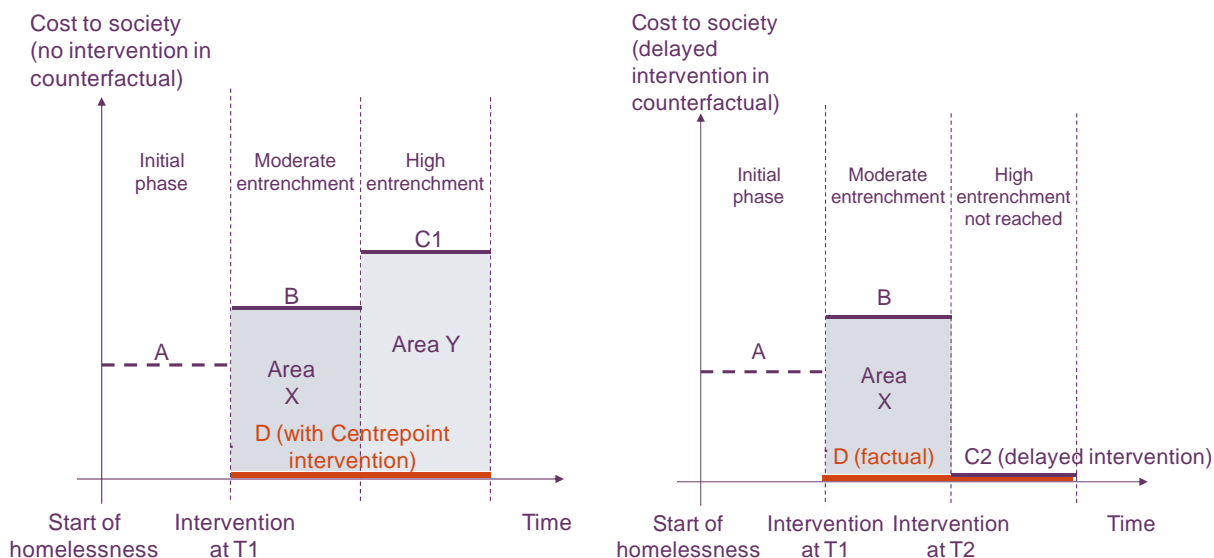
Some of the results of both these studies are based on self-reporting by the survey participants. Therefore, there is a risk that there may be a degree of under-reporting by participants. The overall impact of any such under-reporting would depend on the extent to which it affects the estimates of the incidence of problems after early intervention relative to delayed intervention.

²⁸ This framework of counterfactual analysis is widely used in economics (eg, in claims for damages), as well as policy studies (eg, impact assessments of policy proposals) and medicine (eg, the use of treatment versus control groups in clinical trials).

²⁹ Strictly speaking, the assumption here is that there are no *additional* costs imposed on society from a young person who has received services from Centrepoint compared with the same person if they did not receive those services.

- **delayed intervention:** the young person may have been rehabilitated at some time in the future (say, at T2) by a similar organisation, thereby following path A, B until T2 and no cost (denoted by C2) thereafter.

Figure 3.1 Stylised representation of factual and counterfactual cost to society



Note: This representation includes the costs imposed on society only and not any direct costs of intervention. Source: Oxera.

The gross benefit (ie, not accounting for the costs of Centrepoint in undertaking the intervention) delivered by Centrepoint by intervening at point T1 is the cost that would have been incurred in the counterfactual and is avoided in the factual (the avoided costs). For example, if young people follow A, B and C1 in the counterfactual, the gross benefit is (X + Y). However, if counterfactual is that of delayed intervention and young people follow paths A, B and C1 in the counterfactual, the gross benefit is lower and represented by area X.

For the purposes of this report, it has been assumed that there would have been delayed intervention for all young people in the counterfactual—ie, if Centrepoint did not intervene, other similar organisations (eg, St Mungo’s and Thames Reach) would intervene after a period of time. This is a key assumption behind the conservative approach, as some young people may remain homeless forever or at least for a very long time.³⁰

In addition to the avoided costs to society, the gross benefit delivered by Centrepoint’s intervention includes the avoided costs of any intervention that would have occurred at a later stage if Centrepoint did not intervene. That is:

$$\text{gross benefit} = \text{avoided costs to society} + \text{avoided costs of later intervention if Centrepoint did not intervene}$$

Net benefit of intervention

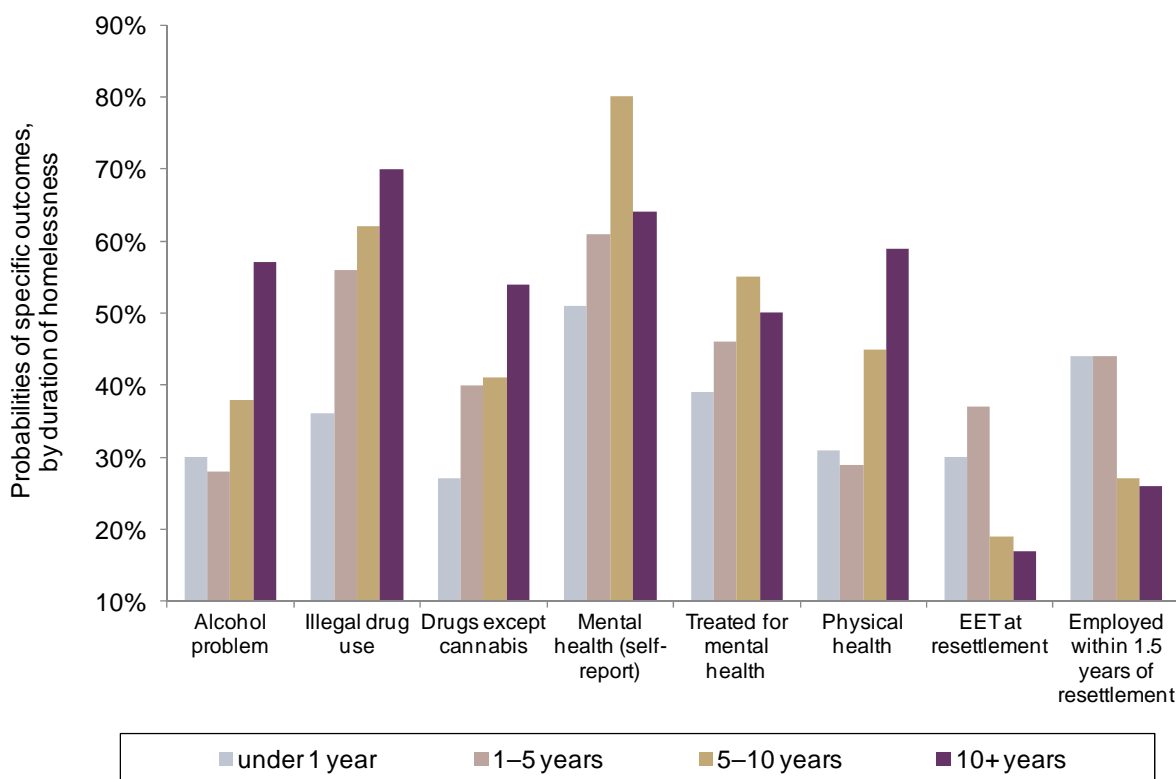
The gross benefit quantified above needs to be offset against the actual costs of intervention incurred by Centrepoint. The net benefit of Centrepoint’s intervention is therefore:

³⁰ It is possible that the young person may have stopped being homeless of their own accord without any intervention (‘spontaneous remission’), for example due to some inherent characteristic that would motivate them to find work after a few years even without any intervention. Reliable data on the likely rate of spontaneous remission was not available. However, based on information from Centrepoint, it is understood that this is likely to be very low, and hence the approach assumes it to be zero. That said, given that this is based on anecdotal evidence, sensitivity analysis has been conducted to assess the impact of positive rates of spontaneous remission by Centrepoint clients (see section 4.4).

net benefit = gross benefit – Centrepoin’s operating costs

Even if there is delayed intervention in the counterfactual, a young person is likely to become more entrenched until that time, and the likelihood or effectiveness of the rehabilitation at that later stage is likely to be lower due to the increased severity of their problems (or due to the costs of similar efficacy being higher). This is evident from the FOR-HOME study, which undertook a survey over the period 2008–10 of 400 single homeless people in contact with six service provider organisations, in order to study their experiences.³¹ The study shows that problems such as unemployment, crime and drug abuse do indeed increase in line with the duration of the homelessness (see Figure 3.2). This in turn is likely to make it more costly to intervene at a later stage. However, reliable data on the direct intervention costs of such delayed intervention in more entrenched homeless people’s lives was not available. It has therefore been assumed that such costs would have been similar to Centrepoin’s actual costs of intervention, but incurred at a later date. This is yet another conservative assumption adopted in the analysis.

Figure 3.2 Increase in problems in line with the duration of homelessness



Note: EET refers to education, employment or training.

The incidence of alcohol abuse over time is counterintuitive. Crane, Warne and Coward (2011) find that the probability of alcohol problems declines from 30% for those homeless for less than one year to 28% for those homeless for 1–5 years, before rising to 38% when the length of homelessness increases to more than five years. This decline in probability of alcohol problems with the increase in the length of homelessness from less than one year to 1–5 years may be a result of under-reporting by the group of survey participants who had been homeless for one to five years (in any event, the decline is not too large). Alternatively, there is evidence that resettlement is most successful for those who stayed in pre-settlement accommodation (eg, hostels) for 24–36 months, but less successful for shorter and longer stays in such accommodation. See Crane, M., Warne, A.M. and Coward, S. (2011), ‘Preparing Homeless People for Independent Living and its Influence on Resettlement Outcomes’, Table 4. This may be linked to lower alcohol problems faced by those who have been homeless for 24–36 months than for those with a short period of homelessness.

Source: Oxera analysis of the FOR-HOME study.

³¹ Crane et al. (2011), op. cit.

4 Assessment of the net impact of Centrepoint

This section sets out the results of the assessment of the net impact of Centrepoint through its intervention for homeless young people. As discussed in section 3, this net impact stems from the avoidance of the costs that the young people would have otherwise imposed on society through increased crime and drug abuse, and through increased needs such as mental health problems and demand for welfare benefits. In addition, Centrepoint also delivers positive benefits through increased employment and wages.

The overall approach, as set out in section 3, has been implemented, to the extent possible, using data from public sources and data collected by Centrepoint on their clients. It was recognised at the start of this project that comprehensive information that would allow a full assessment of costs and benefits was unlikely to be available. The analysis includes sensitivity analysis wherever possible in order to test the reliability of data and/or any assumption made.³²

Sections 4.1–4.3 set out the gross and net benefits that have been quantified in the report, with sensitivity analyses presented in section 4.4. Section 4.5 discusses the additional benefits that have not been quantified. The detailed methodology and data used for the assessment is set out in Appendix 1.

4.1 Quantifiable benefits delivered to society through intervention

This report considers the benefits delivered by Centrepoint through the following five ways: increased taxes and wages due to increased employment; reduced benefit claims due to higher wages; reduced crime; reduced substance abuse; and reduced treatment costs of mental health problems. In considering each of these benefits, it has been assumed that, in the counterfactual of no intervention by Centrepoint, the young person would have received similar services from another organisation after five years.³³ Hence, the counterfactual is that of delayed intervention after five additional years of homelessness, which can be accomplished at the same cost as would be incurred by Centrepoint, but five years later.

The counterfactual may indeed involve a longer period of homelessness before the delayed intervention occurs, albeit some young people may not receive any such support at all during their lifetime and hence they slip through the net. In such cases the costs imposed on society in the counterfactual, and thereby the benefit delivered by Centrepoint, will be significantly higher. Similarly, in the counterfactual, some of the young people at Centrepoint may have obtained gainful employment or decreased the extent of substance abuse of their own accord through spontaneous remission. Oxera understands from Centrepoint that the rate of such spontaneous remission is likely to be low among its clients; nonetheless, in such cases, Centrepoint's net contribution to society would have been less. The impact of changing these assumptions has been explored in section 4.4.

³² In some cases, a 'tipping point' approach has been adopted. This analysis gives an indication of the magnitude of a specific parameter that would result in a net benefit of zero, and helps to determine the plausibility of certain assumptions—for example, it can be used to gauge the extent of spontaneous remission that would be necessary to mean that intervention was not worthwhile.

³³ The FOR-HOME study provides a breakdown of the duration of homelessness of 380 people before they were resettled. It finds that around 18% of the population had been homeless for 0–12 months, 50% for 13–60 months, 18% for 61–120 months and the remaining 14% for more than 120 months. Based on this data and an upper bound of 121 months of homelessness, the weighted average duration of homelessness is estimated to equal at least 53 months, or lie within the four- to five-year range. This is an underestimate of the average duration, as the upper bound could be much higher than 121 months. Therefore, the Oxera analysis assumes that, in the absence of intervention by Centrepoint, homeless young people would receive support from other organisations after five years.

It has also been assumed that both the Centrepoint intervention (in the factual) and the delayed intervention (in the counterfactual) continue for two years. For example, if Centrepoint intervention starts in Year 1, Years 1 and 2 are intervention years followed by post-Centrepoint intervention from Year 3. In the counterfactual, the young person remains homeless from Years 1 to 5, and the delayed intervention spans Years 6 and 7, followed by post-delayed intervention from Year 8. In addition, wherever reliable data was unavailable, it has been assumed that the delayed intervention would be as effective as Centrepoint's early intervention and would involve similar costs, albeit given the relevant type of clients after five extra years of entrenchment.³⁴

Both of these assumptions are conservative as the young people, or at least some of them, are likely to have higher needs where intervention is delayed and would therefore require longer and/or more intensive intervention to achieve the same results as early intervention. This in turn implies that either the delayed intervention would be longer, or not as effective if costs are same, or more costly if it is as effective as Centrepoint's intervention. Section 4.4 also discusses the impact of changing these assumptions.

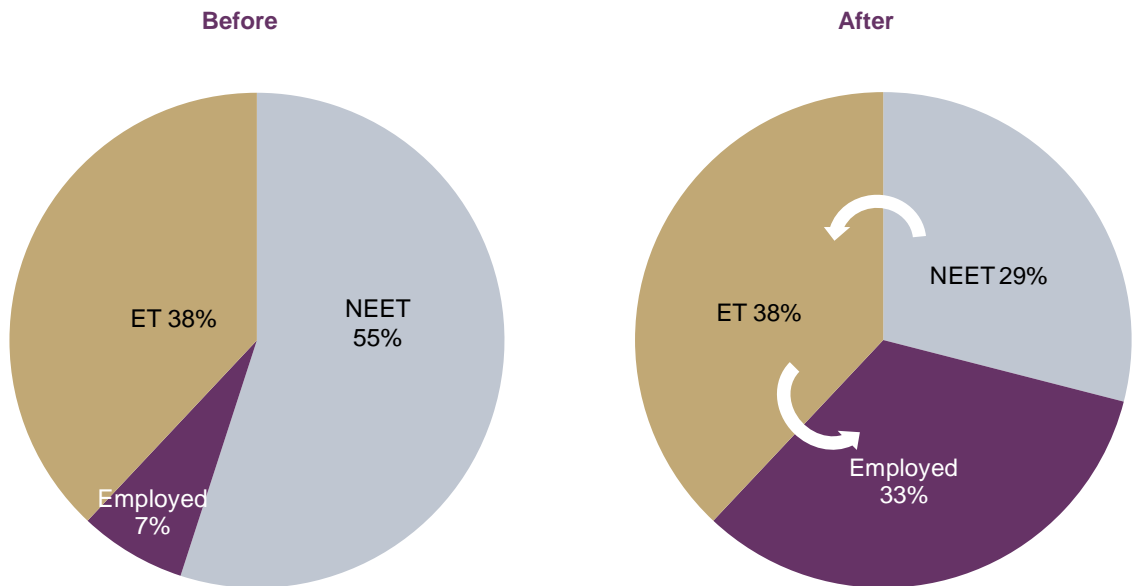
4.1.1 Impact on employment, expected wages and taxes, and benefit claims

The impact of Centrepoint's intervention on employment rates among its clients have two separate impacts: 1) by increasing employment, and wages, it reduces the amount of welfare benefits drawn by its clients; and 2) the higher wages in turn lead to higher tax collection. Both these impacts are driven by the employment rates in the factual and the likely employment rate in the counterfactual.

The employment rate among Centrepoint's clients, both before and after the intervention, and the counterfactual employment rate have been estimated using data from Centrepoint's tracker survey, as well as other data such as the FOR-HOME study. The actual employment rate during and immediately after Centrepoint's intervention was available from Centrepoint. This data also shows, among those not employed, who were in education and training (ET) and who were NEET. Figure 4.1 below shows the breakdown of the three groups before and after the intervention. As illustrated, the intervention increases employment rates as more ETs become employed; however, NEET clients are also brought into training and converted to ETs.

³⁴ For example, if Centrepoint reduced crime by 30%, the delayed intervention would also result in a 30% decrease in crime. However, the type of client in a delayed intervention is likely to be more entrenched and hence have greater probability of committing a crime to start with. For this reason, the absolute rate of crime after delayed intervention may still be higher than the level of crime after Centrepoint's early intervention.

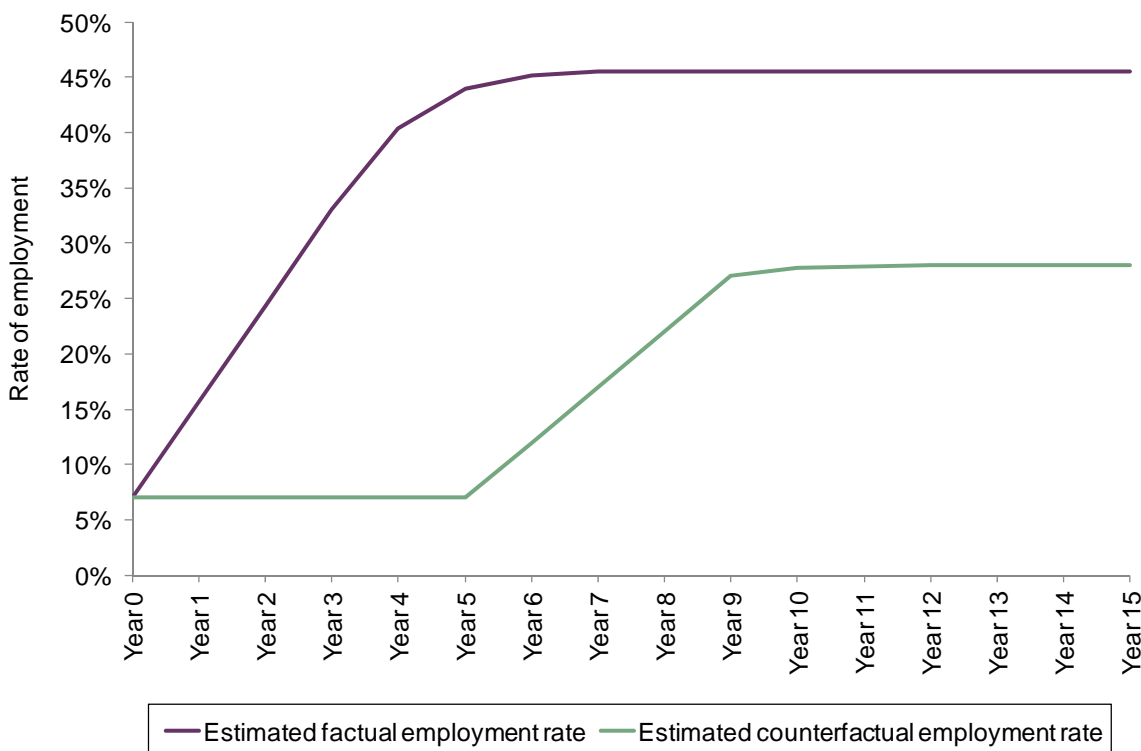
Figure 4.1 Proportion of employed, ET and NEET clients before and after intervention



Source: Oxera analysis of Centrepoint data.

Using information on the movement across these groups, the employment rate after Centrepoint's intervention has been estimated. The detailed methodology is set out in Appendix 1. The counterfactual employment rate until and after delayed intervention is also estimated using Centrepoint data and the employment rate data in the FOR-HOME study. The analysis shows that with Centrepoint intervention, employment levels stabilise at around 46% over the long term, whereas with delayed intervention they stabilise at a lower level of 28% (see Figure 4.2).

Figure 4.2 Estimated employment rates with and without Centrepoint intervention



Note: 'Year 0' refers to the time when the young homeless person comes to Centrepoint. Centrepoint intervention is assumed to take place over a two-year period (in 'Year 1' and 'Year 2'). If Centrepoint does not intervene, delayed intervention is assumed to take place in 'Year 6' and 'Year 7', based on a five-year delay.
 Source: Oxera analysis of Centrepoint data.

The difference in employment rate, and data from Centrepoint on the wages of those employed (obtained from the tracker survey), are then used to estimate the welfare benefits drawn by employed and unemployed young people, which in turn determines the extra welfare benefits that would be claimed without Centrepoint's intervention. The approach takes into account Jobseeker's Allowance claimed by unemployed, income support claimed by the economically inactive, and working tax credit claimed by the employed.

The discounted value of tax benefit from increased employment and wages is estimated using the basic income tax rate of 20% and National Insurance Contribution (NIC) rate of 10% after accounting for any relevant personal allowance threshold. The tax benefit is based on the tax revenues on the lifetime earnings of an employed person with and without the intervention. The lifetime earnings of an employed person have been estimated using data on wages after resettlement provided by Centrepoint and the UK average profile of wages across different age groups.

The consequent lifetime tax revenues with and without Centrepoint's intervention is estimated from the lifetime wages. The benefit from additional tax revenue due to Centrepoint's intervention is estimated to be around £12,332.³⁵ Further details are provided in section A1.1.³⁶

³⁵ Although figures in the text are reported up to four or five significant figures, so that readers can follow how they have been derived, given the assumptions made, these figures should be interpreted as approximations, with an overall accuracy of closer to two significant figures.

³⁶ Other studies estimate the impact of being NEET and of lost employment through different measures. For example, a study by the King's Fund estimates the cost of mental health problems and includes the lost wages through being NEET, and not only

4.1.2 Impact on crime rates

The impact of the intervention on the cost of crime is estimated by using information on the incidence of crime among Centrepoin's clients, the likely rate of crime in the counterfactual, and the public costs associated with different types of crime. Data from Centrepoin shows that around 20% of their clients had a criminal conviction before coming to Centrepoin. Direct data on the reduction of crime rates following intervention by Centrepoin was not available. As a result, the reduction in rates is based on the probability of re-offending by youth offenders in general, leading to the assumption that the post-Centrepoin intervention probability of crime falls to 6%. Data based on crime rates from other sources such as a study by ESRC and other organisations such as Centrepoin offering services to an older cohort of homeless people suggests that the probability of crime would have risen to 44% before delayed intervention.³⁷ It has been assumed that the delayed intervention would have been as effective as Centrepoin (reducing the probability of crime from 44% to 12% after the delayed intervention, which is a 72% reduction in line with the reduction from 20% to 6% in the factual after Centrepoin's intervention).

The benefit delivered by Centrepoin through the reduction of the probability of crime by its clients is measured in terms of the avoidance of costs to the criminal justice system that would otherwise have been incurred. The costs on the criminal justice systems are of four main categories relating to: 1) police work to investigate crime incidents; 2) courts (whose costs vary depending on the type of crime); 3) offender management teams; and 4) custody. These costs have been obtained from a study on youth offenders by the National Audit Office (NAO). This study measured the marginal cost of crime by young offenders, which excludes most of the fixed costs of the criminal justice system.³⁸ These costs have been combined with information provided by Centrepoin on incidence rates and the duration of custody of its clients, and have been estimated to increase from around £9,800 to around £26,000 per homeless young offender over a ten-year period. The costs increase because, if no intervention occurs, an offender is likely to commit a greater number of crimes and of a more serious nature, and thereby serve longer prison sentences (see Figure 4.3).

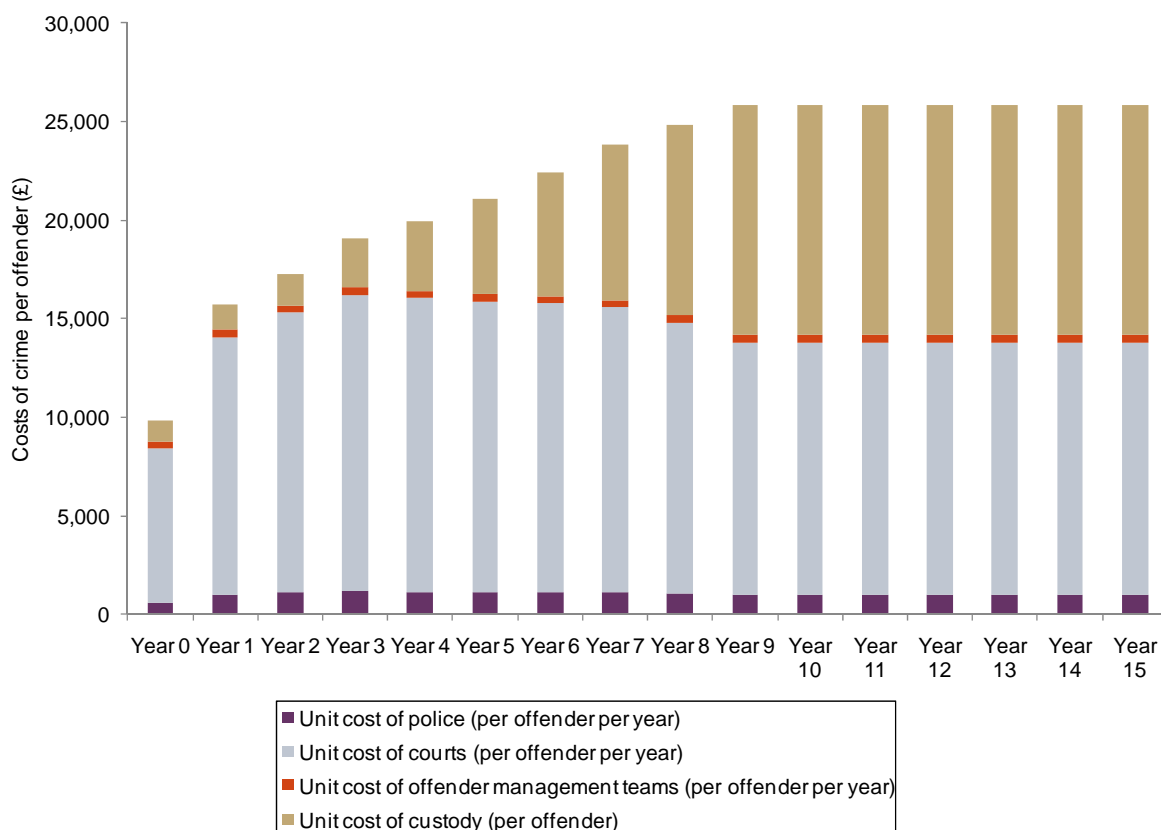
Centrepoin intervention lowers the costs to the criminal justice system by reducing the probability of crimes being committed. Combining the costs per offender with the reduction in probability of crimes being committed by young homeless people implies that Centrepoin intervention is likely to reduce the costs to the criminal justice system by £2,639 per client relative to delayed intervention. Detailed calculations are set out in Appendix 1.

the implied tax revenue, but also the lost employment cost of mental health issues (this is estimated at around £7,000 per year for people suffering from depression and even more for people suffering from more serious conditions). King's Fund (2008), 'Paying the price, the cost of mental health care in England to 2026'. A study in 2012 used lifetime costs of NEET of more than £90,000 to estimate the total costs of alcohol problems. Frontier Economics (2012), 'Specialist drug and alcohol service for young people – a cost benefit analysis'. This study does not, however, take into account the benefit to the young person through higher wages, but considers only the tax benefits of the lifetime earnings.

³⁷ The rate of increase in the probability of crime with increasing duration of homelessness has been obtained from the multiple exclusion homelessness research programme funded by Economic and Social Data Service (ESRC), see 'Multiple Exclusion Homelessness across the United Kingdom, 2010', available at <http://www.esds.ac.uk/findingData/snDescription.asp?sn=6899&key=/&flag=true>, accessed August 2012. This rate of increase has been applied to the starting point of 20% among Centrepoin's clients. Appendix 1 provides further details.

³⁸ These costs are therefore significantly lower than those estimated in other studies (most of which use Home Office cost of crime data). For example, a study by Frontier exploring the economic and social cost of alcohol abuse cites a Cabinet Office study which estimates the cost of criminal justice system at around £6,000 per problem alcohol user. This includes the costs of the criminal justice system, victim costs, and costs such as that of absenteeism (see section 4.5 for more detail). Frontier Economics (2012), 'Specialist drug and alcohol service for young people – a cost benefit analysis'. Cabinet Office (2003), 'Alcohol misuse: how much does it cost?', September.

Figure 4.3 Costs of crime per homeless young offender per year (£, real 2010/11 prices)



Note: The data in the National Audit Office report was provided in real 2008/09 prices. This has been inflated to real 2010/11 prices to be consistent with other data in this report.

Source: National Audit Office (2011), 'The cost of a cohort of young offenders to the criminal justice system. Technical Paper', June; Centrepont; Ministry of Justice (2012), 'Youth Justice Statistics 2010/11', January 16th; Ministry of Justice (2012), 'Story of the prison population. England and Wales', July 31st; and Oxera analysis.

4.1.3 Impact on incidence of drug and alcohol-related problems

The 2010 survey also show that 24% of Centrepont's clients use cannabis, around 7% engage in alcohol abuse and around 4% use class A drugs. Centrepont's health team works with such clients and manages their condition by referring them to appropriate health service providers.

Without such intervention, the consequent increased homelessness of these clients is likely to lead to both a higher incidence rate of such abuse, and increasing complexity and addiction at a later stage for each person involved in such abuse. By providing direct support to tackle its clients' substance misuse and by referring its clients to substance abuse treatment by the NHS early, Centrepont provides a benefit by avoiding the higher treatment costs that would have been incurred in the counterfactual.

Oxera, based on input from Centrepont, has estimated the average one-time treatment costs for a person suffering from the substance abuse problems to be around £19,000 for class A drugs, around £19,000 for problem alcohol use, and around £800 for cannabis.³⁹ Combining the treatment costs with reduction in the probability of substance abuse implies that the reduction in expected treatment costs can be as much as around £950 per client in the case of class A drug use. Detailed calculations of the methodology are provided in Appendix 1.

³⁹ Oxera understands from Centrepont that the health services required to treat a young person involved in Class A drug abuse and someone suffering from alcohol abuse problems are similar.

In addition, misusing drugs may trigger other costs to society, such as further crime committed by young people (this is the effect of multiple exclusion needs). Although this cost has not been estimated explicitly due to the risks of double-counting, the significance of the interaction is indicated by the NHS's National Treatment Agency for Substance Abuse, which has estimated that each drug addict not in treatment costs society £26,074 a year in terms of crime costs.⁴⁰

4.1.4 Impact on mental health problems

The benefit from improved mental health of the young people is estimated in a manner similar to the benefit from reduced substance abuse. Data on Centrepoin's clients collected for the FOR-HOME study shows that the probability of mental health problems reduced from 44% to 24% upon resettlement.⁴¹ It has been assumed that those who have problems after the intervention continue to suffer from those problems. However, these clients may be able to manage their mental health conditions more effectively with intervention, which may lead to decreased costs to the health services. However, the details of such savings are difficult to quantify and have therefore not been included in the analysis.

The incidence of mental health problems in the counterfactual has been estimated using data from the FOR-HOME study that shows that the extent of such problems increases in line with the duration that a person has been homeless (see Figure 3.2). Using this data, it has been estimated that, without Centrepoin's intervention, the incidence of mental health problems would increase to around 56% before the delayed intervention, after which the incidence would reduce to 31%. As with crime, it has been assumed that the delayed intervention is as effective as Centrepoin's intervention and reduces incidence by the same proportion (a 45% reduction in the probability in both cases).

The cost avoided due to early intervention by Centrepoin has been estimated as the average avoided cost of treatment that would be imposed on the public health system. The treatment costs for different mental health conditions have been obtained from a study by King's Fund on the costs of mental health care in England.⁴² This has been combined with information from Centrepoin on the type of mental health problems that clients are likely to suffer from, in order to estimate the average treatment cost in the factual and counterfactual.⁴³ On this basis, in terms of treatment costs avoided, the benefits of Centrepoin intervention equal £46 per client. Further details are set out in Appendix 1.

4.1.5 Aggregate impact

The total benefits of Centrepoin intervention are estimated to equal £22,174 per client. As illustrated in Table 4.1, the majority of these arise through the impact of intervention on increased employment and resultant reduction in welfare benefits required and increase in taxes paid by Centrepoin clients; and reduction in crime, which lowers the costs to the criminal justice system. The other benefits relate to a reduction in the probability of mental health problems, and drug and alcohol abuse, and are relatively small.

These estimates of the benefits of Centrepoin intervention do not consider the dependencies between different types of problem. For example, when considering mental health and substance abuse, these estimates look only at the increase in one-off treatment costs if intervention is delayed. However, increased substance abuse and/or mental health problems

⁴⁰ NHS, National Treatment Agency for Substance Misuse, 'Treat Addiction, cut crime', available at <http://www.nta.nhs.uk/uploads/vfm-crimepresentationvfinal.pdf>, accessed January 2013.

⁴¹ This data is based on a survey of 40 Centrepoin clients. Evidence from Centrepoin (2010), 'Snapshot survey', May 25th shows that 33% of clients reportedly suffered from mental health issues while at Centrepoin. This is not necessarily inconsistent with the estimate of 44% as the snapshot survey was conducted while the clients were at Centrepoin, while the 44% relate to the five years before resettlement.

⁴² King's Fund (2008), 'Paying the price, the cost of mental health care in England to 2026'.

⁴³ This data was available only for those who have been diagnosed. This shows that the majority of clients suffer from depression, anxiety disorder and post-traumatic stress, but a smaller proportion of clients also suffered from bipolar disorder, psychosis and schizophrenia. It has been assumed that the conditions are likely to be similar for all reported to have mental health problems. While this may not be the case, it is a conservative assumption, as it overestimates the cost that Centrepoin's intervention imposes on the public health services, and thereby underestimates the benefit from the intervention.

are expected to lead to lower employment rates or higher levels of crime. Thus, Centrepont intervention against substance abuse is likely to provide wider benefits through greater likelihood of employment and less crime. However, the figures on mental health/substance abuse, presented in Table 4.1, do not take these wider benefits into account as these may be partly captured within the estimates for lower crime and welfare benefits, and higher taxes raised. Instead, in order to avoid the risk of double-counting these wider benefits, the figures are solely reflective of the one-off treatment costs.

Under the conservative approach adopted in this analysis, the discounted net benefits of the intervention for alcohol abuse (ie, through avoided treatment costs) are slightly negative. This is driven by two factors:

- 1) the relatively small increase in the probability of alcohol abuse over time without intervention (7.2% to 7.7%), and the small costs imposed by such a person imply that the costs of delayed intervention are only slightly higher than those of Centrepont intervention;
- 2) the actual treatment costs in the case of delayed intervention are discounted to the present to reflect the time value of money, and are therefore smaller, in present-value terms, than the actual treatment cost in the present through Centrepont intervention.

A less conservative assumption—that, after some years of homelessness, the probability of alcohol abuse rises to 28% (a level consistent with the incidence of alcohol problems among the adult homeless population)—results in a substantially positive net benefit of £4,162 per client.⁴⁴

Table 4.1 Benefit of Centrepont intervention to the public purse, averaged per Centrepont client (£, real 2010/11 prices)

	Central scenario (£, 2010/11 prices)
Avoided welfare benefits	6,989
Tax raised	12,332
Crime (avoided costs)	2,639
Mental health issues (treatment costs avoided)	46
Class A drugs (treatment costs avoided)	188
Cannabis (treatment costs avoided)	117
Alcohol (treatment costs avoided)	-136
Benefit of Centrepont intervention to the public purse	22,174

Note: Numbers may not add up due to rounding.
Source: Oxera analysis.

4.2 The costs of intervention

As discussed in section 3, in order to deliver its services, Centrepont incurs significant costs, and it is the net benefit that reflects the relevant impact. In addition to Centrepont's costs, it is relevant to account for the cost of intervention at a later stage, as early intervention saves society the costs of crime and other conditions, as well as the excess costs of late intervention.

⁴⁴ The FOR-HOME study shows that around 28% of the respondents who were homeless for 1–5 years were problem alcohol users. Arguably, without Centrepont's intervention, the probability of alcohol problem could increase to this high level. However, to account for the *possibility* that Centrepont clients are very different from the average FOR-HOME group, a conservative assumption has been adopted of a minimal increase in alcohol abuse in the absence of Centrepont intervention.

The costs of intervention by Centrepoint have been estimated at £14,240 per client in 2010/11.⁴⁵ The implementation costs of delayed intervention can be proxied by the costs incurred by a provider of all-age homeless services. Due to the relevant cost data being unavailable, in the base case Oxera has assumed that the costs of services to homeless people of all ages are similar to those of Centrepoint (ie, £14,240 per client).⁴⁶

However, the costs of early intervention may be lower than that of delayed intervention by a comparable service provider owing to the difference in the entrenchment of clients. As clients get older, their level of entrenchment into homelessness and related problems such as unemployment and crime increases. This may imply that, with delayed intervention, more intensive treatment is needed and over a longer period of time, resulting in higher costs. The impact of changing the base-case assumption on the cost of intervention is explored in section 4.4.

It should also be noted that the cost of intervention used in this analysis includes all of Centrepoint's costs, including those incurred in its advocacy and lobbying work, and is therefore higher than the cost to Centrepoint of running its direct service intervention programmes. Around half of Centrepoint's income in 2011/12 came from voluntary sources, with the other half coming from its charitable activities.⁴⁷ 77% of its expenditure was on charitable activities, with the remainder on fundraising activities. Centrepoint has indicated that it has increased its investment in fundraising given the reduction in public sector grants.

4.3 Net benefit

The net benefit of Centrepoint is set out in Table 4.2. Intervention by Centrepoint provides a net benefit equal to £19,924 per client relative to similar intervention provided at a later stage. This is equivalent to an overall benefit to cost ratio of 2.40:1. That is, for every £1 spent by Centrepoint, £2.40 is saved by the public purse.

⁴⁵ These costs have been estimated as the total resources used (£17,089,000) divided by the number of people with whom Centrepoint worked (1,200). See 'Centrepoint Soho financial statements for the year ended 31 March 2011'.

⁴⁶ Part of the reason for this data not being available was the difficulty of finding an appropriate comparator to Centrepoint that provides services to more entrenched homeless people. For example, one issue is economies of scale: larger homeless services providers would benefit from economies of scale, incurring lower costs per client. The impact of this factor on Centrepoint's costs relative to those of delayed intervention depends on the number of Centrepoint clients relative to those of alternative service providers.

⁴⁷ Centrepoint Soho (2012), 'Financial Statements year ended 31 March 2012', p. 10.

Table 4.2 Net benefit of early intervention, per Centrepoint client (£, real 2010/11 prices)

	Benefit per client (£, 2010/11 prices)
A: Benefit to the public purse (criminal justice and health sector costs avoided; increased tax revenue)	22,174
B: Avoided costs of delayed intervention (incurred in future)	14,241
C: Avoided costs of delayed intervention (discounted to the present) ¹	11,990
Total benefits (A+C)	34,165
Costs of intervention	
Total average costs of Centrepoint	14,241
CBA	
Net benefit of Centrepoint intervention	19,924
Benefit to cost ratio	2.4

Note: Numbers may not add up due to rounding. ¹ Discount rate of 3.5% has been used; source: HM Treasury (2011), 'The Green Book. Appraisal and Evaluation in Central Government'.
Source: Oxera analysis.

4.4 Sensitivity analysis

As discussed above, the central scenario uses a number of conservative assumptions. This section explores the impact of changing some of the key assumptions on the benefit to cost ratio. This includes sensitivities on model assumptions and on the key data used to calibrate the model.

- **Spontaneous remission rate:** it is recognised that not all of the benefits (eg, an increase in employment or a decrease in crime rates) may be due to Centrepoint's intervention if a proportion of Centrepoint's clients would have undergone 'spontaneous remission'—ie, they would have found employment or stopped their crime involvement of their own accord without Centrepoint's intervention. However, data on such spontaneous remission rate was not available. Hence, Oxera has conducted a break-even analysis which estimates the spontaneous remission rate that would be required for the net benefit of Centrepoint's intervention to be zero, and assessed, together with Centrepoint, whether such remission rates are plausible.

The results of the analysis indicate that a spontaneous remission rate of over 60% would be required for the net benefit to be zero—ie, only if more than 60% of all Centrepoint clients were to find employment or stop drug abuse on their own accord, for example, would the benefits of Centrepoint intervention equal zero.

This is an extremely high level of spontaneous remission; Oxera understands from Centrepoint that spontaneous remission rates are likely to be substantially lower.⁴⁸ In any event, even if spontaneous remission were assumed to equal 10%, Centrepoint intervention would provide net benefits of £17,270 per client, with the benefit to cost ratio at 2.21.

⁴⁸ Suitable data was not available to estimate the rate of spontaneous remission. Departure data from Centrepoint may provide some indication. For example, in 2011 out of 546 departures from Centrepoint's services, only 10 young people (1.8%) returned to their previous home, and 69 (12.6%) moved on to staying with family. This data is likely to provide an upper bound of spontaneous remission rates, as this relates to departure after the client has used Centrepoint's services for some time. Furthermore, young people may return to family if, for example, they are evicted from their accommodation for non-payment of arrears, and the move may be only temporary.

- **The costs of delayed intervention relative to Centrepoint intervention:** Oxera has assumed that the direct costs of delayed intervention were equal to those of early intervention. However, if intervention were delayed, the problems of homeless individuals may become more entrenched, necessitating a longer duration and intensity of intervention by providers of homelessness services. This is likely to result in the costs of delayed intervention being higher than those of early intervention by Centrepoint. If the costs of delayed intervention were taken to be 10% higher than those of early intervention, the net benefits of Centrepoint intervention would equal £21,123, with an overall increase in the benefit cost ratio to 2.48.
- **The extent of delay in intervention in the counterfactual:** as discussed above, the delay of five years in intervention in the counterfactual was based on the average duration of homelessness among a sample of homeless people. However, without Centrepoint’s intervention, intervention may occur earlier or later than five years, depending on the specific circumstances of the client.

The data on the duration of homelessness in the FOR-HOME study suggests that the average duration is likely to be more than five years, which may in turn increase the benefit to cost ratio if more costs are incurred by society in the counterfactual—for example, through a continued rise in crime rates. The results show that a delay of six years implies a slightly higher benefit to cost ratio of 2.47. A lower delay in intervention (eg, four years), on the other hand, implies a lower benefit to cost ratio of 2.25.⁴⁹

The impact of an even longer delay in intervention of ten years has also been estimated. This increases the benefit to cost ratio to 2.69. This is a conservative estimate as it does not take account of the reduction in effectiveness of intervention as people get older. For example, Table 4.3 shows that in the case of substance abuse a greater proportion of people in the 17–24-year age group are successfully treated than those in the 25–39-year age group (with the exception of those drinking more than 24 units of alcohol a week).

Table 4.3 Effectiveness of intervention (proportion of young people who are successfully treated)

	17–24 years	25–39 years
Cannabis	11%	0%
Class A drugs	85%	69%
Alcohol (drinking daily)	85%	70%
Alcohol (drinking 24+ units per week)	47%	62%

Note: Effectiveness has been estimated as (1 minus probability of substance abuse when resettled/probability in the preceding five years).

Source: Oxera analysis of FOR-HOME study, Table 4.4.

4.5 Additional benefits not quantified

As noted earlier, in addition to conservative assumptions adopted in quantifying the benefits above, a number of benefits delivered by Centrepoint are not quantified in this report because there is no reliable data. These benefits are likely to be significant, as discussed below.

⁴⁹ The change in the benefit to cost ratio of increasing delay from five to six years is not significant due to the impact of discounting. For the same reason, the increase in benefit to cost ratio from a delay of four to five years is greater than that of increasing the delay from five to six years.

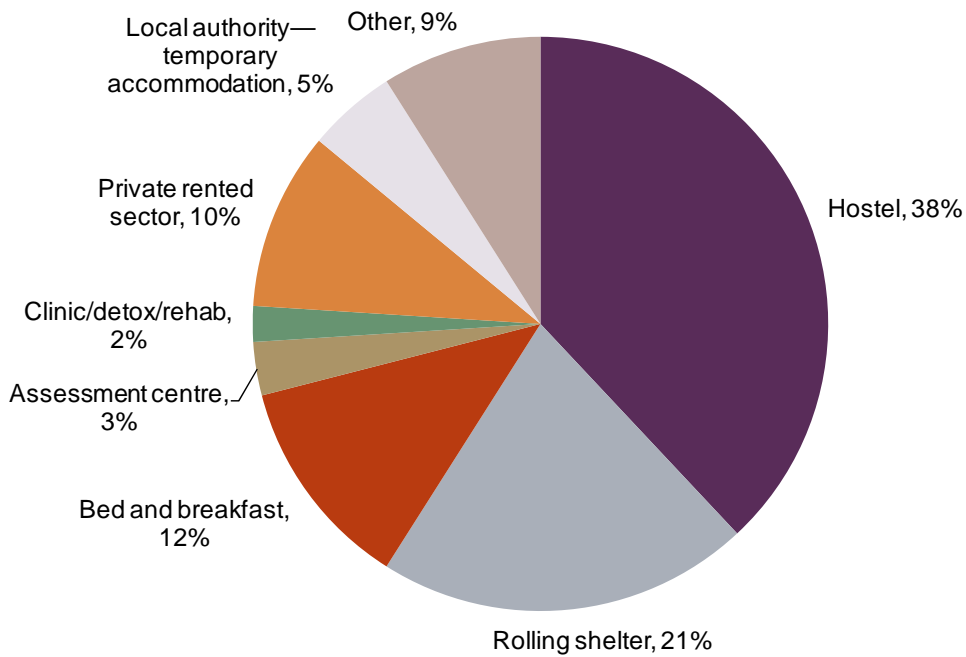
4.5.1

Benefits from saved housing costs

An important benefit delivered by Centrepoin’s intervention is the reduction of housing costs that would have been incurred in providing temporary and ad hoc shelter to the young people. Those who do not receive support to tackle their wider needs are more likely to have repeated stays in expensive emergency accommodation as they are less likely to move into and sustain tenancies in independent accommodation.

Homeless young people may either sleep on the street or be provided with temporary accommodation in hostels and shelters funded by the local/national government. Figure 4.4 shows that the majority of known rough sleepers use hostel accommodation at some time, followed by rolling shelters and bed and breakfasts.

Figure 4.4 Temporary and long-term accommodation provided to rough sleepers in 2011/12



Note: This figure presents data on those sleeping on streets, in stairwells, in parks and other such locations. It excludes the hidden homeless, such as those sofa-surfing or living in squats.

Source: Broadway (2012), ‘Street to Home Annual Report. 1st April 2011 to 31st March 2012’, available at http://www.broadwaylondon.org/CHAIN/Reports/S2H_201112.pdf, accessed January 2013.

The cost of such temporary accommodation is significant. By enabling its clients to find more permanent accommodation and to be self-sufficient, Centrepoin reduces such costs incurred by government.

After Centrepoin’s intervention, clients may receive housing benefit (to the extent they are eligible).⁵⁰ Hence, Centrepoin’s intervention may result in its clients who end up in permanent accommodation claiming housing benefit, but its intervention also saves the costs of emergency shelters. A comparison of the average level of housing benefit provided by the public welfare system with the cost of providing homeless shelters indicates that the net benefits delivered by this aspect of the intervention is, on balance, positive. Although the level of housing benefit depends on a number of factors (such as whether the accommodation is rented privately or from the council, and the household income), the average housing benefit in the UK in the 2010 to 2012 period was around £85/week. Oxera

⁵⁰ People may be eligible for housing benefit if they pay rent, are on low income or claiming benefits and their savings are below a certain level (usually £16,000). See <https://www.gov.uk/housing-benefit/overview>, accessed January 2013.

has considered specific scenarios of housing benefits for a representative Centrepoint client in London and concluded that this could be as low as £11/week for a person in full-time employment and around £60/week for a person in part-time employment (see Table 4.4).

In terms of housing benefit for private rental, Centrepoint clients are restricted to receiving support for bedsit accommodation or a single room in shared accommodation. This reflects the rules applied to single people below the age of 35. The level of support differs by area: for example, as at January 2013 it is £123.50/week in central London, £86.54/week in Inner South East London and £77.35/week in Outer West London.⁵¹ As shown in Table 4.4, the cost of temporary accommodation, on the other hand, is usually higher. For example, hostels cost around £107/week, and bed and breakfast costs around £335/week. Oxera understands from Centrepoint that the cost of emergency hostel accommodation is likely to be higher than this average hostel rate suggests, with many high support services across the sector costing around £200 a week. As can be seen, the costs of various types of temporary accommodation (which will be incurred in the counterfactual) are higher than the likely housing benefit that a Centrepoint client might receive after intervention, indicating that the net benefit delivered by Centrepoint through saved housing costs is positive and significant. Indeed, local authority support for housing-related needs can be substantial. In 2010/11, this averaged £5,600/year (or £108/week) for single homeless people, and £7,900/year (or £152/week) for rough sleepers.⁵²

Table 4.4 Housing costs (£/week)

	Cost (£/week)
Costs of temporary accommodation incurred by government¹	
Hostels	107
Bed and breakfast	335
Local authority accommodation—funded through Housing Benefit payments	98
Housing Association accommodation—funded through Housing Benefit payments	87
Private landlord accommodation—funded through Local Housing Allowance payments	162
Example housing benefit payments	
Full-time worker earning £220/week ²	11
Part-time worker earning £125/week ²	59
Average housing benefits in 2012 ³	85

Note: In calculating housing costs, Oxera has assumed that rent paid equals £100/week and council tax equals £600/year.

Source: ¹ Shelter (2012), 'Immediate costs to government of loss of home', January; ² Government benefits adviser, available at <https://www.gov.uk/benefits-adviser>, accessed January 2013; ³ Department for Work and Pensions (2012), 'Housing Benefit and Council Tax Benefit caseload. Table 5', August; and Oxera analysis.

4.5.2 Public benefits from improved sexual and physical health

Homeless young people also are at high risk of sexual transmitted diseases and deterioration of physical conditions, which imposes costs on the health services. The 2011 Crisis survey found that a significant proportion (30%) of homeless people had engaged in sex work or unwanted sexual relations, often in order to find accommodation or to obtain money. Detailed data on the sexual health of Centrepoint's clients and how it is affected with and without intervention was not available, and hence have not been quantified. However, poor sexual health imposes significant costs to the health system due to the costs of treatment of

⁵¹ <https://lha-direct.voa.gov.uk/search.aspx>, accessed January 2013.

⁵² Department for Communities and Local Government (2012), 'Evidence review of the costs of homelessness', August, p. 13 available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/7596/2200485.pdf, accessed January 2013.

diseases such as AIDS.⁵³ Similarly, young people suffer from deterioration of physical health owing to exposure to cold, and from living in poor conditions, which in turn imposes the costs of A&E visits and is likely to increase the amount of incapacity benefits claimed.

Oxera understands from Centrepont that intervention can also help prevent unwanted pregnancies. If the homeless young people continue to suffer from a range of other problems, such pregnancies could lead to their children being taken into care, resulting in additional costs to the public purse.

4.5.3 **Benefits from reduced cost to victims of crime**

In addition to the costs of crime imposed on public systems, crimes committed by homeless people are likely to impose costs on the victims of crime. This includes the emotional and physical costs of the victims of burglaries, robberies, or acts of violence (eg, damaged property and health costs following the trauma of the incident). Businesses and individuals may also incur additional costs on crime prevention.

A study by the Home Office on the cost of crimes highlights that violent crimes often involve injury to the victim, both physical and mental, and that, in such cases, substantial costs are incurred by the NHS and other health service providers in treatment costs, the cost of lost output from the victims, as well as loss in quality-adjusted life years (QALY) due to intangible emotional and physical costs imposed on the victim. The total costs are estimated at around £7,070 for wounding offences, £28,000 for sexual offences, £4,540 for robbery and £1,180 for common assault.⁵⁴

4.5.4 **Quality of life**

Lastly, this report does not take into account the general value of life and cost of the value of quality of life of the homeless young people themselves. Living in extremely poor conditions reduces their quality of life significantly, and therefore the overall social welfare. Furthermore, the complex multiple needs reinforce each other, increasing the level of entrenchment necessitating much more intense intervention, with higher associated costs.

4.5.5 **Summary**

These additional costs presented in this and other sections of this report, but not included in the overall cost–benefit ratio can be substantial, as summarised in Table 4.5. The reasons for exclusion of such costs include the risks of double counting and the relatively intangible nature of some types of costs.

⁵³ For example, a research article estimated that, in 2006, the average annual treatment costs across all stages of HIV infection in the UK ranged from £18,000 to £32,300. This included outpatient visits, inpatient days and visits to day wards, and did not include community care costs. Mandalia, S., Mandalia, R., Lo, G., Chadborn, T., Sharott, P. et al. (2010), 'Rising Population Cost for Treating People Living with HIV in the UK, 1997-2013', *PLoS ONE*, 5:12, e15677, available at <http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0015677>, accessed January 2013.

⁵⁴ Although most of these costs are intangible costs. The health and lost output costs are significant—the health costs range from £123 for common assault to £1,350 for wounding, and lost output costs range from £270 for common assault to £4,430 for sexual assault and rape. These figures are for 2003/04 and are likely to be higher in 2010 prices. Home Office (2005), 'The economic and social costs of crime against individuals and households 2003/04', pp. 33–44, <http://webarchive.nationalarchives.gov.uk/20100413151426/http://www.homeoffice.gov.uk/rds/pdfs05/rdsolr3005.pdf>, accessed January 2013.

Table 4.5 Additional costs not included in the cost–benefit analysis

Cost category	Cost	Reason for exclusion
Housing costs	Range of £11–£330 per week per homeless person	Wide variation in supporting accommodation costs and dependence of housing benefits on individual circumstances
Costs of crime to victims	£1,180 to £28,000 per victim, depending on type of crime	A number of the cost components (eg, impact of crime on quality of life) are intangible and difficult to isolate
Ongoing costs to society per drug addict not in treatment	£26,074 per year per drug user	Risks of double-counting, as society costs include crime costs and other multiple exclusion needs
Physical and sexual health	Depends on the conditions—can range from £18,000–£32,000 per HIV-infected person over their lifetime	Lack of reliable data for Centrepoint clients

Sources: Centrepoint data; Home Office (2005), 'The economic and social costs of crime against individuals and households 2003/04', pp. 33–44; and NHS, National Treatment Agency for Substance Misuse (2012), 'Treat Addiction, cut crime'.

5 Concluding remarks

As highlighted in this report, the work of Centrepoin is important both in improving the quality of life of homeless young people and in saving substantial amounts of public resource that would otherwise have been incurred due to the adverse impacts of homelessness. This report has quantified the costs incurred as a result of restricted education and thereby high barriers to securing employment and consequent loss of wages and tax revenue to the Exchequer; increased involvement in crime leading to higher costs of the criminal justice system; increased health problems leading to greater burden on the public healthcare system; and finally a higher drain of welfare benefits. The findings indicate that £1 spent by Centrepoin in intervening during the early stages of homelessness, compared with a similar intervention at a later stage, results in potential costs avoided by the public purse of at least £2.40.⁵⁵

The methodology used to estimate the benefits includes a number of conservative assumptions. Furthermore, this report has not explicitly accounted for various other benefits when estimating the £2.40 of benefits and/or costs avoided, such as the benefits due to reduced housing costs and reduced costs to victims of crime. Evidence indicates that these benefits are likely to be substantial. The results set out in this report are therefore conservative and the actual social benefit delivered by Centrepoin is likely to exceed the above estimate. Overall, the analysis highlights the importance of intervening in the lives of homeless people at an early stage and thereby preventing escalation of conditions which may prove to be very costly for society if left to be tackled at a later stage.

⁵⁵ A similar review of the Supporting People programme, which covers housing-related services provided to vulnerable people (including the homeless, older people, teenage parents, women at risk of violence, etc), found that the programme provided £3.41 billion of benefits per year for £1.61 billion of investment. The study compared the costs of provide support under the arrangements of the Supporting People programme with the best alternative. In case of homeless people, these include the costs of repeat homelessness, crime costs, drug treatment costs and costs of hospital admissions. See Department for Communities and Local Government (2009), 'Research into the financial benefits of the Supporting People programme, 2009', July.

A1 Methodology for quantifying benefits due to intervention

The overall approach to assess the benefits delivered by Centrepoin t involves comparing the likely costs to the public purse due to homelessness in the factual of early intervention by Centrepoin t with the costs imposed in the counterfactual of delayed intervention by another organisation. As set out in section 4 of the main report, evidence suggests that the average number of years of homelessness is at least five. To this effect, it has been assumed that delayed intervention would have therefore occurred after a young person had been homeless for another 5 years. This appendix sets out the detailed methodology used to quantify the benefits of Centrepoin t’s intervention.

A1.1 Benefits from lower benefit claims and higher tax revenues through higher employment

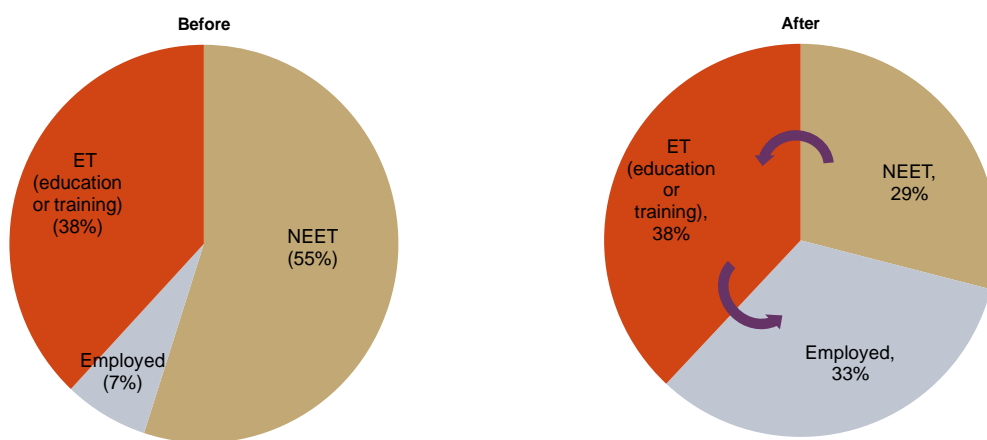
Centrepoin t’s intervention on employment rates among its clients has two separate impacts: 1) by increasing employment, and wages, it reduces the amount of welfare benefits drawn by its clients; and 2) the higher wages in turn leads to higher tax revenues. Both these impacts are driven by the employment rate in the factual and the likely employment rate in the counterfactual.

A1.1.1 Actual and counterfactual employment rates

The actual employment rate among Centrepoin t’s clients both before and after the intervention was available from data gathered by Centrepoin t for the FOR-HOME 2011 study. The data includes employment rates among a sample of clients when they came to Centrepoin t, as well as upon resettlement after two years and six months and 15 and 18 months after resettlement. Of those who were not employed, the data also recorded the proportion of ET clients at Centrepoin t, which allowed a breakdown of the clients into three groups: ‘employed’, ET and NEET.

Figure A1.1 gives the breakdown of the three groups before and after the intervention. As indicated by the figures, the intervention increases employment rates as more ETs become employed; however, NEET clients are also brought into training and converted to ETs (meaning that the ET group is not reduced).

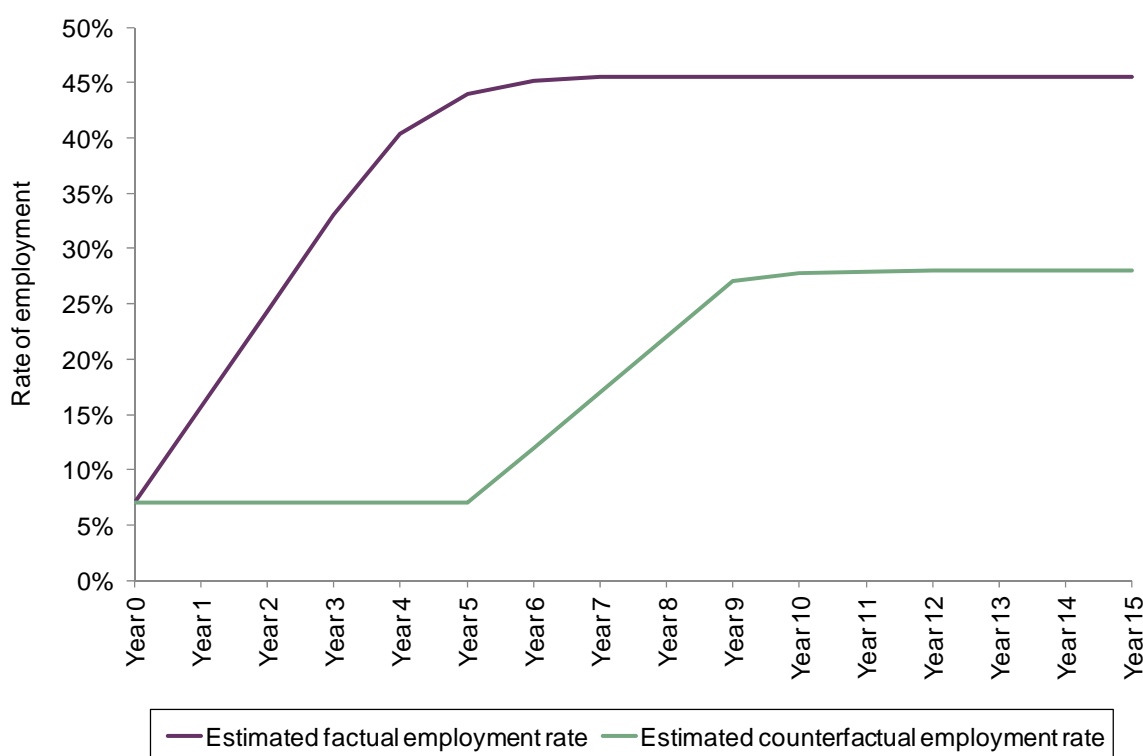
Figure A1.1 The proportion of employed, ET and NEET before and after intervention



Source: Oxera analysis of Centrepoin t data.

This increase in the ET group is an important effect, as a client who is in education and training when they leave Centrepont is more likely to be engaged in gainful employment in the future. Evidence from the same survey showed that Centrepont increased the rate of employment even among the EET group (in education, employment or training). Before the intervention only 16% of the EET group was employed, while after the intervention 46% of the EET group gained employment. Hence, it is assumed that some clients in the ET group (38% of the total) become employed within three years following their departure from Centrepont (ie, Years 4–6); the 29% of clients who are NEET are assumed to remain NEET after leaving Centrepont. Figure A1.2 shows the consequent estimate of the likely annual employment rates in the factual with Centrepont’s intervention. The employment increases from 7% in Year 0 (ie, just before coming to Centrepont) to 33% in Year 3 (when the client leaves Centrepont) and increases further to 46% in Year 7, after which it is stable.

Figure A1.2 Estimated employment rates with and without Centrepont intervention



Note: ‘Year 0’ refers to the time when the young homeless person comes to Centrepont. Centrepont intervention is assumed to take place over a two-year period (in ‘Year 1’ and ‘Year 2’). If Centrepont does not intervene, delayed intervention is assumed to take place in ‘Year 6’ and ‘Year 7’, based on a five-year delay.
Source: Oxera analysis of Centrepont data.

Figure A1.2 also presents the estimated employment rate among Centrepont’s clients if intervention is delayed—ie, the counterfactual employment rate. It is assumed that the counterfactual employment rate remains constant for five years until delayed intervention occurs in Year 6,⁵⁶ after which employment increases. The rate of increase in employment is based on data from the FOR-HOME 2011 study, which shows that 27% of clients who were homeless for more than five years were employed 15 and 18 months after resettlement (equivalent to Year 9). This is less than the employment rate at a similar stage after Centrepont’s intervention (45%). Hence, the delayed intervention is less effective than the

⁵⁶ While, arguably, the counterfactual employment rate may increase during these five years because the client is older (for example, if they are physically more able), the higher entrenchment may act to decrease employment rates. On balance, it is unlikely that employment rates would have changed substantially in the five years without any intervention.

early intervention. The increase in employment between Year 6 and Year 9 has been estimated by interpolating between these years.⁵⁷

A1.1.2 Costs imposed with and without intervention

The costs imposed by a young person due to the lower employment rates in the counterfactual include the following: 1) the costs of higher welfare benefits; and 2) the cost of lower wages and tax revenues.

The increased welfare benefits collected in the counterfactual are estimated using data from Centrepont on the different types of benefit drawn by clients when they arrive at Centrepont, the average wages of employed clients immediately after intervention, as well as publicly available data on the average welfare benefits. Table A1.1 sets out the possible benefits drawn by different clients.

Table A1.1 Primary categories of benefits by employment status and wage (real 2010 prices)

Status	Benefit	Age 17–24 (£/week)	Age 25 and over (£/week)
Unemployed (no children)	Jobseeker's Allowance	51.1	64.5
Under 21, estranged from family and in full-time further education	Income Support	51.1	n/a
Employed less than 16 hours per week (no children)	Partial Jobseeker's Allowance or Income support (Centrepont clients unlikely to be eligible) ¹	0 to 51.1	0 to 64.5
Employed more than 16 hours per week, wage less than £250 per week (no children)	Working credit	–	36.9
Employed more than 16 hours per week, wage more than £250 per week (no children)	None	–	–

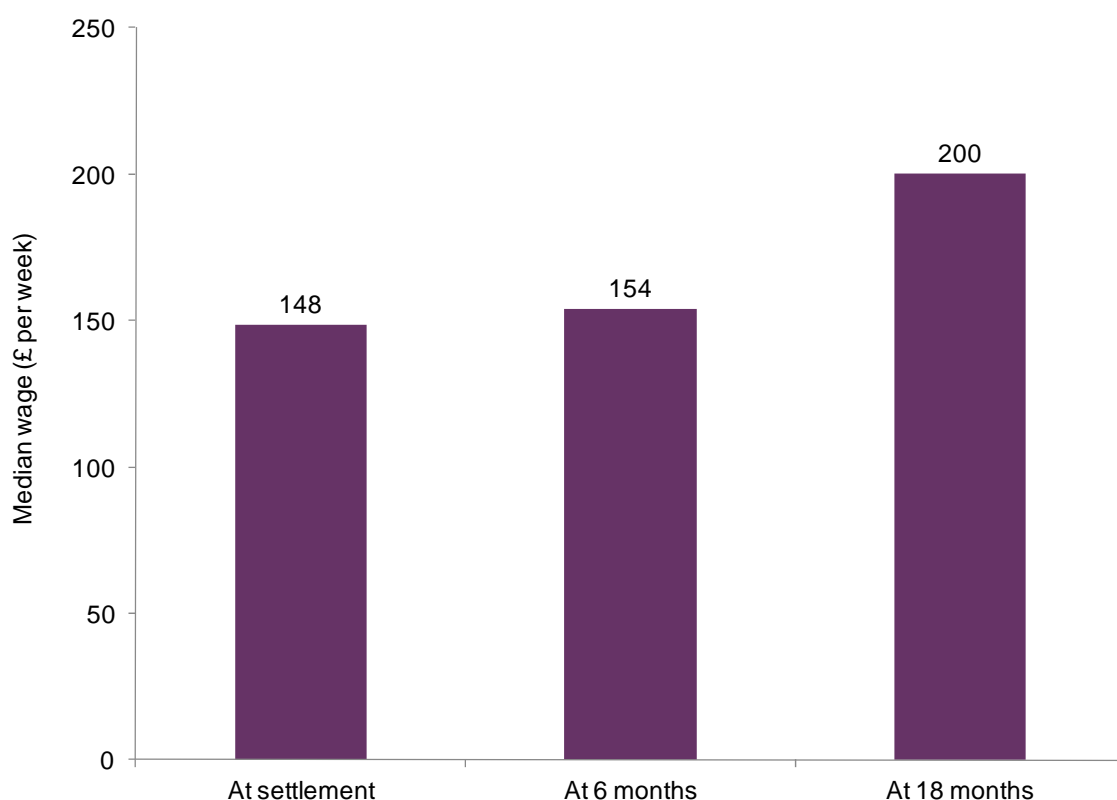
Note: 'Young people' are 20 years old on average when Centrepont intervention begins, with their average age rising to 25 by year 6. ¹ Income support is provided only to those who meet certain criteria. For example, Centrepont has informed Oxera that young people who are estranged from their families and in full-time further education are eligible for income support. However, income support is provided at the full rate only if weekly income including support is less than £5 for single people. After that, the benefit is tapered off pound for pound until the benefit rate reaches £0. Since the average income (including benefits) of Centrepont clients working part-time is £100/week, it is assumed that those in part-time work are therefore not eligible for income support. Source: Oxera analysis.

The amount and types of benefit collected by a client will depend on their employment status, their age and their wage. Information on the wages of employed clients after Centrepont's intervention was gathered for the FOR-HOME study. This survey posed a number of questions regarding employment status and total income including benefits to a subset of clients when they left Centrepont and were resettled. The survey followed up on those clients six months and 15 or 18 months after resettlement. The results show that 40% of the surveyed employed clients were in full-time employment and the rest in part-time employment at the time of resettlement; such detailed data on employment status was not collected at the six and 15/18 month intervals. The data also shows that the total average income (inclusive of salary and benefits) of the employed client increased with time (see Figure A1.3).

⁵⁷ As discussed in section 4, not all of the increase in employment may be due to Centrepont's intervention if the spontaneous remission rate is positive. The impact of a positive remission rate is presented in section 4.4. The impact of a higher effectiveness of delayed intervention is also discussed in section 4.4.

Oxera has estimated that, on average, employed young people do not claim any employment-related benefits when they first come to Centrepoint on account of their age being below 25 (implying ineligibility for working tax credit) and income being higher than the maximum threshold for receiving income support. However, once the employed young people reach their 25th birthday, they begin to claim around £15 of benefits per week (this is the working tax credit for full-time employees multiplied by the proportion of Centrepoint clients in full-time employment upon resettlement—around 40%). It has been assumed that the proportions of full- and part-time employment (and hence the absolute amount of benefit claimed) remain the same going forward. The unemployed young person, by contrast, claims around £51 in Jobseeker’s Allowance when they first come to Centrepoint (increasing to around £64.5 once they turn 25). This difference between the benefits claimed by an employed and unemployed young person is then combined with the employment rates in the factual and counterfactual to estimate the amount of benefit claims avoided due to the intervention.

Figure A1.3 Increase in average wage of Centrepoint client after intervention (£ per week)



Note: The tracker survey provided the average (median) income inclusive of benefits at resettlement and at six and 15/18 month intervals thereafter, together with data on the proportion of full- and part-time employees upon resettlement. The benefits are likely to be lower and the wages higher because the proportion of full-time employees is likely to increase over time as clients gain experience of working and become more embedded in the workforce.

Source: Oxera analysis of Centrepoint data.

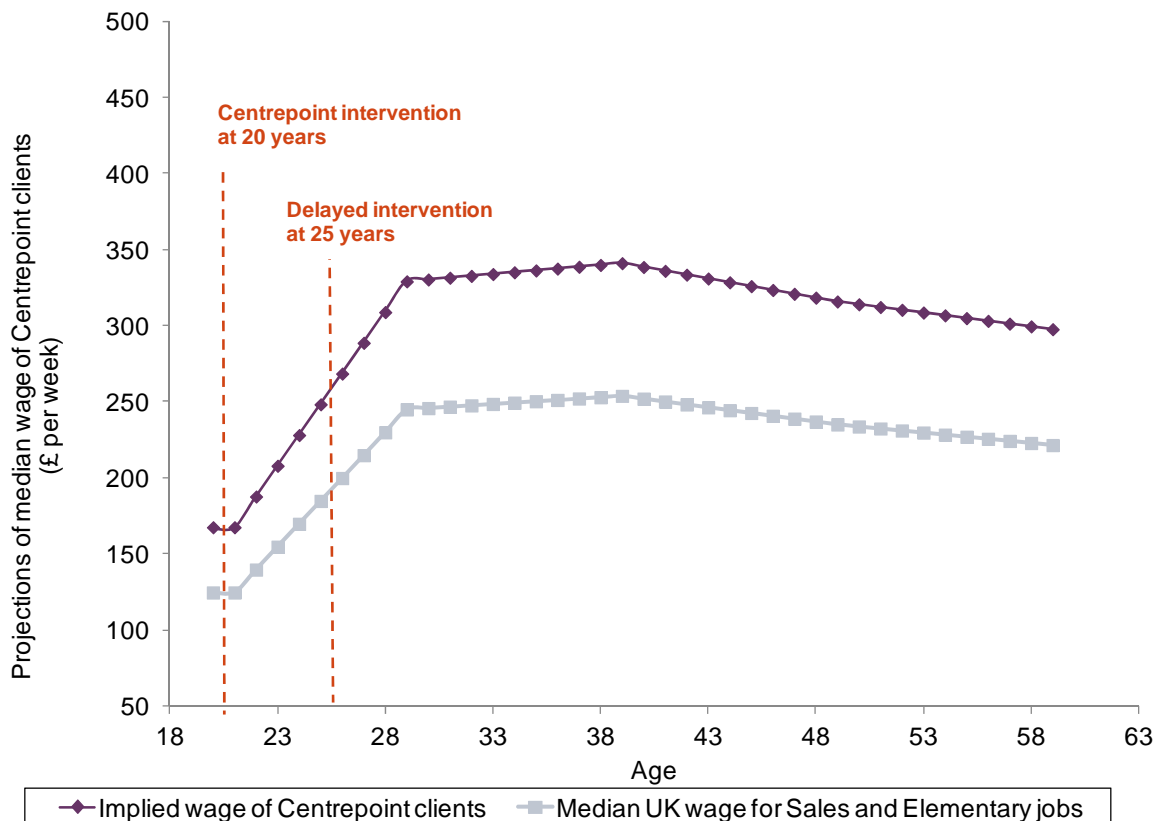
The second element of the benefit from a higher employment and higher wages is higher tax revenues. For this purpose, the lifetime taxable earnings (excluding benefits) of the employed young person are relevant.

As illustrated in Figure A1.3, the total income excluding benefits of the employed young people increased by more than 40% from resettlement to 15 and 18 months later. To estimate the expected earnings going forward, the evolution of wages in the UK across age groups can be used. However, the wage profile of an employed client depends on the age at

which they were resettled. Data from the Centrepont snapshot survey shows that the average client was 20 years old. This suggests that resettlement was complete by the age of 21 or 22 (ie, there were two years of intervention before resettlement). An average Centrepont client therefore earns an average of around £167 in wages between the ages of 20 and 22.

Oxera has estimated the evolution of the wages beyond the 18 months using data on wages across age groups in the UK obtained from the 2010 Annual Survey of Hours and Earnings (ASHE). The ASHE data provides weekly wages for different age groups and for different occupational groups. Comparison of the average weekly wage of a Centrepont client at age 20–22 (£167) with the median wage of 18–21-year olds across different occupations indicates that the most comparable groups are the Sales and Customer Service occupations and Elementary occupations (the average median wage of the two groups was £125 in 2010).⁵⁸ Figure A1.4 shows the median weekly wage, averaged across these two occupations for employees of 18 to 59 years of age. It has been assumed that a Centrepont client has the same earnings growth rate after intervention. The difference in income levels may be explained by the fact that the ASHE data is an average for the UK, whereas Centrepont clients are largely based in London, which has higher wages than the national average.

Figure A1.4 Estimated weekly wage by age after intervention (£)



Source: Oxera analysis of ASHE data.

It has been assumed that delayed intervention occurs after five years when the client is 25 years old and that, when resettled after delayed intervention, they would earn the same wage as they would have following Centrepont's intervention at age 25. Hence, the only loss due

⁵⁸ These two groups are also the lowest-earning occupational groups for each age group. See 'ASHE 2010 (revised) Table 20 - Age Group by Occupation (2 digit SOC 2000)' at: <http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcn%3A77-238620>, accessed January 2013.

to the delay in intervention for each employed client would be the earnings between the ages of 20 and 24 (in addition to the difference in the employment rates discussed above).

The discounted value of the lifetime tax revenue from this income stream is estimated using the increase in employment rates in the factual and counterfactual, along with the expected wage of (and hence taxes paid) by the employed person throughout their working life. For this purpose, the relevant personal allowance of £6,475 (as set out by the HMRC for 2010/11) was subtracted from the annual income of an employed client and a 20% tax rate was applied to the residual. Similarly, the NIC allowance was subtracted and the lowest NIC rate of 10% was applied to calculate the total tax revenue collected from each employed Centrepoint client.

A1.2 The benefits of reduction in crime

Homeless young people impose a cost on the criminal justice system through any crime they might commit. Centrepoint intervention provides a benefit to society by reducing the probability of crime relative to delayed intervention by another organisation. This reduces the costs imposed on the criminal justice system by young homeless people.

This section quantifies the reduction in criminal justice costs.

A1.2.1 Probability of crime

Around 20% of Centrepoint's clients have had a criminal conviction before coming to Centrepoint.⁵⁹ Intervention by Centrepoint can reduce the probability of crimes being committed by its clients in future. Furthermore, early intervention by Centrepoint may be more effective than delayed intervention (see Figure A1.5).

- Oxera has assumed that once Centrepoint intervention begins, the re-offending rates of the 20% of its clients who have previously received criminal convictions are equal to the average re-offending rates of all offenders, irrespective of whether they are homeless.⁶⁰ The 80% of Centrepoint clients who have not had previous criminal convictions are assumed not to commit crimes in future.
- Analysis by the Ministry of Justice finds that around 28% of offenders re-offend in the year after committing a crime, with around 59% doing so within nine years of committing a crime. Oxera has applied these re-offending rates to the 20% of Centrepoint clients who received previous criminal convictions. This implies that the probability of Centrepoint clients committing crimes falls from 20% before Centrepoint intervenes to 6% after the first year of Centrepoint intervention, before gradually rising to 12%.
- If there were no intervention, the probability of criminal activity by young homeless people might be expected to increase rapidly over time before reaching a peak at around 44%.^{61 62}

⁵⁹ Centrepoint (2010), 'Snapshot survey', May 25th.

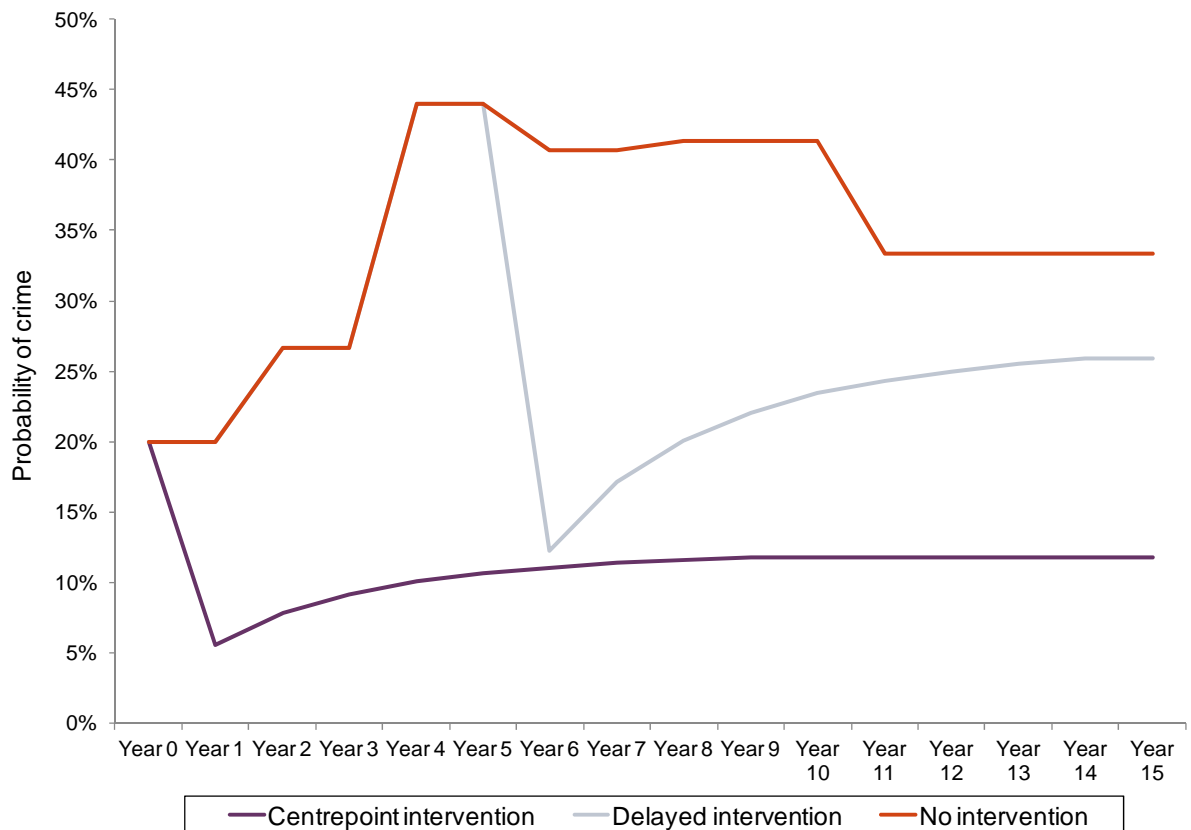
⁶⁰ Ministry of Justice (2012), '2012 Compendium of re-offending statistics and analysis', July.

⁶¹ The rate of increase in the probability of crime with increasing duration of homelessness has been obtained from the ESRC's multiple exclusion homelessness research programme. This programme researched the link between homelessness and other problems, such as the experience of prison, mental ill health, drug and/or alcohol problems, and begging. See <http://www.esds.ac.uk/findingData/snDescription.asp?sn=6899&key=/&flag=true>, accessed August 2012.

⁶² The ESRC programme assesses all homeless people, not just the young homeless. As such, all those covered by the research are likely to have been homeless for a longer period of time than Centrepoint clients. Consequently, they may be expected to have a higher probability of committing crime. Indeed, whereas the starting point of the probability of criminal activity by young homeless people is 20% (as obtained from the Centrepoint snapshot survey), that of the mixed-age homeless people covered by the ESRC programme is 30%. Therefore, when estimating the future profile of criminal activity by young people in the absence of Centrepoint, Oxera has scaled down the future probabilities in the ESRC programme using a 20:30 ratio.

- In the case of delayed intervention after some years of homelessness, Oxera assumes that 44% of the young homeless people commit crimes before intervention takes place. The re-offending rate of this 44% equals that of the general homeless population. Oxera assumes that the remaining 56% who have not had prior criminal convictions do not commit crimes in future.
- This implies that the probability of crimes falls from around 44% before delayed intervention takes place to 12% immediately following intervention. The probability of crime increases over time as more people re-offend.

Figure A1.5 Probability of crime by young homeless people

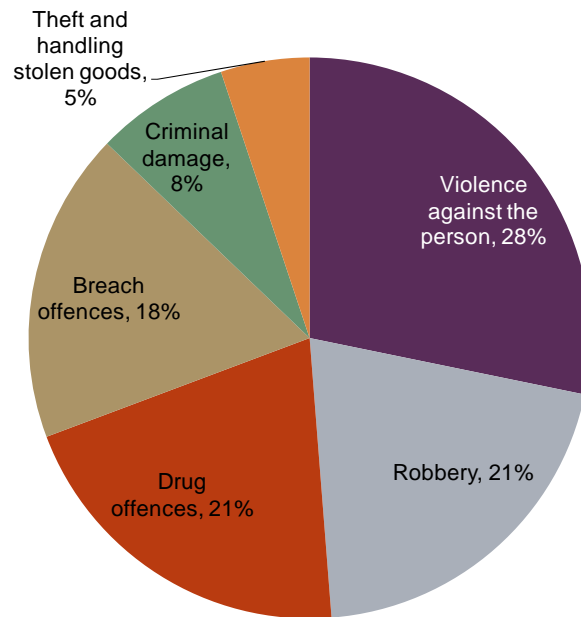


Note: 'Year 0' refers to the time when the young homeless person comes to Centrepoint. Centrepoint intervention is assumed to take place over a two-year period (in 'Year 1' and 'Year 2'). If Centrepoint does not intervene, delayed intervention is assumed to take place in 'Year 6' and 'Year 7'.
 Source: Centrepoint (2010), 'Snapshot survey', May 25th; ESRC Programme; Oxera analysis.

In addition to the probability of crime, the types of crime committed by the offender are an important determinant of the total costs imposed on the criminal justice system. For example, the costs of serious and complex crimes (eg, violence against a person) are higher than those of less serious crimes (eg, drug offences) as courts spend a greater amount of time dealing with the more serious crimes.

Of the Centrepoint clients who have committed crimes, most engaged in offences related to violence against other people, robberies or drug-related offences (see Figure A1.6).

Figure A1.6 Mix of crimes committed by Centrepoint clients



Note: Breach offence refers to the breach of a court order against a previous offence.
Source: Oxera analysis of Centrepoint data.

A1.2.2 Costs to the criminal justice system without intervention

Crime imposes four main types of cost on the criminal justice system: 1) police work to investigate crime incidents; 2) courts (whose costs vary depending on the type of crime); 3) offender management teams; and 4) custody.

Furthermore, the costs imposed by each offender on the criminal justice system are a function of:

- the type of crime they commit;
- the number of crimes they commit; and
- the length of prison sentences they receive.

Estimates of these costs have been obtained from an NAO study on young offenders (see Table A1.2).⁶³

- With the exception of custody costs, the three other cost categories provide estimates of the staff time spent directly on dealing with criminal offences. They exclude overheads such as maintenance of office buildings. These are the most representative estimates of the savings made from preventing individual crimes available to Oxera.
- However, the NAO states that it was not possible to exclude fixed costs from its custody cost estimates. It also states that it was not possible to establish the proportion that fixed costs represent of the total costs. Therefore, the custody cost estimates represent long-run marginal costs, and do not reflect cash savings through the prevention of an individual conviction.

⁶³ National Audit Office (2011), 'The cost of a cohort of young offenders to the criminal justice system', Technical Paper, June.

Table A1.2 Units costs of the criminal justice system (£, real 2010/11 prices)

Aged over 18	
Unit costs of police	
Unit costs of police (per recorded crime), £	512
Number of crimes per offender per year ¹	Rise from 1.2 to 1.9 with increasing duration of homelessness
Unit costs of police (per offender per year), £	Increase from £608 to £997 with increasing duration of homelessness due to a greater number of crimes per offender
Unit costs of courts	
Unit costs of courts (per court event, depending on type of offence), £	
Violence against the person	13,233
Robbery	9,812
Theft and handling stolen goods	4,175
Criminal damage	463
Drug offences	2,602
Breach offences	283
Unit costs of courts (per court event), £²	6,576
Units costs of courts (per offender per year), average weighted by probabilities of different types of crime, £³	Increase from £7,815 to £12,810 with increasing duration of homelessness due to a higher numbers of crimes per offender
Unit costs of offender management teams	
Unit costs of offender management teams (per offender per year), £	372
Unit costs of custody	
Unit costs of custody (per month served in prison), £	2,463
Probability of prison sentence subject to a crime being committed	15.9% when clients first come to Centrepont ⁴ Assumed to increase by 5% points per year ⁵
Number of months served in prison per offender per year	2.6 months when clients first come to Centrepont ⁶ Increase to 9.3 after 10 years of homelessness ⁷
Unit costs of custody (per offender per year), £	Increase from £1,018 to £11,661 with increasing duration of homelessness as the probability of prison sentences and the number of months served in prison per offence increases

Note: Numbers may not add up due to rounding. The NAO provides costs in real 2008/09 prices; these have been converted to real 2010/11 prices using the RPI. ¹ Centrepont analysis of its database found 82 instances of offences across 69 clients who had committed crimes. Based on this, Oxera has assumed that a representative Centrepont client who has engaged in criminal activity commits an average of 1.2 crimes per year. The rate of growth in the number of crimes per offender for a representative Centrepont client is assumed, on average, to equal the rate of growth across young offenders as estimated in the NAO study. ² Estimated as the average of the costs of different types of offence weighted by the probability that Centrepont clients would repeat the same offences. ³ Assumes that there is one court event per offence. The costs of courts (per offender per year) have been estimated as the costs of courts (per court event) *multiplied by* the number of crimes per offender per year. ⁴ Centrepont data, which showed that 15.9% of clients with criminal histories received prison sentences. The remaining were given community service, tags, curfews, required to attend anger management classes, etc. ⁵ This is a conservative assumption relative to the probabilities of prison sentences from all-age homelessness service providers. ⁶ Ministry of Justice statistics for young offenders (aged 10–17 years). ⁷ Ministry of Justice statistics on the average time served in prison for those released from determinate sentences in 2008.

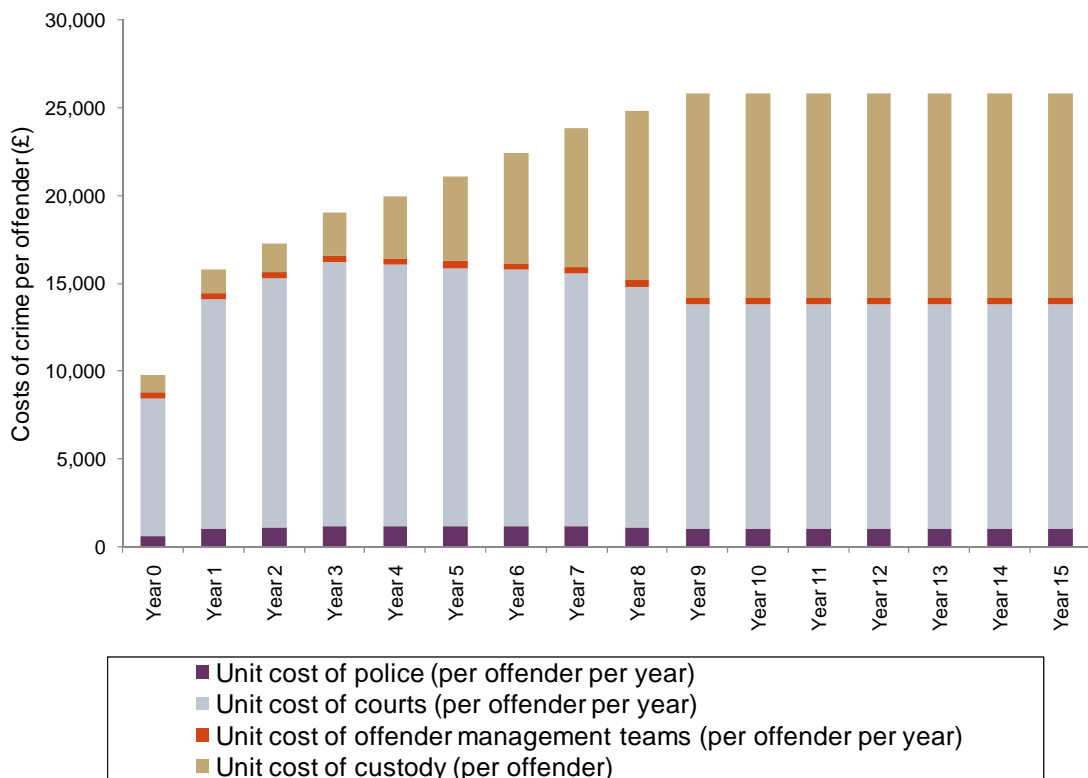
Source: National Audit Office (2011), 'The cost of a cohort of young offenders to the criminal justice system', Technical Paper, June; Centrepont; Ministry of Justice (2012), 'Youth Justice Statistics 2010/11', January 16th; Ministry of Justice (2012), 'Story of the prison population. England and Wales', July 31st and Oxera analysis.

The annual cost of crime per homeless young offender increases from around £9,800 to around £26,000 over a ten-year period of homelessness (see Figure A1.7). Oxera has made a conservative assumption that the costs remain constant thereafter.

The main driver of the increase in costs is the cost of custody, which increases with growing entrenchment into homelessness. Conditional on a crime being committed, the crime is likely to be more serious with growing entrenchment. This makes prison sentences more likely (the likelihood increases from around 16% to over 50%). Furthermore, for the same reason, the duration of prison sentences is likely to become longer over time (from an average of 2.6 months to more than 9 months).

Oxera has also made a conservative assumption around the duration of prison sentences. The assumed duration in the early years of homelessness (2.6 months) reflects young offenders aged below 18. In comparison, the average age of Centrepoint clients is 19.7 years.⁶⁴ As such, they are likely to face longer prison sentences than those aged below 18 years, thus imposing higher costs on the criminal justice system than presented in this report.

Figure A1.7 Costs of crime per homeless young offender per year (£, real 2010/11 prices)



Source: National Audit Office (2011), 'The cost of a cohort of young offenders to the criminal justice system. Technical Paper', June; Centrepoint; Ministry of Justice (2012), 'Youth Justice Statistics 2010/11', January 16th; Ministry of Justice (2012), 'Story of the prison population. England and Wales', July 31st and Oxera analysis.

A1.2.3 Benefits from Centrepoint intervention

The expected benefits of Centrepoint intervention, arising from the costs avoided due to a reduction in crime, have been estimated at £2,639 per Centrepoint client (in real 2010/11 prices), as follows:

- the reduction in the probability of crime following Centrepoint intervention relative to the delayed intervention path is estimated;

⁶⁴ Centrepoint (2010), 'Snapshot survey', May 25th.

- the expected benefits of Centrepoint intervention in each year are calculated as the reduction in the probability of crime *multiplied by* the costs per homeless young offender, as set out in Figure A1.7 above;
- the expected benefits in each year are converted to present-value terms using a social discount rate of 3.5%, taken from the HM Treasury guidance on appraisal of government activities;⁶⁵
- the costs of crime are then calculated as the average of the present values of expected benefits over a 15-year period.

A1.3 Benefit from reduced substance abuse

Homeless young people impose costs on public services and wider society if they engage in drug and alcohol abuse, including:

- the cost of treatment;
- the impact of drug and alcohol abuse on physical and mental health and the resultant impact on health services;
- the impact of drug and alcohol abuse on crime and other anti-social behaviour.

When Centrepoint intervenes, it offers in-house support and refers its clients to public health services and/or treatment services for drug and alcohol abuse, which the clients may not have accessed in the absence of Centrepoint intervention. Such treatment is likely to reduce the probability and intensity of drug and alcohol abuse in future.

Therefore, one of the benefits of Centrepoint intervention relative to delayed intervention is the avoidance of the treatment costs for drug and alcohol abuse, given the reduced probability and intensity of abuse following Centrepoint intervention. It is these avoided treatment costs that are estimated in this report.

However, the majority of the benefits of Centrepoint intervention against substance abuse are likely to arise from the consequent increase in the employability of clients, and the reduction in crime and in physical and mental health problems resulting from substance abuse. As it has not been possible to measure the direct link between substance abuse and these other problems of homelessness, the benefits of Centrepoint intervention (as reported in this study) with respect to the reduction in substance abuse have been underestimated. The full extent of these benefits is captured within the wider estimates of increased employment, reduced crime, etc, resulting from Centrepoint intervention.

A1.3.1 Probability of drug and alcohol use

A small proportion of Centrepoint clients use class A drugs (around 4%) and engage in problem alcohol use (around 7%), while a larger proportion use cannabis (around 24%). In the absence of Centrepoint intervention, a higher proportion would be likely to engage in drug and alcohol use in future as the duration of homelessness increases (see Table A1.3, and Figures A1.8 and A1.9).⁶⁶

The probability of Centrepoint clients engaging in substance abuse would decline with Centrepoint intervention. Oxera has assumed that after Centrepoint intervention, the probability of substance abuse remains stable and at a relatively low level (see Figures A1.8 and A1.9).

When intervention is delayed, the probability of substance abuse increases in the years before intervention. Figure A1.8 and A1.9 show that, although the probability declines

⁶⁵ HM Treasury (2003), 'The Green Book. Appraisal and Evaluation in Central Government'.

⁶⁶ The probability of substance abuse with increasing duration of homelessness is based on Oxera analysis of data from the FOR-HOME 2011 study.

following intervention, it does not fall as low as the levels with Centrepoint intervention. This is because the degree of addiction to drugs and alcohol may be expected to increase if it is left untreated for longer.

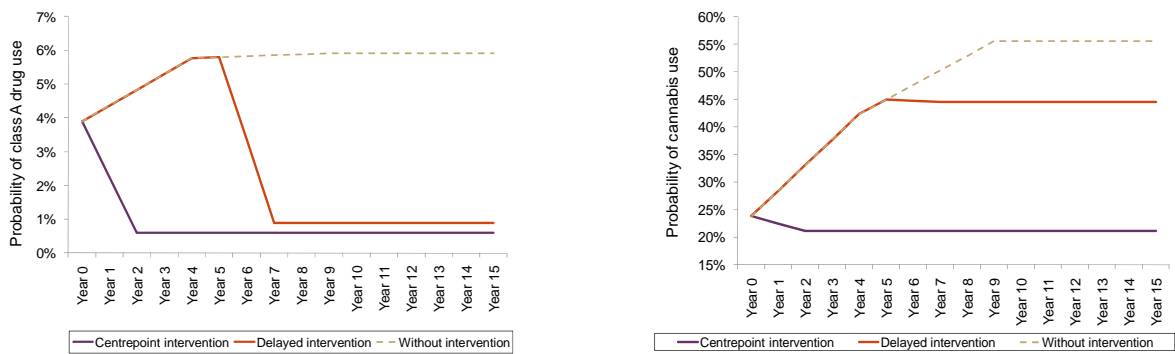
Table A1.3 Probability of Centrepoint clients engaging in substance abuse (%)

	Centrepoint client ¹	After Centrepoint intervention ²	After delayed intervention ²	Without intervention
Class A drugs	3.9	0.6	2.4	5.8
Cannabis	23.8	21.1	44.6	45.0
Alcohol	7.2	3.8	4.6	7.7

Note: ¹ Centrepoint client probabilities obtained from Centrepoint snapshot survey. ² The 'after Centrepoint intervention' and 'after delayed' intervention probabilities are based on data reported in the FOR-HOME study, which presents data on the substance abuse by the homeless people at the time of resettlement and during the preceding five years, separately presenting data for different age groups. This provides a measure of the effectiveness of intervention at different ages. To calculate the 'after Centrepoint intervention' and 'after delayed intervention' probabilities, the probabilities of substance abuse at the time of intervention are adjusted by this effectiveness of intervention.

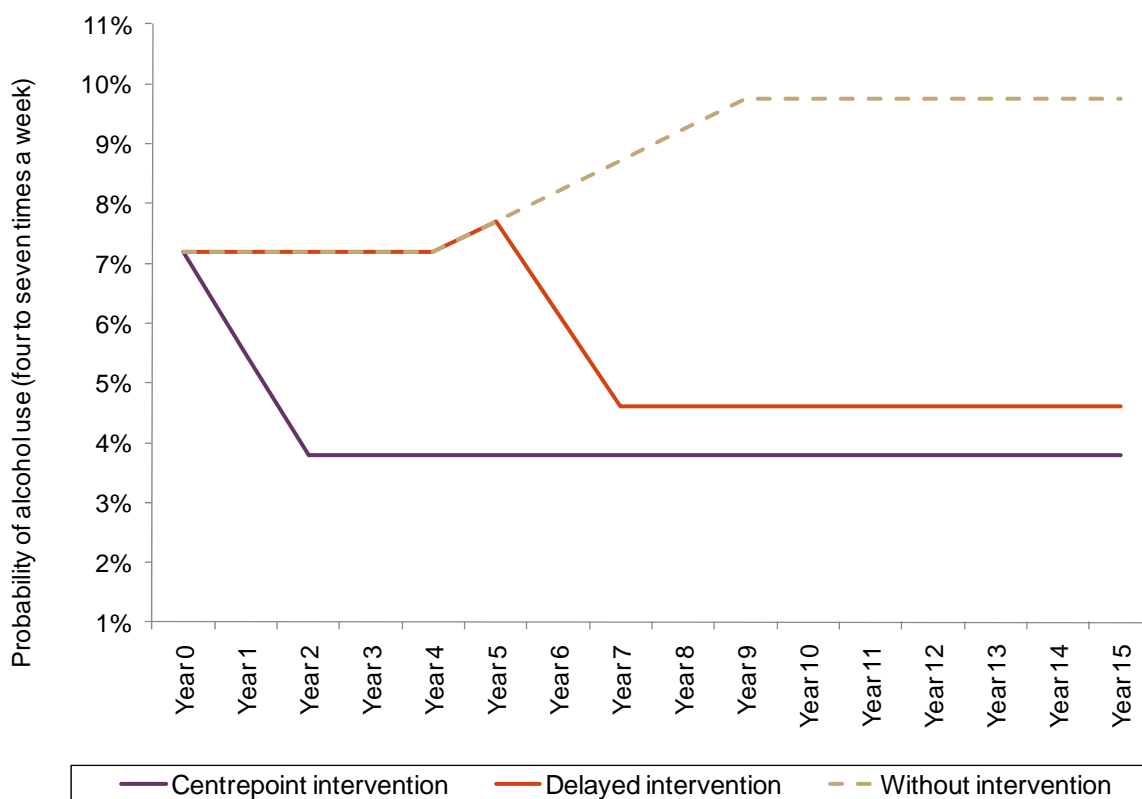
Source: Centrepoint snapshot survey; Crane et al. (2011), op. cit.; and Oxera analysis.

Figure A1.8 Probability of Centrepoint clients engaging in class A drug and cannabis use



Source: Centrepoint snapshot survey; Crane et al. (2011), op. cit., Table 4.5; and Oxera analysis.

Figure A1.9 Probability of Centrepont clients engaging in alcohol abuse



Source: Centrepont snapshot survey; Crane et al. (2011), op. cit., Table 4.5; and Oxera analysis.

A1.3.2 Treatment costs

A range of treatments are used for drug and alcohol abuse. Treatments for class A drugs and alcohol abuse are more intensive than that for cannabis. For example, Centrepont clients typically go through the following stages of treatment for class A drug abuse:

- stabilising period—this includes weekly appointments with drug workers/street agencies, Methadone/Subutex treatment,⁶⁷ possible respite stays in hospitals if drug use is very high, and A&E visits for overdoses or injection injuries. Individuals are also referred to counsellors if they suffer from wider trauma or mental health issues;
- detoxification—after drug use has stabilised sufficiently and individuals have secured council funding, they go into hospital for detoxification;
- rehabilitation—individuals go to residential rehabilitation for three to six months depending on their response to treatment.

Oxera understands from Centrepont that the type of treatment for serious alcohol abuse is fairly similar to that for class A drug use. The treatment for cannabis abuse, on the other hand, is much less intense.

Oxera has estimated the average treatment costs per class A drug user to equal around £19,000, with that per problem alcohol user also equalling around £19,000. The treatment costs for cannabis use are substantially lower, at around £800 per person (see Table A1.4).

⁶⁷ Oxera understands from Centrepont that the length of time that drug users spend on Methadone/Subutex while trying to stabilise their drug use varies significantly, but this is likely to be between 3–12 months.

In estimating treatment costs, information on the average duration of use of different types of treatment (eg, methadone treatment, hospitalisation, etc) provided to Centrepont clients has been obtained from Centrepont.

Information on the costs per instance of use has been obtained from the Department for Education's Family Savings Calculator,⁶⁸ a tool used by local authorities who manage support services for families with multiple problems to quantify the savings/cost avoidances from the prevention of negative outcomes such as drug use.

Table A1.4 Costs of substance abuse treatment (real 2010/11 prices)

	Units for measuring treatment and costs	Average duration of use by Centrepont clients	Cost per visit, hour, day, week etc (£)	Average cost per person (£)
Class A drugs				
Street agency visit	Visit	33	83	2,718
Methadone treatment	Week	28	61	1,702
A&E	Visit	3	122	304
NHS inpatient treatment	Day	56	238	13,306
Counsellor	Hour	9	51	459
Voluntary sector residential rehabilitation ¹	Week	19	848	548
Total				19,038
Cannabis				
Street agency visit	Visit	5	83	376
Counsellor	Hour	9	51	459
Total				835
Alcohol				
Street agency visit	Visit	33	83	2,718
Medication	Week	28	61 (assumed equal to methadone treatment)	1,702
A&E	Visit	5	122	608
NHS inpatient treatment	Day	56	238	13,306
Counsellor	Hour	9	51	459
Voluntary sector residential rehabilitation	Week	19	848	548
Total				19,342

Note: Numbers may not multiply or add up to the totals due to rounding. ¹ Oxera has applied a conservative assumption that 3% of class A drug users make use of voluntary sector residential rehabilitation. This is based on data from Curtis, L. (2010), 'Unit Costs of Health and Social Care' which found that, of the 210,815 individuals receiving structured drug treatment in 2008/09, there were 4,711 (or 3%) recorded in residential rehabilitation. Source: Department for Education, Families with Multiple Problems Division, 'Family Savings Calculator v1.5.8b. Guidance Note'; Centrepont data; and Oxera analysis.

⁶⁸ Department for Education, Families with Multiple Problems Division, 'Family Savings Calculator v1.5.8b. Guidance Note'.

A1.3.3 Benefits of Centrepoint intervention

The expected benefits of Centrepoint intervention (ie, treatment costs avoided by the health sector) due to a reduction in class A drug use have been estimated at £188 per Centrepoint client (in real 2010/11 prices).

In the case of cannabis use, the benefits (or treatment costs avoided) equal £117 per Centrepoint client.

The benefits of Centrepoint intervention have been calculated in the following steps:

- the expected treatment cost is calculated under the Centrepoint intervention and delayed intervention scenarios. This equals the probability of substance abuse when a young person comes to Centrepoint (or another organisation in future) *multiplied by* the per-person treatment costs. Therefore, the expected cost of treatment of a class A drug user if Centrepoint intervenes equals £741 (3.9% *multiplied by* £19,038);
- the expected benefits of Centrepoint intervention in each year are calculated as the expected treatment costs if Centrepoint intervenes *minus* the expected treatment costs under delayed intervention.

In the case of alcohol abuse, the net benefits (or treatment costs avoided) are estimated to be negative (–£136 per Centrepoint client) under Oxera's extremely conservative assumptions: a) the relatively small increase in the probability of alcohol abuse over time (from 7.2% at the start of homeless to 7.7% after five years of homelessness) implies that the costs of delayed intervention are only slightly higher than those of Centrepoint intervention when measured in nominal terms; and b) the discounting of the costs of delayed intervention to the present to reflect the time value of money implies that, in present-value terms, the costs of delayed intervention are lower than those of Centrepoint intervention when considering one-off treatment costs alone. However, as indicated in the introduction to this sub-section, this does not account for the extent to which a reduction in alcohol abuse leads to an increase in employment, reduced crime levels and fewer health problems.

Impact of Oxera's conservative assumptions

However, Oxera has taken an extremely conservative approach to estimating the probability of alcohol abuse in the absence of Centrepoint intervention:

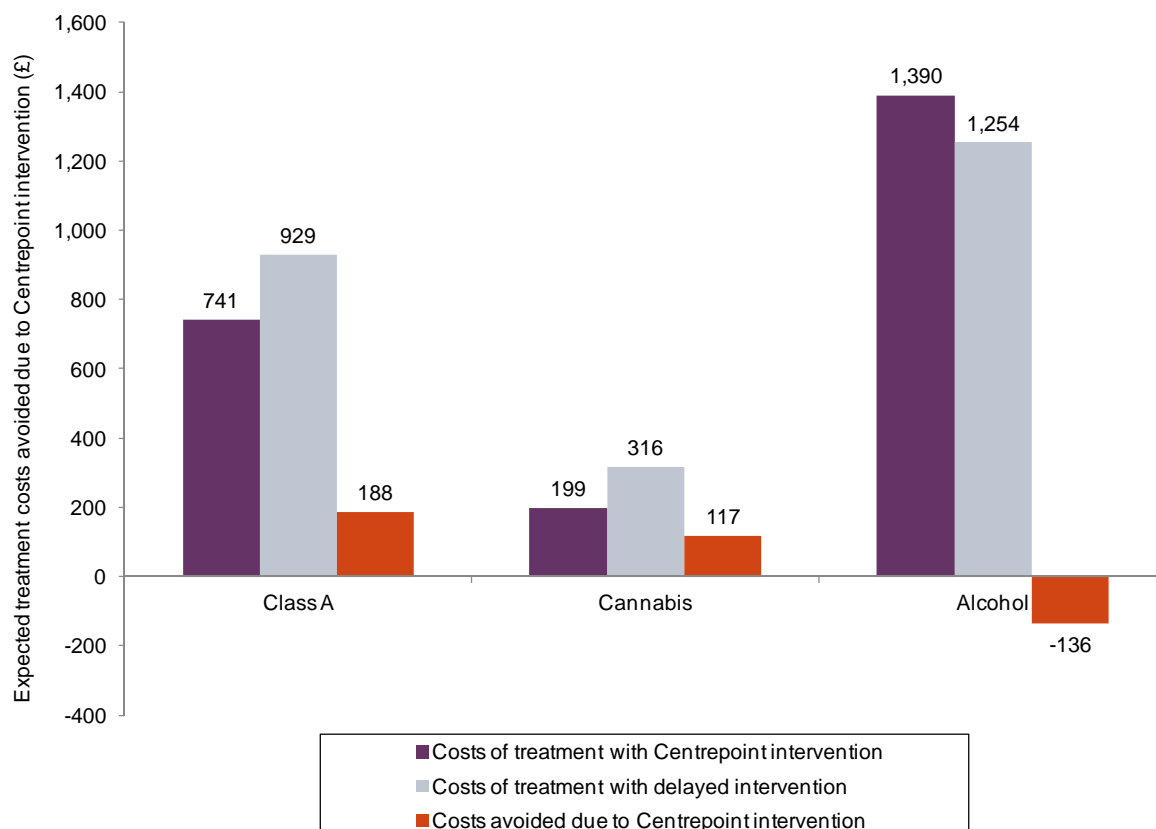
- Oxera understands that around 28–30% of homeless people (when considering all age groups, not just young people) suffer from alcohol problems in the first five years of homelessness.⁶⁹ This compares to 7.2% of the young homeless clients who Centrepoint deals with suffering from alcohol problems when they first come to Centrepoint;
- with increasing duration of homelessness, the probability of alcohol problems rises to nearly 60% when considering all homeless people, whereas Oxera has taken the conservative assumption that this probability does not rise above 10% in the case of the young homeless.

Furthermore, although 14% of the average cohort of 17–24-year old homeless young people drinks alcohol daily, only around 7% of Centrepoint clients are found to be problem drinkers. If it were assumed that Centrepoint clients' probabilities of alcohol abuse are lower than those of the wider cohort of homeless people of similar ages because Centrepoint clients enter Centrepoint quite soon after becoming homeless, it is likely that over time they would converge towards the 17–24-year average if there were no intervention.

⁶⁹ Crane, M., Warnes, T. and Coward, S. (2011), 'The FOR-HOME Study: Moves to Independent Living; Single Homeless People's Experiences and Outcomes of Resettlement', Sheffield Institute for Studies on Ageing, University of Sheffield.

Assuming that the probability of alcohol abuse rises to 28% in the delayed intervention scenario implies that the benefits of Centrepoint intervention (ie, treatment costs avoided relative to delayed intervention) are likely to be around £4,162 per client instead of –£136 per client under the conservative assumptions.

Figure A1.10 Benefits of Centrepoint intervention—treatment costs avoided (£/Centrepoint client, real 2010/11 prices)



Note: The delayed intervention costs are in present-value terms, discounted at the 3.5% rate suggested by HM Treasury.

Source: Department for Education, Families with Multiple Problems Division, 'Family Savings Calculator v1.5.8b. Guidance Note'; Centrepoint data; and Oxera analysis.

A1.3.4 Additional benefits

The inclusion of only treatment costs to estimate the benefits of Centrepoint intervention with respect to substance abuse is potentially conservative, as substance abuse also imposes a number of additional costs on society, as set out in Table A1.5. Some of these effects are immediate (eg, poisoning and overdoses), while others accrue over a longer period of time (eg, poor educational attainment and employability).

Table A1.5 Wider costs of substance abuse

Immediate	Long-term
Crime	Crime
Poor health and hospital costs	Poor health and hospital costs
Premature deaths from overdoses	Premature deaths from overdoses
	Low productivity
	Poor educational attainment
	Poor employability

Source: Oxera.

Treatment for substance abuse is likely to improve the overall health of Centrepont clients, resulting in lower costs imposed on the healthcare system. A study on drug and alcohol services finds that respondents reported that their physical health improved by 13% and psychological health improved by 22% as a result of treatment for substance abuse.⁷⁰

These healthcare costs include the costs of inpatient and outpatient services, A&E visits, deaths and poisoning, mental health problems due to substance abuse and the provision of A&E drugs. As there is likely to be some overlap between healthcare costs and the substance abuse/mental health treatment costs, Oxera has not separately incorporated these in the CBA presented in this report.⁷¹ Similarly, other wider costs, such as the costs of crime, poor educational attainment and poor employability, have not been included in the costs of substance abuse due to the risk of double-counting.

A1.4 Benefits from improved mental health

The impact of Centrepont's intervention on clients' mental health is estimated using data from Centrepont on how the probabilities of mental health problems change before and after intervention, and data on such problems among general homeless population obtained from the FOR-HOME 2011 study and publicly available data on the costs of treatment.⁷²

Figure A1.11 shows the evolution of the probability of a client having mental health problems in the factual and counterfactual. Data provided by Centrepont shows that 44% of the clients surveyed suffered from some mental health issues before the intervention; this figure reduced to 24% upon resettlement (a 45% reduction). It is assumed that those who have problems after the intervention continue in the same state. As noted earlier, these clients may be able to manage their mental health conditions more effectively with intervention, which would lead to decreased costs to the health services. The details of such savings are difficult to quantify and have therefore not been included.

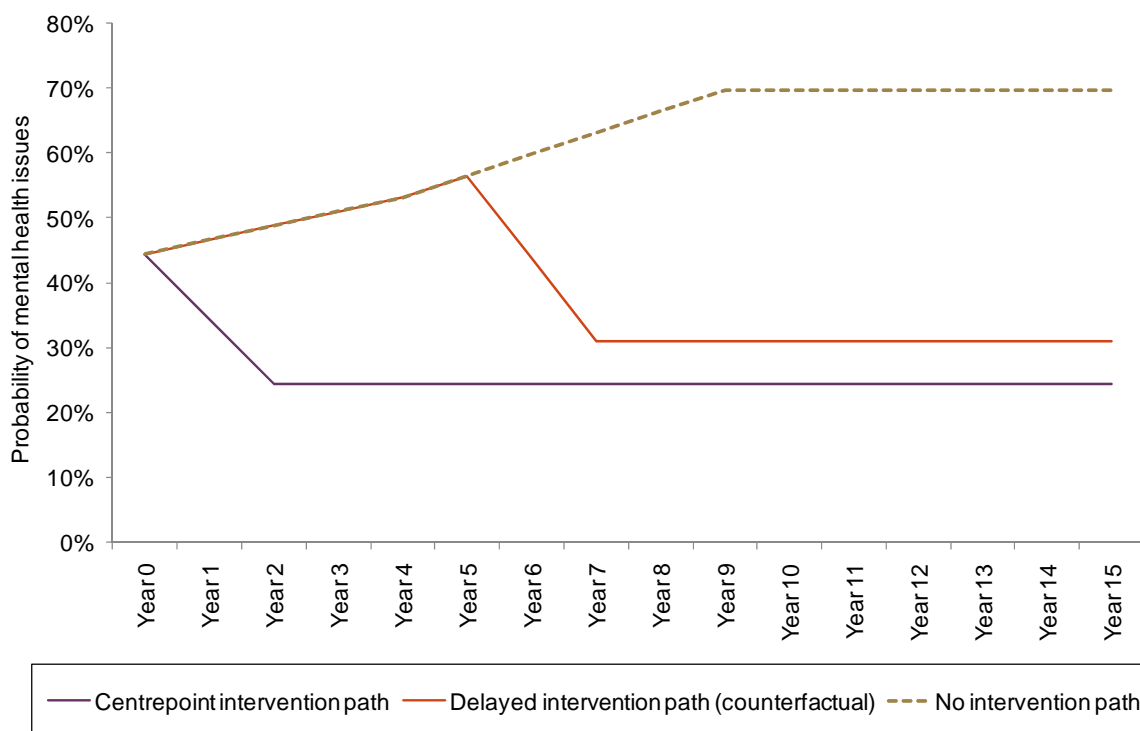
The incidence of such issues in the counterfactual has been estimated using data from the FOR-HOME study, which sets out the extent of such issues by duration of homelessness. The probability of such problems under no intervention has been estimated using this data. In the counterfactual considered in this report, however, intervention occurs in Year 6. The incidence of mental health problems therefore increase to around 56% in Year 5 before reducing to 31% in Year 7 due to the delayed intervention. The reduction in incidence rate is in line with the reduction after Centrepont's intervention (a 45% reduction in the probability in both cases).

⁷⁰ Frontier Economics (2012), 'Specialist drug and alcohol service for young people – a cost benefit analysis'.

⁷¹ Indeed, the reduction in healthcare costs could be substantial. Oxera analysis suggests that early treatment for class A drugs could reduce healthcare costs arising from drug use by £938 per Centrepont client relative to delayed treatment. This is around six times higher than the treatment costs avoided due to early intervention. In addition, the reduction in healthcare costs resulting from alcohol use could equal £108 per client. These estimates are based on healthcare costs per drug user presented in Frontier Economics (2012), op. cit.

⁷² Research suggests that the probability of mental disorders increases as the quality and security of housing decreases. See Stephens, J. (2002), 'The mental health needs of homeless young people', a report commissioned by The Mental Health Foundation, August. Indeed, the correlation between mental health problems and homelessness has also been found in other countries. For example, evidence from Canada suggests that in some instances mental health problems precede the onset of homelessness, whereas in other instances they can be exacerbated by continuing homelessness. See Canadian Institute for Health Information, 'Improving the health of Canadians 2007/08. Mental Health and Homelessness'.

Figure A1.11 Probability of mental health issues with and without intervention (%)



Note: The FOR-HOME study finds that 51% of those who have been homeless for one year or less reported to have problems, while this figure increases to 61% among those who have been homeless for 1–5 years, and even higher at 80% for those homeless for 5–10 years. The probabilities of 61% and 80% have been adjusted downwards to reflect the lower incidence among Centrepoint clients to start with (based on the data collected for the FOR-HOME study, 44% of Centrepoint’s clients had problems when they were homeless); this is shown as the ‘No intervention path’.

Source: Oxera analysis.

The costs to society due to the incidence of such mental health issues with and without the intervention would depend on the type of problems faced by the clients. The 2010 Centrepoint survey provides some information on the type of mental health problems suffered by clients. This data was available only for those who have been diagnosed, and shows that the majority of clients suffer from depression, anxiety disorder and post-traumatic stress, but a smaller proportion of clients also suffered from bipolar disorder, psychosis and schizophrenia.

The treatment of these conditions imposes potentially significant costs on the healthcare system. As noted in the main report, a study by King’s Fund on the costs of mental health care in England sets out the costs associated with each of these conditions.⁷³ The costs relating to the 16–44 age group have been used in this report as being the group closest to Centrepoint’s clients that was available in the study. The cost data was not available for each of the conditions identified by Centrepoint. Oxera has grouped similar conditions to match the conditions for which cost data was available. Table A1.6 sets out the incidence rates and service costs for each condition.

⁷³ King’s Fund (2008), ‘Paying the price, the cost of mental health care in England to 2026’.

Table A1.6 Incidence rates and service costs, by type of condition

Condition	Proportion	Average service cost (£) ³	Services considered
Depression	53%	1,700	GP, non-inpatient NHS, non-psychiatric inpatient, System and Services Delivery (SSD), medication, psychiatric inpatient, residential care
Anxiety disorder	16% ¹	1,000	GP, non-inpatient NHS, non-psychiatric inpatient, SSD, medication, psychiatric inpatient, residential care
Psychosis, schizophrenia	9%	13,300	Inpatient, outpatient and medicines, informal care, community service, day care ⁴
Bipolar disorder	4%	1,400	GP, psychiatrist, therapist, day care, inpatient, residential care, medication and informal care
Personality disorder	17% ²	500	GP, medication, outpatient, inpatient
Total weighted average costs of treatment (2005/06 values)		2,400	
Total weighted average costs of treatment, in 2010 value		2,780	

Note: ¹ Includes the incidence of post-traumatic stress disorder. ² Includes all other categories of conditions identified among Centrepoin's clients. ³ The average service costs for each condition should be treated as approximate as this is read-off from the relevant charts in the King's Fund study; the average service costs have been estimated using the rates of service use for each condition obtained from a large-scale Psychiatric Morbidity Survey (PMS) and Hospital Episode Statistics (HES) data. ⁴ This is based on Figures 51 and 53 of the study; the cost of the criminal justice system, which accounts for 5% of the total service costs, has been excluded from the cost of £14,000 for the 15–44 age group.

Source: Oxera analysis.

It has been assumed that average costs of £2,780 are imposed on the public purse for the treatment of relevant young people after intervention by Centrepoin, as well as after delayed intervention. However, the total costs when intervention is delayed are higher, as the probability of mental health problems increases without Centrepoin's intervention, as discussed above.

It is also assumed that the mix of the types of condition remains the same during delayed intervention. This is a conservative assumption, as the severity of the condition is likely to increase; for example, a client with a mild bipolar disorder may develop more serious conditions of bipolar disorder, psychosis, and related physical health problems.⁷⁴

⁷⁴ For example, see: <http://www.nimh.nih.gov/health/publications/bipolar-disorder/complete-index.shtml>.

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