Ministry
of Justice

Youth Justice Interventions – findings from the Juvenile Cohort Study (JCS)

Edith Wilson
Ministry of Justice

Ministry of Justice Analytical Series
2013

Analytical Services exists to improve policy making, decision taking and practice by the Ministry of Justice. It does this by providing robust, timely and relevant data and advice drawn from research and analysis undertaken by the department's analysts and by the wider research community.

Disclaimer

The views expressed are those of the authors and are not necessarily shared by the Ministry of Justice (nor do they represent Government policy).

First published 2013

Any enquiries regarding this publication should be sent to us at mojanalyticalservices@justice.gsi.gov.uk

This publication is available for download at http://www.justice.gov.uk/publications/research-and-analysis/moj

ISBN 978-1-84099-618-8

Acknowledgements

The Juvenile Cohort Study (JCS) was funded by the Ministry of Justice and the Youth Justice Board. Special thanks go to Morgan Harris Burrows for undertaking the data collection for the JCS and to staff in participating Youth Offending Teams. Thanks go also to the JCS Technical Advisory Group for their invaluable contribution to the technical analysis and quality assurance. Additional comments on the report were also gratefully received from Ministry of Justice colleagues and two anonymous peer reviewers.

Contents

List of tables

List of figures

1. Summary

1.1 Introduction and background

This report aims to provide a broad overview of 'what Youth Offending Teams (YOTs) do' in terms of planning and delivering interventions to young people (aged 10–17 years) who are under their supervision in the community. The study was conducted to fill a gap in the youth justice evidence base by assessing the range of interventions delivered by YOTs and how these relate to young people's offending-related risks, needs and future re-offending. This study is the first of its scale as previous research was based on small samples or focused on specific types of interventions.

The main aim of the Youth Justice System (YJS) in England and Wales is to prevent young people from offending. Within the YJS, a YOT's primary role is to co-ordinate the youth justice services in the local area, and work with young people who have come into contact with the police or have been given a criminal justice disposal. In order to support the young person to desist from further offending, the YOT practitioner assesses their offending-related risks and needs via a standard youth assessment tool called Asset. The findings from this assessment inform the production of the *intervention plan*, which sets out the aims and nature of the interventions that will be delivered by the YOT to help the young person to stop offending. The intervention plan can be implemented in a number of ways including:

- face-to-face meetings;
- group work;
- programmes or packages; or
- a combination of these.

1.2 Approach

This study used data from the Juvenile Cohort Study (JCS), a joint initiative by the Ministry of Justice (MoJ) and the Youth Justice Board (YJB). The JCS comprises a broadly representative sample of 13,975 young people who came into contact with 30 Youth Offending Teams (YOTs) from 1 February 2008 to 31 January 2009. Since the data were collected some elements of YOT practice have changed and therefore findings may not be representative of current practice (e.g. the Scaled Approach and Youth Rehabilitation Order were introduced in November 2009).

The JCS data included information, collected by YOTs, on young people's interventions and their offending-related issues as assessed via the Asset youth assessment tool. The analysis

does not, however, draw any conclusions about the way interventions were delivered, for example in terms of adherence to programme manuals or staff training. Records were matched to the Police National Computer (PNC) to extract offending histories and proven one-year re-offending.

The JCS also included a small-scale qualitative study of 102 interviews, which was conducted to investigate the views of YOT practitioners to shed light on the context in which they work, and to provide background to the administrative data collected in the JCS.

1.3 Key findings and implications

Interventions and proven one-year re-offending

Face-to-face contacts, between practitioners and young people that aimed to address specific offending-related issues and their association with proven re-offending were explored. Indicative findings suggested (after controlling for offender characteristics):

- that young people who had more frequent contacts (not distinguishing by contact type), were less likely to re-offend; and
- when a range of contacts relating to 'cognition & lifestyle' issues were grouped together, the results suggested a reduction in young people's proven re-offending. This was regardless of whether or not the young person had an assessed risk in these areas.

Further work would, however, be necessary to understand the underlying mechanisms behind the reductions in proven re-offending.

Addressing young people's risk of re-offending

YOT resources were found to be aimed at young people who were most likely to re-offend. Young people with more serious CJS disposals and those assessed as having a higher risk of re-offending had, on average, a wider range of aims set in their intervention plans and received more contacts (i.e. face-to-face interventions) with YOT practitioners or external agencies.

Overall, there was room to improve the alignment between offending-related risks and needs, aims in the intervention plan, and subsequent contacts. YOTs were better at addressing certain factors related to a young person's likelihood of future offending than others. The following issues were, on the whole, targeted in young people's intervention plans and were the subject of contacts between the YOT practitioner and the young person:

- lifestyle;
- perception of self and others;
- thinking and behaviour;
- attitudes to offending; and
- motivation to change.

In contrast, the following factors were less likely to be targeted in intervention plans and by contacts between the YOT practitioner and the young person:

- neighbourhood;
- living arrangements; and
- family & personal relationships.

However, once risks and needs had been identified as aims in the intervention plan, young people were more likely to receive contacts related to these needs. This indicates that YOTs on the whole deliver against the aims set in the plan. Findings from qualitative interviews with YOT practitioners, found that practitioners perceived living arrangements, family & personal relationships, and to some extent also neighbourhood the most challenging to address. It was felt by those interviewed that YOTs had little leverage to intervene in these areas.

Range of programmes & packages (p&ps) used by YOTs

The study found that YOTs used a wide range of different, structured programmes and packages (p&ps) as part of delivering interventions. Although many of these p&ps had been developed by the YOTs themselves, they also made use of resources which were commercially produced or provided by the third sector.

Despite the wide variety of p&ps found, these were not used regularly as part of the supervision of young offenders. Also, most p&ps had not been subject to rigorous evaluation and the development and use of evidence-based programmes should be encouraged. The YJB has, however, been working on identifying and promoting effective practice and has introduced resources on innovation and evaluation in Youth Justice.

Recording of interventions

There was no consistent way of recording interventions across YOTs. A common recording framework was introduced for the JCS data collection. Common standards for the recording information on YOT interventions could aid comparability of ‘interventions’ across YOTs and also facilitate evaluation and sharing of best practice.

Conclusions

The YJB has encouraged YOTs to take an individualised approach to managing and rehabilitating young people who offend. This has led to a wide variety of different approaches at local level, which, in this study, was reflected in the challenges involved in standardising the recording of interventions across participating YOTs. Going forward, common standards for the recording of youth justice interventions should be considered.

Overall, YOT resources were focussed on the planning and delivery of interventions related to young people's risk of future offending. YOTs were better at addressing certain risks and needs than others, and there may be room for improvement. Addressing 'cognition & lifestyle' issues appeared to reduce proven re-offending of young people, though further work would be necessary to understand the underlying mechanisms. In addition, more work is needed to understand which offending-related risks and needs YOTs have leverage to address directly in order to impact on proven re-offending.

2. Introduction

The main aim of the Youth Justice System (YJS) in England and Wales is to prevent young people from offending (Crime and Disorder Act, 1998). Within the YJS, a Youth Offending Team's (YOT's) primary role is to co-ordinate the youth justice services in the local area, and to work with young people who have come into contact with the police or have been given a criminal justice disposal. YOTs work with a range of partner agencies, including the police, probation, health, children's services, education agencies and the local community.

In order to support the young person to desist from further offending, their offending-related risks and needs are assessed by the YOT practitioner via a standard youth assessment tool called Asset. The findings from this assessment are used to inform the development of an intervention plan, which sets out the YOT's approach to helping young people to stop offending (Youth Justice Board, 2010a). The Youth Justice Board (YJB), the organisation which has oversight of YOTs, has encouraged an individualised approach to managing and rehabilitating young people who offend and, unlike for adult offenders, there are no accredited re-offending community programmes.

To date very little is known about the interventions young people under YOT supervision receive and how well these interventions are matched to their identified offending-related risks and needs, and whether resources are targeted at those young people who are most likely to re-offend.

2.1 Research aims

The overall aim of this study was to gain better insights into 'what YOTs do' with the young people (aged 10–17 years) they manage in the community.

The specific research questions were:

- Do YOT intervention plans address young people's offending-related risks and needs as identified via the Asset assessment tool?
- Do the contacts between the young person and YOT practitioners (or other specialist staff) address the aims set in intervention plans and young people's risks and needs associated with their offending behaviour?
- Are particular interventions associated with a reduction in proven re-offending?
- What types of programmes & packages do YOTs use?

This report is one of a series of outputs from the Juvenile Cohort Study (JCS),[1] which aims to inform youth justice policy and effective practice in the YJS.

2.2 Link between young people's offending-related risks and needs, intervention plans and contacts

Young people who come into contact with the YJS often experience a range of factors which are related to their likelihood of future offending. Risk factor research suggests that Criminal Justice System (CJS) practitioners and offender management programmes should particularly focus on criminogenic needs (i.e. factors which can change over time), as addressing these issues has the potential to bring about change in an offender's thinking and behaviour, which may in turn help them to desist from crime. Also, resources should be aimed at those people with the highest risk of re-offending (see for example the 'risk-need-responsivity model' Andrews, Bonata and Hoge, 1990). In addition, interventions should be delivered in a way which accounts for factors that may affect the young people's ability to respond to the intervention, such as motivation, age, or learning styles.

Risk factor research has been criticised for simplifying the potential interplay of a range of factors, and also for not taking sufficient account of the role of protective factors in helping an individual desist from crime. (For an overview see, for example, Case and Haines, 2009; Farrington and Welsh, 2007). Other offender rehabilitation models, such as the Good Lives Model (e.g. Ward and Maruna, 2007), which aims to build capabilities and strengths in people, could be used to complement or act as an alternative to the risk based assessment and treatment approaches.

Risk assessment in the Youth Justice System

In the youth justice context a young person's risks and needs in relation to their offending behaviour are assessed via the Asset youth assessment tool, which is used by all YOTs in England and Wales. It measures 12 dynamic factors, which can change over time (e.g. living arrangements, relationships, and substance abuse) and four static factors that do not change over time (e.g. age at first conviction, number of previous convictions).

[1] Other outputs from the JCS include Wilson and Hinks, 2011: a report on the predictive validity of Asset based on JCS data; and a description of the characteristics and needs of the JCS cohort, in Ministry of Justice, 2012c.

The YOT practitioner uses the Asset assessment scores and related information to develop the **intervention plan**. The intervention plan sets out how the individual's offending-related risks and needs will be addressed along with the aims and nature of the interventions that will be implemented to help the young person to desist from further offending. The interventions can be delivered, by the YOT or external agencies, in a number of ways including via:

- face-to-face meetings;
- group work;
- using specific programmes or packages; or
- a combination of these.

Findings from previous studies

To date, only a limited number of UK studies have looked at how young people's risks and needs in relation to re-offending impact on the planning and delivery of interventions by YOTs. These studies have, however, either been small-scale or focused on interventions addressing specific areas of need. (For example, see Baker *et al*, 2005; Sutherland, 2009; Baker *et al*, 2011; HMI Probation *et al*, 2011).

Indicative results, for example as highlighted by Baker *et al* (2011), suggested that intervention plans were not always matched to the risks and needs as identified via Asset. Similarly, Sutherland (2009, p.54) reported that 'assessed risk did not necessarily guide the areas where interventions were planned or undertaken'. Baker *et al* (2011) cited a number of reasons for the lack of match between assessment and planning, including the depth and quality of the assessment being hindered by time constraints and working practices, resource constraints, and limited influence over some aspects of the young person's life (such as neighbourhood) which affected adequate intervention planning.

An inspection by HMI Probation *et al* (2011) of six YOTs reviewed cases in terms of assessment and delivery of intervention on offending behaviour, health, and education, training and employment (ETE). The report stressed that the assessments in these areas were often thorough, 'but these did not always lead to clear planning and delivery of the right interventions with the right individuals in the right way at the right time' (p.3). It was suggested that an improved understanding of existing research, in addition to improved case planning and training and development for practitioners, would enable YOTs to improve the effectiveness of interventions in future.

Similar conclusions were drawn in relation to interventions delivered in the youth secure estate. Research, commissioned by the YJB, reported a lack of individually tailored offending-behaviour interventions, with generic offending sessions being more commonly used. (Gyateng, Moretti, May and Turnbull, 2013; Cattell, Mackie, Prestage and Wood, 2013).

In addition, similar results were found for adult offenders managed in the community. A recent MoJ report found 'variation between types of need identified in assessment and those addressed in the sentence plan suggests room for improvement' (Cattell *et al*, 2013, see p.4).

2.3 Report outline

Section 3 of this report explains the approach taken to extract a sample to answer the research aims. Section 4 presents the results and section 5 outlines the main conclusions and implications.

3. Approach

The study used data from the Juvenile Cohort Study (JCS), which was based on administrative data extracted from YOT case management systems. The JCS was a joint initiative by the MoJ and the YJB, which aimed to inform youth justice policy and effective practice.

The JCS comprised a broadly representative sample of 13,975 young people who came into contact with 30 Youth Offending Teams (YOTs) from 1 February 2008 to 31 January 2009.[2] The cohort was followed up for one year and matched to the Police National Computer (PNC) to extract offending histories and proven re-offending over one year.

Young people were eligible for inclusion in the JCS cohort if they:

a) had an 'eligible' index disposal during the study period;
b) were aged 10–17 years at the time of the index disposal; and
c) were normally resident within the YOT area.

The JCS data collection period preceded the introduction of the Scaled Approach which was introduced in England and Wales in November 2009. In line with a risk-based approach to offender assessment and management, this process aims to target YOT resources at those young people with the highest likelihood of re-offending. This tiered approach to intervening with young people in order to reduce re-offending is based on the assessment of risk and need using the Asset tool. The numbers of contacts young people have with the YOT increases with their level of assessed risk of future offending.[3] For the purpose of this report Scaled Approach bands were replicated based on data (static Asset factors) extracted from the PNC.

[2] At the time of the data collection there were 157 YOTs.

[3] The Scaled Approach groups young people into three bands of increasing intensity of YOT supervision based on their likelihood of re-offending according to their Asset scores. The three bands are: 0–14 (standard), 15–32 (enhanced), and 33–64 (intensive). The minimum number of contacts per month for the first three months of the CJS order are: standard=2, enhanced=4, intensive=12. Contacts reduce for the remainder of the order.

The JCS data collection also took place prior to the implementation of the Youth Rehabilitation Order (YRO) for offences committed from 30 November 2009, although it included some of the components of the YRO.[4]

More information on the characteristics of the JCS cohort can be found in Appendix A of this report. See also Wilson and Hinks (2011) and Youth Justice Statistics 2010/11 (Ministry of Justice, 2012b).

This report includes, where appropriate, findings from the JCS practitioner study. This is a small-scale study of 102 qualitative interviews with YOT practitioners, which aimed to shed light on the context in which they work, and to provide background to the administrative data collected in the JCS. (See Appendix A for further information.)

3.1 Sample selection process

PNC matching

Cases in the JCS were matched against the MoJ's copy of the Police National Computer (PNC) to extract offending history and proven re-offending information. The match rate was 98 percent.

Sample selection and attrition

The sample was selected from those young people included in the JCS cohort, who had:

- A valid **index disposal** – only one record per young person was selected;
- A valid **intervention plan** record – only the intervention plan record which related to the index intervention disposal was selected.
- Valid **contact** entries (i.e. contacts between the young person and the YOT practitioner, or other workers, that were planned or carried out as part of the index disposal) – all contacts a young person had related to the index disposal were selected.

[4] The YRO provides judges and magistrates with a choice of 18 community options from which they can create a sentence specifically designed to deal with the circumstances of the young offender before them. The JCS includes the following components which were replaced by the YRO: Action Plan Order, Curfew Order, Supervision Order (and conditions), Community Punishment Order, Community Punishment and Rehabilitation Order, Attendance Centre Order, Community Rehabilitation Order. The JCS does not include Drug Treatment and Testing Order, and Exclusion Order, which were also replaced by the YRO.

Based on these criteria only one index disposal was chosen per person and the linked intervention plan items and contacts were selected for analysis. The JCS included a small number of young people on Intensive Supervision and Surveillance Programmes (ISSPs). Based on the available data, it was difficult to interpret which interventions were related to the main disposal (e.g. Supervision Order) or to the ISSP component of the disposal. Therefore, in order to ensure comparability of results by disposal tiers, ISSPs were removed from the subsequent analyses.[5]

Table 3.1 shows the sample attrition and the proportions of young people at the various sample selection stages compared with the total cohort (e.g. 58% of young people who were included in the total JCS cohort also had a recorded index intervention plan). Not all index disposals included in the JCS will have a related 'intervention plan' recorded on the JCS case management system. For example, some YOTs did not always create intervention records for disposals they did not manage directly or where they only manage parts of the disposal, such as Attendance Centre Orders, Community Punishment Orders, and Community Punishment & Rehabilitation Orders.

Table 3.1: Sample attrition

Sample selection	Young people N	Percentage of JCS total cohort %
Number of young people in the JCS cohort	13,975	**100**
Number of young people (in the JCS) where the index disposal matched to interventions records	10,944	**78**
Number of young people (in the JCS) with a recorded index intervention plan	8,078	**58**
Number of young people (in the JCS) with recorded contacts relating to the index disposal	7,918	**57**
Number of young people (in the JCS) with a recorded programme & package relating to the index disposal	1,697	**12** (or 21% of young people with a valid contact)

[5] A total of 334 ISSPs were removed from the analysis. The ISSP was an intensive alternative to custody (with a minimum of 25 hours supervision per week for a set period), given to young people aged 10–17, as a condition of bail supervision and support; as part of a community penalty, either an Supervision Order or a Community Rehabilitation Order; or as a condition of community supervision in the second part of a DTO. It is now known as Intensive Supervision and Surveillance (ISS) after becoming a requirement of the Youth Rehabilitation Order. For an evaluation of Intensive Supervision and Surveillance Programmes see e.g. Moore *et al* (2004), Gray, E. (2013).

Of those young people who were included in the JCS cohort but their index disposal did not link to interventions records (n=2,697, after removing ISSPs), 66% were on Final Warnings.[6] Similarly, 68% of those young people who had their index disposal linked to interventions records but did not have a related intervention plan record were on Final Warnings.[7] This may be because many of the young people on Final Warnings were not subject to formal supervision under the YOT. The 2004 YJB National Standards state that an intervention programme for Final Warnings should include a brief programme of activity only if, according to Asset, there is a high likelihood that they will re-offend. The high levels of attrition may also be partly explained by the sample selection process outlined above.

Representativeness of samples

The samples were tested in terms of how representative they were of the total JCS cohort (13,975 young people) and the national caseload of young people who offended during 2008/09.[8]

The JCS sub-samples, which include young people whose index disposal linked to interventions records (n=10,944), young people with intervention plans (n=8,078), and young people with valid contacts (n=7,918), were broadly representative of the JCS and YOT caseload in terms of gender and age (although the proportion of 14–17-year-olds was higher for the JCS sub-samples). There was a difference in the proportions of young people across the four CJS disposal tiers, with lower proportions on pre-court disposals but higher proportions on first-tier and community disposals for the JCS sub-samples compared to the overall YOT caseload (2008/09) and also the total JCS cohort. Therefore, findings may not necessarily be representative by youth justice disposal tiers. See Appendix A for further information.

---

6 Index disposal of young people included in the JCS but without a valid intervention record: 66% Final Warnings, 9% Referral Orders, 7% Curfew Order, 7% CPO, 5% Attendance Centre Order; remainder included Action Plan Order, CPRO, CRO, DTO, Reparation Order and Supervision Order. An additional 334 young people were excluded as their records included ISSP components.

7 Index disposal of young people with valid 'intervention programme' record but no related intervention plan record (n=2,886): 68% Final Warnings, 13% Referral Order, 4% Supervision Order (remainder comprised 'intervention programmes').

8 This timeframe was chosen as it broadly falls within the JCS data collection period.

3.2 Recording of contacts

As part of the JCS feasibility work it was found that there was little consistent recording across YOTs of the different 'types of work' undertaken with young people; nor was there a consistent application of definitions of concepts, such as what comprises a 'contact' or an 'intervention'.[9]

Therefore, a relatively simple recording framework for contacts was developed by the external contractors, Morgan Harris Burrows, in consultation with YOT practitioners for the purposes of this study. This was subsequently adopted by all 30 JCS YOTs. YOT practitioners were trained in its use.

The JCS framework grouped contacts into the following three broad sections:

- face-to-face contacts which address a specific offending-related issue (e.g. anger management or victim awareness) with aim of helping the young person to stop offending;
- face-to-face contacts which do not address a specific offending-related issue (e.g. general engagement work or prison visits);
- activities on behalf of the young person (e.g. sending out letters, making telephone calls).

YOT practitioners would use this framework when recording contacts for the duration of the JCS period. For example, if a contact was aimed at addressing anger management related issues, the YOT practitioner would record 'anger management' as the main purpose of the contact. However, a contact may address multiple issues and these instances were also recorded by the practitioners. Any issues that were addressed during 'home visits' (where the YOT worker meets the young person at their home rather than at the YOT office) were also recorded.

[9] This was found to be due to the different IT systems used (which were described as providing either too complicated or simplistic options for recording contacts), differences in practice, and lack of advice and central guidance. YOTs, at the time of the study, used one of two IT systems, which are the Youth Offending Information System (YOIS) and RAISE (this is not an acronym), also known as CareWorks.

3.3 Linking JCS framework to Asset

The JCS interventions framework, as illustrated in Table 3.2, maps the recorded contacts between the young person and the YOT practitioner, or external agency, to the young person's offending-related risks and needs as assessed by Asset. For example, a contact related to 'educational/career support' could address a young person's risks and needs regarding education and training, and therefore links to the Asset section 'Education, training and employment (ETE)'. Similarly, a 'health awareness' contact could address a young person's risk and need in terms of the two Asset sections, 'Physical health' and 'Emotional and mental health'.

There are, however, other contacts which can be linked to multiple Asset sections and therefore these contacts have been mapped to a number of potentially relevant Asset sections. For example, an 'anger management' contact could address 'Lifestyle', 'Perception of self and others', 'Thinking and behaviour', 'Attitudes to offending', and 'Motivation to change'. Caution needs to be applied when interpreting findings related to these needs as the contact may or may not have been intended to address all of these needs.

Table 3.2: JCS interventions framework and links to Asset for 'face-to-face contacts which address a specific offending-related issue'

Issues being addressed by contacts	Asset section(s)
Life skills	5. Lifestyle 9. Perception of self and others 10. Thinking and behaviour 11. Attitudes to offending 12. Motivation to change
Mentoring	
Anger management	
Victim awareness	
Cognitive/behavioural skills	
Offending behaviour	
Constructive pursuits	
Reparation (direct/indirect)	
Education/career support	3. Education, training and employment
Family support	2. Family and personal relationships
Health awareness	7. Physical health 8. Emotional and mental health
Housing support	1. Living arrangements 4. Neighbourhood
Drugs/alcohol awareness	6. Substance use

3.4 Programmes & packages survey

Based on the management data collected, the JCS framework was not detailed enough to capture specific 'programmes & packages' (p&ps)[10] used during contacts. These were recorded separately, via an open-ended text field, and over 1,000 potential p&ps were identified. After further quality-assuring the data and only selecting those p&ps which were regularly used and supplementary to generic supervision sessions,[11] information on the aims, development and implementation of 454 potential p&ps was sought via a survey.

The survey was conducted by the JCS external contractors, Morgan Harris Burrows, among YOT practitioners within the JCS who had been identified as the 'principal proponents' (i.e. either the person who set it up, organised it, or used it the most) of a particular programme or package. A total of 290 completed survey forms were returned across the 30 JCS YOTs (64% response rate). These included some returns on the same (or similar) p&ps.

Using the JCS to assess the impact of programmes and packages on proven re-offending

Although the JCS was not designed to look definitively at the effectiveness of youth justice interventions as the methodology did not include a control group needed for this type of analysis, the feasibility of evaluating specific p&ps was explored. For example, advanced statistical techniques such as Propensity Score Matching (PSM) could potentially be used to estimate whether an intervention had an effect on, for example, re-offending. (For example, see Caliendo and Kopeinig, 2005; Sadlier, 2010).

Two specific p&ps yielded numbers that were potentially large enough for evaluation. These were Teen Talk (used by 20 out of the 30 YOTs) and Targets for Change (used by 14 out of the 30 YOTs). Both programmes, however, targeted a range of issues and practitioners could choose to use (all or selected) sections of the programme (e.g. focusing on drug use, relationships, etc.) and also there was insufficient information on the delivery of the programmes and packages. Therefore, it was not appropriate to asses the impact of these interventions on re-offending.

---

[10] For this study a '*programme*' is defined as: a course or a structured approach for dealing with a particular issue; a '*package*' comprises resources materials produced either in-house, commercially or by local external specialists. Some 'programmes' might use 'packages'.

[11] The aim was to reduce the survey exercise in each YOT to minimise burden on YOT staff.

3.5 Interpreting findings

There are a number of limitations to the methodology used for this study, which should be considered when interpreting findings.

- At the time of the JCS data collection there were no national standards set for the recording of the specific content of contacts or the recording of p&ps. The JCS framework was developed to set a common standard for recording contacts among the 30 participating YOTs. Therefore, findings on the type and frequency of contacts and specific p&ps used cannot be generalised to other YOTs as local practices may have varied.
- Findings cannot be generalised across all youth justice disposals as intervention records are not routinely collected for certain disposals (such as Attendance Centre Orders, Community Punishment Orders, and Community Punishment & Rehabilitation Orders).
- The JCS data on interventions were collected between 1 February 2008 and 31 January 2009, and therefore current practice in terms of the planning and delivery of interventions may differ. In particular, the JCS data collection period precedes the introduction of the Scaled Approach and the Youth Rehabilitation Order (YRO) for offences committed from 30 November 2009. Although the data include some of the components of the YRO, findings do not relate specifically to the YRO. For the purpose of this report, Scaled Approach bands were replicated based on data extracted from the PNC, which could differ from YOT recorded data.
- P&ps were recorded as free text fields. Difficulties involved in recording specific p&ps on the YOTs' case managements systems may have led to under-recording or inaccurate recording of their use. Further information was provided on a range of p&ps via the 'programmes & packages survey' but responses to the survey did not cover all p&ps recorded by YOTs.
- The analysis does not draw conclusions about the delivery of interventions, the level of 'programme fidelity' or adherence to programme instructions (if available), or specific training that practitioners received for delivering interventions. These implementation issues have been shown to contribute to the success of interventions (e.g. Ross *et al*, 2010; Lipsey *et al*, 2010).

4. Results

This section provides findings on the range of different activities that YOTs plan and carry out with young people and how these relate to addressing risk of proven re-offending. Findings also shed light on the wide variety of approaches and resource materials used by YOTs.

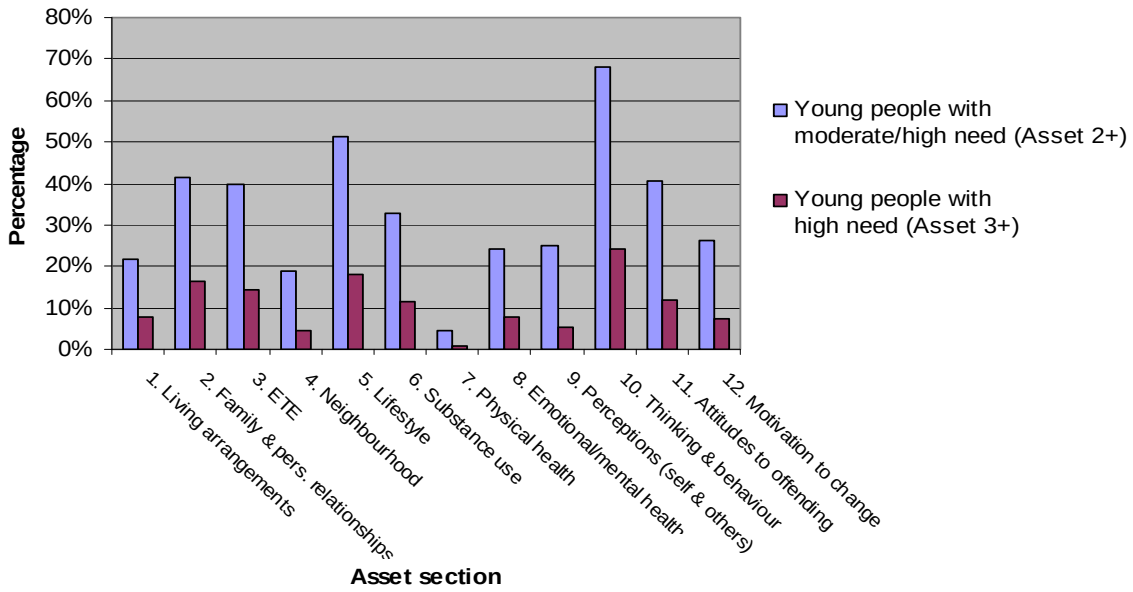
4.1 Profile of risks and needs of young people

The following section looks at the offending-related risks and needs of young people in the sample, as defined by the Asset assessment tool.

Young people had moderate or high levels of offending-related risks and needs for the following Asset categories: thinking and behaviour (68%) and lifestyle (51%). In contrast, young people had the lowest levels of risks and needs relating to physical health (4%).[12]

Figure 4.1 identifies the percentage of young people with moderate to high risk, reflected by an Asset score of two or above for those young people with an intervention plan. Results are also presented for scores of 3 or above per Asset section, indicating a high level of risk.

Figure 4.1: Percentage of young people with moderate/high levels of risks/needs as identified by an Asset score of 2+ or 3+[13] per Asset section (n=6,582)



[12] The levels of risk/need are broadly similar to those described in the Youth Justice Statistics 2010/11 (Ministry of Justice, 2012b). However, figures presented in the 2010/11 statistics are based on a different sub-sample of the JCS.

[13] Those young people with 2+ offending-related risks and needs represent a sub-set of those recorded with 3 or more risks/needs.

Table 4.1 shows the number of moderate to high risk factors young people reported, according to Asset.

In terms of moderate to high risk factors, 38% had two or fewer Asset sections with Asset score of 2+, whilst 9% had nine to 12. Young people had on average four moderate to high risks. Taking an Asset score of 3+ as the threshold for high risk, 81% had two or fewer risk factors, whilst 1% had nine or more. The average number of high risks was one (see Table 4.1).

Table 4.1: Number and % of young people by number of moderate/high risks (Asset 2+) and high risks (Asset 3+) as identified by Asset (n=6,582)

Number of risk factors	Moderate/high risks (Asset 2+)		High risks Asset (3+)	
	N	**%**	**N**	**%**
0–2	2,486	**38**	5,301	**81**
3–4	1,565	**24**	740	**11**
5–6	1,163	**18**	344	**5**
7–8	774	**12**	135	**2**
9–12	594	**9**	62	**1**
Total	6,582	100	6,582	100
Average (mean) number of risks/needs	3.9	N/A	1.3	N/A

Source: JCS data.

Note: only young people with an intervention plan and valid Asset records (completed within 31 days of the index order, all 12 Asset sections completed) were included.

4.2 Intervention plan aims

Key findings:

- Young people had on average four aims included in their intervention plans. The number of aims increased in line with CJS disposal tiers and increased slightly with Scaled Approach bands.
- A wide variety of different combinations of aims included in intervention plans were found.
- The most commonly set intervention plan aims were:
  - indirect reparation (54% – this may partly be explained by the relatively high number of referral orders, which include an element of reparation, in the sample compared to the national level);
  - offending behaviour (44%),
  - cognitive/behaviour (42%);
  - education, training & employment (40%);
  - drugs & alcohol (38%); and
  - victim awareness (38%).

  The least common aims were:
  - housing support (4%),
  - engagement (4%), and
  - mentoring support (4%).

This section provides an overview of 'what YOTs do' with young people who have offended in terms of planning interventions by looking at the overall types of activities included in intervention plans (at this stage without matching these to their risks/needs as identified by Asset and presented later in Table 4.4). Where appropriate, results were presented by CJS disposal type and Scaled Approach bands (see Appendix B).

The intervention plan sets out the aims of the overall intervention programme, i.e. the issues YOT practitioners plan to address with the young person during the duration of the disposal to encourage the young person to desist from re-offending. YJB National Standards state that the intervention plan is informed by the young person's needs and risks of further offending as identified in the Asset assessment (Youth Justice Board, 2004; 2010c).

YJB introduced new national standards in 2013 which, amongst other changes, included the use of a new YJB-approved assessment tool which was proposed to replace Asset in its current form.

Nature of intervention plans by CJS disposal tier

The most commonly set aims, which were included in young people's intervention plans, related to:

- (indirect) reparation (54%);[14]
- offending behaviour (44%);
- cognitive/behaviour (42%);
- education, training & employment (ETE, 40%);
- drugs & alcohol (38%); and
- victim awareness (38%).

In contrast, aims for the following issues were least commonly included in the intervention plan:

- housing support (4%);
- engagement[15] (4%); and
- mentoring (4%).

Although the aims varied according to CJS disposal type, in general, those in custody had a higher proportion of different aims to be addressed. (See Table 4.2.)

The average (mean) number of plan aims addressing different issues was 3.5.[16] If multiple aims of the same type are counted separately, the number of plan aims was slightly higher at an average of 4.2 aims.[17] (See Table 4.2).

[14] This figure refers to 'indirect' reparation. Direct reparation accounted for an average of 6% of intervention plan items of all young people. The figure on reparation is likely to be higher than expected at a national level due to the comparatively large number of referral orders in the sample (30% of total JCS sample compared to 14% nationally in 2008/09).

[15] Engagement is aimed at gaining trust and co-operation rather than addressing a specific issue.

[16] median=3, mode=4.

[17] median=4, mode=1 (i.e. one intervention plan aim was most frequently set but accounted for only 16% of cases).

Table 4.2: Percentage of intervention plan aims by CJS disposal tier (n=8,078)

Intervention plan aim	CJS disposal tier								Total	
	Pre-court		First-tier		Community		Custody			
	N	%	N	%	N	%	N	%	N	%
Anger management	252	**13**	810	**21**	432	**23**	50	**15**	1,544	**19**
Cognitive behavioural	515	**27**	1,737	**44**	974	**51**	181	**54**	3,407	**42**
Constructive pursuits	169	**9**	659	**17**	332	**17**	104	**31**	1,264	**16**
Drugs & alcohol	378	**20**	1,549	**40**	891	**47**	238	**71**	3,056	**38**
Engagement	47	**2**	163	**4**	64	**3**	36	**11**	310	**4**
ETE	394	**20**	1,390	**36**	1,125	**59**	300	**90**	3,209	**40**
Family support	149	**8**	157	**4**	184	**10**	97	**29**	587	**7**
Health	145	**8**	457	**12**	296	**16**	68	**20**	966	**12**
Housing	10	**1**	56	**1**	156	**8**	67	**20**	289	**4**
Life skills	207	**11**	420	**11**	229	**12**	54	**16**	910	**11**
Mentoring	39	**2**	221	**6**	70	**4**	21	**6**	351	**4**
Offending behaviour	707	**37**	1,745	**45**	895	**47**	175	**52**	3,522	**44**
Reparation indirect	458	**24**	3,098	**79**	802	**42**	14	**4**	4,372	**54**
Reparation direct	89	**5**	353	**9**	71	**4**	1	**0**	514	**6**
Victim awareness	544	**28**	1,709	**44**	762	**40**	82	**25**	3,097	**38**
Other	100	**5**	606	**15**	291	**15**	91	**27**	1,088	**13**
Total number of people with at least one intervention plan aim	**1,927**		**3,914**		**1,903**		**334**		**8,078**	
Average (mean) number of different intervention plan aims (binary measure)	**2.2**		**3.9**		**4.0**		**4.7**		**3.5**	
Average (mean) number of intervention plan aims (frequency measure)	**2.5**		**4.6**		**4.6**		**7.3**		**4.2**	

Source: JCS data. Notes:

- Numbers do not add up to 100% as young people can have more than one intervention plan aim.
- The category ‘health’ includes plan aims relating to physical or mental health.
- Reparation direct includes all reparation work involving direct offender/victim reparation; reparation indirect includes all reparation work not directly with the victim (and also a small number of cases which were classified as both direct and indirect reparation).
- The category 'other' includes a number of aims which did not fall into any of the JCS framework categories. This could partly be explained by different recording practices, although each of the JCS YOTs had at least one person with an intervention plan aim falling into the 'other' category.
- The data excludes young people on ISSPs, which may partly explain a small number of intervention plan aims relating to 'surveillance'. These were removed from the subsequent analysis, as were a small number of plan aims relating to ‘advocacy’.

These figures are comparable to results by Baker *et al* (2005)[18] and may indicate that there could be a limit to the number of aims that can be addressed, regardless of a young person's likelihood of future offending or current disposal. This limit may also be due to time or resource constraints. That said, a young person may also experience a range of risks and in these instances YOT workers may prioritise addressing the most important risk factors and/or address risks and needs sequentially, as some issues may need to be addressed prior to focusing on others. For example, drug use or mental health issues may need to be addressed prior to a young person being successfully engaged in ETE. It was also stated in the Asset intervention plan guidance that it may be difficult for a young person to work on more than five aims and that fewer aims can be set. The guidance also provides a standard intervention plan template, with a view to updating the aims of the plan at regular intervals.

The average (mean) number of intervention plan aims increased with increasing severity of CJS disposal tier.[19] This finding is not unexpected, as previous work has shown that the number of risks and needs increased with increasing severity of CJS disposal (e.g. Ministry of Justice, 2012b). Furthermore, as intervention plan aims should be reviewed at regular intervals, the number of intervention aims may be higher for disposals with longer sentence lengths as additional aims may be added over the length of the order.

The analysis on intervention plan aims by CJS disposal was repeated, this time presenting intervention plan aims by Scaled Approach score bands to see if resources were targeted at those young people who were at the greatest risk of re-offending. (See Table B.1 in Appendix B.) The average number of intervention plan aims increased slightly across Scaled Approach bands, indicating that, on average, young people received a similar number of intervention plan aims regardless of young person's level of risk (likelihood of future offending). The 'intensive' band, representing those young people with the highest level of risks and needs had on average 4.3 intervention plan aims, compared with 4.1 for the 'enhanced' band and 3.9 for the 'standard' band. The average (mean) across all score bands was 4.1 (the median and mode were 4).

[18] Baker *et al* (2005) reported average numbers of intervention plan objectives for reparation/referral orders (mean=3.6, mode=3.0), community supervision (mean=4.0, mode=4.0) and custody (mean=4.6, mode=5.0).

[19] Findings were statistically significant (1% level, Mann-Whitney Test) for all comparisons between disposals, except for first-tier and community disposals. This indicates that there is no statistically significant difference in terms of the average number of different intervention plans for these two disposal types, but there is for comparisons between all other disposal types. Sentence length was not taken account of in this analysis.

Another way of looking at intervention plan aims is to analyse the most frequent combinations of aims that were set. The analysis found a wide variety of different combinations of intervention plan aims. This may indicate that YOTs have used an individualised approach for supporting young offenders to desist from further offending by addressing their offending-related needs, as encouraged by the YJB (e.g. YJB, 2008). An analysis of the combinations of aims included in the intervention plan can be found in Appendix C.

4.3 Contacts to deliver the intervention plan and CJS disposal

Key findings:

- There was no consistent way of recording the types of work undertaken across participating YOTs. Therefore, for this study, a shared recording framework for contacts was established.
- The most frequent face-to-face contact types across CJS disposal tiers were:
  - indirect reparation (51%);
  - offending behaviour (47%);
  - education/careers-related contacts (37%);
  - drugs/alcohol awareness (33%); and
  - victim awareness (30%).
- Indicative findings show that proven re-offending decreased with the number of contacts between the YOT practitioner, or external agency, and the young person – not distinguishing by the type of contact.

Moving on from the planning of interventions, this section looks at their delivery i.e. the types of contact. A contact was defined as a meeting[20] between the young person and the YOT worker (or a specialist worker from other agencies) to address the aims set in their intervention plan i.e. to help the young person to stop offending.

For this study, YOT practitioners kept records of the contacts they (or other specialist staff) had with the young person based on the JCS contact framework. As described in the Approach section, it was necessary to create a relatively simple framework to provide a more standardised way of recording the types of work undertaken by those YOTs participating in the JCS. The JCS framework categories do not necessarily allow for further differentiation of

the work done as part of a contact. For example, during a contact which aims to address 'anger management' a YOT practitioner may discuss anger management related issues with the young person during a one-to-one supervision session, the young person could be referred on to another agency, or the practitioner may make use of a range of programmes & packages on anger management. Although the framework provides a useful structure of the 'work YOTs do', the categories are broad and potentially cover a wide variety of activities undertaken as part of the same framework category.

Table 4.3 shows the number and percentage of young people who had a scheduled (face-to-face) contact addressing a specific offender rehabilitation issue. It does not include the face-to-face contacts which do not address specific offender rehabilitation issues (e.g. engagement activities, initial appointments, etc.), or activities carried out on behalf of the young person (e.g. telephone calls, emails, etc.).

Overall, the numbers of young people by contact type were lower compared with those for intervention plan aims (see Table 4.2). This may indicate that some young people may not receive a contact in a specific area even if this was set as an aim in the intervention plan (as is also shown in Table 4.4 in the next section). As reported by the JCS qualitative practitioner study, YOTs felt that plans were often disrupted by the emergence of a crisis in the young person's life, as well as factors impeding the young person's ability to focus (such as substance misuse, mood).

The frequency of contacts increased with CJS disposal tiers (see Table 4.3).[21] Overall, the most frequent contact types across disposal tiers were:

- indirect reparation (51%);
- offending behaviour (47%);
- education/careers-related contacts (37%);
- substance use interventions ('drugs/alcohol awareness' 33%); and
- victim awareness (30%).

[20] Based on the available data these could face-to-face meetings, either delivered as one-to-one sessions or as part of group work.

[21] Statistically significant (1% level, Mann-Whitney Test) differences in terms of the frequency of contacts were found between all disposal tiers, expect for community and custodial disposals, where differences were not significant. The analysis focused predominantly on young people under supervision in the community but also included a small number of young people on DTOs, whose intervention plans and contacts may refer to contacts during and after custody. However, contacts which were recorded by the YOT while the young person was in custody would not necessarily have captured the full range of interventions young people experience while in the youth secure estate.

Association between frequency of contacts and proven one-year re-offending

One of the research questions of this study was to assess if particular interventions were associated with a reduction in proven re-offending.

Statistical analyses (i.e. binary logistic regression) were run to test if the frequency of face-to-face contacts addressing specific offender rehabilitation issues had any effect on proven one-year re-offending, after taking account the young person's characteristics in terms of static and dynamic risk factors. Indicative findings suggested that proven re-offending decreased with the number of contacts (not distinguishing by the type of contact). Findings were statistically significant at the 10% level (see Glossary). On average, the likelihood of proven re-offending decreased by six percent for a young person with each additional contact. (See Appendix D, Table D.1.)

Table 4.3: Number of young people with face-to-face contacts addressing specific offending-related issues by CJS disposal tier (n=6,831)

Contact type	CJS disposal tier								Total	
	Pre-court		First-tier		Community		Custody			
	N	%	N	%	N	%	N	%	N	%
Anger management session	137	**11**	510	**14**	305	**18**	18	**7**	970	**14**
Cognitive/behavioural	143	**11**	1,021	**28**	644	**38**	68	**27**	1,876	**27**
Constructive pursuits	62	**5**	426	**12**	299	**18**	53	**21**	840	**12**
Drugs/ alcohol awareness	215	**17**	1,216	**33**	728	**43**	127	**51**	2,286	**33**
ETE contact	151	**12**	1,208	**33**	992	**58**	198	**80**	2,549	**37**
Family support contact	38	**3**	235	**6**	240	**14**	29	**12**	542	**8**
Health awareness contact	69	**5**	568	**16**	406	**24**	60	**24**	1,103	**16**
Housing support contact	4	**0**	129	**4**	177	**10**	36	**15**	346	**5**
Life skills	23	**2**	297	**8**	288	**17**	29	**12**	637	**9**
Mentoring support contact	21	**2**	115	**3**	92	**5**	25	**10**	253	**4**
Offending behaviour contact	495	**39**	1,667	**46**	956	**56**	109	**44**	3,227	**47**
Reparation indirect contact	331	**26**	2,578	**71**	583	**34**	6	**2**	3,498	**51**
Reparation direct contact	36	**3**	311	**9**	94	**6**	3	**1**	444	**6**
Victim awareness contact	340	**27**	1,216	**33**	458	**27**	41	**17**	2,055	**30**
Total number of people with at least one contact type	**1,257**		**3,630**		**1,696**		**248**		**6,831**	
Average (mean) number of contacts addressing different issues (binary measure)	**1.6**		**3.2**		**3.7**		**3.2**		**3.0**	
Average (mean) number of contacts (frequency measure)	**2.5**		**8.3**		**12.9**		**13.4**		**8.5**	

Source: JCS data. Notes:

- Numbers do not add up to 100% as young people can have more than one contact type.
- The table is based on the number of young people who had at least one contact which addressed a specific issue and the index disposal matched to interventions records. It does not take account of the duration or frequency of these contacts. Education skills contacts and careers contacts were combined.
- Reparation direct includes all reparation work involving direct offender/victim reparation; reparation indirect includes all reparation work not directly connected with the victim (and also a small number of cases which were classified as both direct and indirect reparation).
- Some contacts may address more than one issue. A technical solution was implemented for practitioners to record multiple issues against one contact. This option was only used in less than 2% of cases.
- Contacts for young people on custodial sentences (in this case DTOs) can refer to contacts during and after custody. However, contacts with the YOT worker during custody would not necessarily capture the full range of interventions young people experience while in the youth secure estate.

4.4 Matching intervention plan aims and contacts to a young person's offending-related risks and needs

Key findings:

- In terms of the content of intervention plans and contacts addressing young people's needs, certain factors, such as
  - 'lifestyle',
  - 'perception of self and others',
  - 'thinking and behaviour',
  - 'attitudes to offending', and
  - 'motivation to change'

  were addressed more frequently compared with others. These types of issues may perhaps be easier for YOTs to address than others.
- Results indicate that certain needs, such as
  - 'neighbourhood',
  - 'living arrangements', and
  - 'family & personal relationships'

  were less likely to be targeted in intervention plans and contacts. Similarly, these factors may be more challenging for YOTs to address directly.
- Indicative findings, based on statistical analysis that controlled for offender characteristics, suggested that:
  - when a range of contacts relating to 'cognition & lifestyle' issues were grouped together, the results indicated a reduction in proven re-offending.

This section seeks to address three of the study's main research questions:

- Do intervention plan aims address the young person's offending-related risks and needs as identified via Asset?
- Do contacts, between the young person and YOT practitioners/others, address the aims set in a young person's intervention plan and their offending-related risks and needs as identified via Asset?
- Are particular interventions associated with a reduction in proven re-offending?

Based on National Standards (2004, 2010), a young person's intervention plan and related contacts should prioritise areas that were classed, via the Asset assessment, as moderate to high risk in relation to their likelihood of future offending. Overall, results indicate that certain

areas of risks and needs appear to be better addressed than others, both in terms of intervention planning and actual contacts addressing these needs.

Table 4.4 presents results related to young people with moderate to high levels of offending-related risks and need; their intervention plan aims, the contacts they received, and whether the intervention plan aim was being addressed by contacts.

Need addressed by intervention plan

In terms of intervention plans addressing young people's needs as identified by Asset, high levels of intervention planning (96–97%) for those with Asset moderate to high need were found for (see Table 4.4):

- 'lifestyle';
- 'perception of self and others';
- 'thinking & behaviour';
- 'attitudes to offending'; and
- 'motivation to change'.

Low levels of addressed offending-related Asset risks and needs in intervention plans were found for:

- 'neighbourhood' (6%);
- 'living arrangements' (11%);
- 'family & personal relationships' (13%);
- 'physical health' (24%); and
- to some degree 'mental health' (29%).

The high levels of addressed needs for the Asset categories: 'lifestyle', 'perception of self and others', 'thinking & behaviour', 'attitudes to offending', and 'motivation to change', can partly be explained by the way intervention plan aims and contact types were linked to Asset sections (as shown by the JCS framework, Table 3.2). As most intervention plans and contacts relate to more than one Asset need, it is possible for a need (e.g. 'motivation to change') to have a greater proportion of related intervention plan aims or contacts than was originally planned. In these instances, the focus of the intervention plan aim or contact may have been on another related need. Also, offender rehabilitation meetings and conversations between a YOT worker and the young person may cover a broad range of these offending-related risks and needs.

Broad comparisons regarding some levels of needs can be made with the findings from Baker *et al* (2005)[22] and Sutherland (2009).[23] However, these studies were based on smaller sample sizes and the methodologies used, particularly in terms of mapping plans/contacts to Asset sections, were different.[24] 'Family & personal relationships' was the area which was found to be difficult to address in these two studies and in this study. Also, 'neighbourhood' was found to be an area of low addressed need by Sutherland (2009) and in this study. Substance use was found by all three studies to be generally addressed. Baker *et al* (2005) found ETE to be addressed in 67% of cases with high need, and findings presented here found ETE to be addressed in 58% of cases with moderate to high need. However, findings across the three studies were different for other areas of need, which could partly be explained by methodological differences.

Indicative findings from the JCS practitioner qualitative interviews suggested that high-scoring Asset sections would usually be identified as priorities for intervention planning. However, some of the practitioners interviewed suggested that there was some flexibility in the interpretation of the term 'priority' particularly in relation to issues over which the YOT perceived they had little influence (such as 'neighbourhood'), or which were already being addressed by other agencies. However, the majority of interviewees indicated that major welfare considerations should be addressed as a priority and many took this view regardless of whether welfare issues could be directly linked to offending behaviour. By contrast, others maintained that such issues should be the responsibility of other agencies.

---

[22] Overall, Baker *et al* (2005) found the highest level of planned targets (for those young people who had Asset section scores of 3+) for attitudes to offending (100%), substance use (67%) and education (67%). However, low levels were reported for motivation to change (0%), perceptions of self and other (8%), and family & personal relationships (15%). Baker *et al* explained the lack of planning for 'motivation to change' by the high proportion of intervention plans addressing 'attitudes to offending' (which may be seen as including an element of 'motivation to change').

[23] Sutherland (2009) reported the biggest discrepancies between assessed risk and planned interventions for 'lifestyle' (30% with high risk, identified by an Asset score of 3+, but only 6% with planned interventions in this area) and also 'family and personal relationships' (21% with high risk and 5% with planned objectives relating to this risk). Sutherland commented that the lack of planning for these particular problems may be due to 'practice issues'. In addition, 'resource issues' were quoted as potentially making it difficult for practitioners to plan targets for problems related to 'ETE' and 'living arrangements'. In addition, 'neighbourhood' was reported to be a risk for 9% of the sample, but none had this risk addressed.

[24] Baker *et al* (2005) looked at 150 intervention plans (paper copies) collected from two YOTs. See Baker *et al* (2005), Table 5.3 for full results. Sutherland (2009) used case file and case management information from 60 young people supervised by four YOTs in 2005 (the sample size used for analysis varied due to missing data).

Table 4.4: Number/percentage of young people with each need (Asset 2+), percentage of those with relevant intervention plan aims and contacts by needs met (n=6,497)

Asset section	Young people with moderate/high risks/needs (Asset 2+)		Of those with moderate/high risks/needs (Asset 2+)					
			Risks/needs met by plan aim		Risks/needs met by contact		Plan aim met by contact	
	N	%	N	%	N	%	N	%
Living arrangements	1,422	**22**	150	**11**	153	**11**	62	**41**
Family & relationships	2,705	**42**	362	**13**	298	**11**	105	**29**
ETE	2,608	**40**	1,521	**58**	1,120	**43**	875	**58**
Neighbourhood	1,235	**19**	70	**6**	77	**6**	30	**43**
Lifestyle	3,351	**52**	3,218	**96**	2,662	**79**	2,620	**81**
Substance use	2,131	**33**	1,586	**74**	1,218	**57**	1,074	**68**
Physical health	282	**4**	69	**24**	68	**24**	34	**49**
Mental health	1,572	**24**	450	**29**	433	**28**	225	**50**
Perception of self & others	1,632	**25**	1,560	**96**	1,287	**79**	1,258	**81**
Thinking and behaviour	4,456	**69**	4,308	**97**	3,627	**81**	3,569	**83**
Attitudes to offending	2,651	**41**	2,554	**96**	2,090	**79**	2,050	**80**
Motivation to change	1,726	**27**	1,666	**97**	1,327	**77**	1,308	**79**
Total number of people	**6,497**							

Source: JCS data.

Note: The table only includes face-to-face contacts addressing specific offending-related issues. It does not take account of the duration or frequency of these contacts.

Need addressed by contact

Mixed findings were found for the level of contacts addressing young people's needs, regardless of the need being targeted in the intervention plan. (See column 'risks/needs met by contact' in Table 4.4). These indicative findings were generally similar to those found for risks and needs met by intervention plans.

Contacts and proven one-year re-offending

Indicative findings based on statistical analysis[25] suggested that when contacts, between the practitioner and the young person, on a range of issues relating to 'cognition & lifestyle' were combined[26] proven one-year re-offending reduced. (See Appendix D.)

For example, a young person with a 'cognition & lifestyle' need but no related contact was 38%[27] more likely to re-offend, compared with a young person who had the need met by a contact. To put this into context, if (hypothetically) the average re-offending rate for the group of young people who had a cognition & lifestyle need ***and*** a related contact was 30%, the average re-offending rate for young people with a cognition & lifestyle need but ***no*** related contact would be 41%.[28]

Furthermore, indicative findings suggest, that young people who had at least one contact on an offending-related issue compared with those who had a risk or need but no related contact appeared less likely to re-offend. However, findings were not statistically significant, except for 'cognition & lifestyle'. (See Appendix D, Table D.2 and the Glossary). Indicative findings from the JCS qualitative practitioner study suggested that the YOT workers interviewed perceived the Asset sections which they could not necessarily influence (in particular 'family and personal relationships' and 'living arrangements') most challenging to address in their work. There is, however, good international evidence on the effectiveness of well implemented programmes in this area – particularly for family intervention programmes (see for example Allen, 2011; Social Research Unit, 2012).

---

[25] Binary logistic regression was conducted and this controlled for offender characteristics.

[26] Five Asset sections: lifestyle, perceptions of self & others, thinking & behaviour, attitudes to offending, and motivation to change were combined into one variable labelled 'cognition & lifestyle' as these risks/needs may more likely be addressed by a range of similar contacts.

[27] 95% Confidence Interval: 15–65%. The odds ratio was 0.73, based on proven one-year re-offending as the outcome variable where 1 is re-offending and 0 is not re-offending. The 38% reduction in re-offending is derived as follows: (1/0.73)-1=0.38 (figures are rounded). The confidence interval is calculated in the same way (figures are rounded).

[28] 95% Confidence Interval: 34%–50%. Based on the following calculation: 0.3*1.38=0.41.

Intervention plan aim addressed by contact

In addition to looking separately at the ways in which needs are addressed by plans and contacts, further analysis was performed to assess whether young people's needs were targeted both in their intervention plan aims and subsequent contact(s). (See column 'plan aim met by contact' in Table 4.4).

Results showed that, overall, YOTs delivered against the set intervention plan aims, although this varied by need. Again, the lowest levels of delivery of contacts against plans were:

- 'neighbourhood' (44%);
- 'living arrangements' (44%); and
- 'family & personal relationships' (30%).

Some aims, which were initially set as part of the intervention planning, may not have been addressed by subsequent contacts as the young person may, for example, have re-offended during their current order and re-sentenced to a different disposal (which in turn could have led to new aims). Also, the young person could have moved to a different location and may have been supervised by another YOT which was not one of the 30 YOTs participating in the JCS.

There was little difference in terms of the average level of Asset risks and needs between those offenders who had their risks and needs addressed in the plan and those who did not (see Appendix E). Similar results were found for adult offenders serving community orders, except for drug misuse and accommodation problems (and to a small extent alcohol problems), where the average level of needs was higher for those who had their need addressed (Cattell *et al*, 2013).

4.5 Programmes & packages

Key findings:

- YOTs used a wide variety of 'programmes & packages' (p&ps), many of which had been developed 'in-house'.
- Most p&ps had not been subject to rigorous evaluation.
- P&ps were used with just over a fifth of young people (who had a valid contact).
- However, due to the difficulties involved in recording specific p&ps on the YOTs' case management systems, the full extent of the use of p&ps was likely to be under-recorded.

This section focuses on the specific 'programmes & packages' (p&ps) used during a YOT practitioner contact with a young person.

A 'programme' was defined as a course or a structured approach to dealing with a particular offending-related issue. A 'package' comprises resource materials, produced either in-house, commercially or by external specialists.

Table 4.5 shows the 290 p&ps, for which YOTs provided more detailed information, grouped into broader 'families' of p&ps and the number of p&ps within each group. P&ps relating to offending behaviour, ETE and constructive pursuits were the most frequently used (based on further information gathered via survey returns).

Table 4.5: Number of p&ps grouped into 'families' of p&ps (based on 290 survey returns from 30 YOTs participating in the JCS)

'Families' of p&ps	Total
Offending Behaviour	**95**
Offending Behaviour (Arson)	14
Offending Behaviour (Burglary)	1
Offending Behaviour (Gangs)	3
Offending Behaviour (General)	32
Offending Behaviour (Knife)	5
Offending Behaviour (Race)	2
Offending Behaviour (Sexual)	3
Offending Behaviour (Shoplifting)	2
Offending Behaviour (Vehicle)	28
Offending Behaviour (Violence)	5
ETE	**53**
ETE (Alternative Education)	19
ETE (Education)	5
ETE (Employment)	29
Constructive pursuits	**48**
Constructive Pursuits (Arts)	13
Constructive Pursuits (Horticulture)	2

'Families' of p&ps	Total
Constructive Pursuits (Mixed)	3
Constructive Pursuits (Practical Skills)	7
Constructive Pursuits (Sport)	23
Cognitive Behavioural	**25**
Substance Misuse Programme	**15**
Reparation Programme	**12**
Parenting Programme	**9**
Anger Management	**7**
Life Skills Programme	**6**
Engagement Programme	**5**
Motoring (Safety)	**4**
Support Services (Mixed)	**4**
Victim Awareness	**4**
Mentoring Programme	**3**
Total	**290**

Source: JCS programmes & packages survey. Analysis by contractor Morgan Harris Burrows.

Note: P&ps included only refer to structured approaches to addressing specific issues over and above generic supervision contacts.

Further information on p&ps can also be found in the YJB 'effective practice library', which is an online collection of practice resources and information and describes a variety of p&ps.[29] The YJB has also been working on identifying and promoting effective practice and has recently introduced resources on innovation and evaluation in Youth Justice.[30]

Table 4.6 shows the five p&ps most frequently used by a number of YOTs. Overall, p&ps were found to be under-utilised during the course of an intervention and generic supervision sessions appeared to be more common. The analysis found that p&ps were used with about 21% of young people (who had a valid contact and at least one contact related to a p&p). However, due to the difficulties involved in recording specific p&ps on the case management systems, the full extent of the use of p&ps was likely to have been under-recorded.

[29] http://www.justice.gov.uk/youth-justice/effective-practice-library, accessed 6 June 2013.
[30] http://www.justice.gov.uk/youth-justice/improving-practice/innovation-and-evaluation-in-youth-justice, accessed 6 June 2013.

Table 4.6: Five most frequently used p&ps across YOTs (based on p&ps recorded by 30 YOTs participating in the JCS)

Type of p&p	YOTs	People	Contacts
	N	N	N
Teen Talk[31]	20	362	628
Targets for Change[32]	14	146	309
Victim Awareness Work	13	138	224
Anger Management	9	56	88
Prison! Me! No Way![33]	8	59	93

Source: JCS data.

Note: Based on n=1,697 young people who had any p&ps recorded against valid contacts. These included also p&ps which were used as part of generic supervision sessions. Due to the difficulties involved in recording specific p&ps on the YOTs'.

The YJB has encouraged an individualised approach for dealing flexibly with the needs that young offenders present (YJB, 2008), and this may account for the wide range of p&ps that have been developed. Based on the 290 survey returns, about a third of p&ps were developed by the YOT themselves. Most of them have not been subject to rigorous evaluation.

A report by the National Audit Office (NAO) (2010)) also reported that many interventions were developed by YOTs. The NAO observed interesting and innovative interventions but highlighted that there was 'no system-wide quality control of these' (pg.30). It was acknowledged that developing interventions in-house may help deal with local offending issues more flexibly; however, it was also noted that 'it risks poor value for money as lessons learned from delivery of interventions at other teams may not be well disseminated, and errors and poor practice may be repeated' (pg.30).

[31] 'Teen Talk' is a commercially produced resource including a variety of materials facilitating one-to-one and group sessions on topics such as offending, drug use, and relationships. http://www.3craws.co.uk/teentalk.html, accessed 6 June 2013.

[32] 'Targets for Change' was produced by the Nottinghamshire Probation Service as a resource pack for one-to-one work. It was originally developed to address offending behaviour in adults. It includes exercises on assessment of offending behaviour, victims of crime, choosing targets for change (setting objectives), working for change (action) and evaluation. See Marshall and Weaver (1991).

[33] This includes, amongst other resources, presentations, DVDs, and awareness days, produced by the No Way Trust http://www.pmnw.co.uk/, accessed 6 June 2013.

5. Conclusion and implications

The study aimed to gain better insights into 'what YOTs do' with young people who are under their supervision in the community. In particular, it sought to explore whether intervention plan aims and related contacts with practitioners were targeted at addressing the young people's recorded offending-related risks and needs. It also assessed whether YOTs target their resources at those most likely to re-offend.

The conclusions below should be considered in the light of the limitations of this study (see section 3.5 of this report for further details). In particular, since the data were collected some elements of YOT practice have changed (e.g. the Scaled Approach and the Youth Rehabilitation Order were introduced in November 2009).

In summary, the main conclusions and implications are:

Planning and delivery of interventions

- The most commonly set intervention plan aims related to indirect reparation; offending behaviour; cognitive behavioural interventions; education, training & employment; drugs & alcohol; and victim awareness. However, intervention plan aims were not always aligned to the young person's offending-related risks and needs as identified by the Asset assessment.
- On average, four different intervention plan aims were set per young person. Although this number increased with severity of CJS disposal and was slightly in line with Scaled Approach band, it could also indicate that there may be a limit to the number of aims that can be addressed regardless of a young person's likelihood of future offending or current disposal. This limit may be due to time or resource constraints. Also, a young person may also be experiencing a wide range of issues, and therefore it may be necessary to prioritise addressing certain offending-related issues.
- Overall, the alignment between young people's offending-related risks and needs, planning and delivering interventions was varied across needs and could be improved. Similar observations were made by earlier studies (Baker, 2005; Sutherland, 2009), as well as in relation to offending behaviour interventions delivered in the youth secure estate (Gyateng *et al*, 2013).
- A wide variety of different combinations of intervention plan aims was found. This may be expected as the YJB has encouraged an individualised approach for delivering interventions to young people who offend.

- Young people's offending-related risks and needs in relation to lifestyle, perception of self and others, thinking and behaviour, attitudes to offending, and motivation to change were most likely to be addressed in terms of planned aims and contacts. In contrast, factors such as neighbourhood, living arrangements, and family & personal relationships were the least likely to be targeted in intervention plans and YOT contacts with young people. Based on the qualitative study of interviews, practitioners thought that living arrangements and family & personal relationships the most challenging to address as they perceived YOTs had little leverage to intervene in these areas.

Interventions and proven one-year re-offending

Contacts between practitioners and young people that aimed to address specific offender-related issues and their association with proven re-offending were explored. Indicative findings suggested (after controlling for offender characteristics):

- young people who had more frequent contacts (not distinguishing by contact type) were less likely to re-offend; and
- when a range of contacts relating to 'cognition & lifestyle' issues were grouped together, the results suggested a reduction in young people's proven re-offending. This was regardless of whether or not the young person had an assessed risk in these areas.

Further work would, however, be necessary to understand the underlying mechanisms.

Programmes & packages used by YOTs

- YOTs used a wide variety of 'programmes & packages' (p&ps), many of which had been developed 'in-house'. However, overall, p&ps were found to be little utilised during the course of an intervention and generic supervision sessions appeared to be more common.
- Most p&ps had not been subject to rigorous evaluation and the development and use of evidence-based programmes should be encouraged. The YJB has, however, been working on identifying and promoting effective practice and has recently introduced resources on innovation and evaluation in Youth Justice.

Recording of interventions

- Common standards for the recording of YOT interventions data should be considered in order to aid comparability of 'interventions' across YOTs and facilitate evaluation and sharing of best practice. This recommendation was also made in the context of delivering interventions in the youth secure estate (Gyateng *et al*, 2013).

References

Allen, R. (2011) *Early Intervention: The Next Steps.* London: Cabinet Office.

Andrews, D.A., Bonta, J. and Hoge, R. (1990) Classification for effective rehabilitation: Rediscovering psychology. *Criminal Justice and Behavior*, 17, 19–52.

Baker, K. (2005) Assessment in youth justice: Professional discretion and the use of Asset. *Youth Justice*, 5, 106–122.

Baker, K., Jones, S., Roberts, C. and Merrington, S. (2003) *Validity and Reliability of Asset.* London: Youth Justice Board.

Baker, K., Jones, S., Roberts, C. and Merrington, S. (2005) *Further Development of Asset.* London: Youth Justice Board.

Baker, K., Kelly, G. and Wilkinson, B. (2011) *Assessment in youth Justice.* Bristol: The Policy Press.

Caliendo, M. and Kopeinig, S. (2005) *Some Practical Guidance for the Implementation of Propensity Score Matching*, *IZA Discussion Papers Series*, Discussion Paper No. 1588. Institute for the Study of Labor (IZA).

Case, S. and Haines, K. (2009) *Understanding Youth Offending. Risk factor research, policy and practice*. Devon: Willan Publishing.

Cattell, J., Mackie, A., Prestage, Y. and Wood, M. (2013) *Results from the Offender Management Community Cohort Study (OMCCS): Assessment and sentence planning*. London: Ministry of Justice.

EdComs (2008). *Education, training and employment*, source document. London: Youth Justice Board.

Farrington, D.P. and Welsh, B.C. (2007) *Saving children from a life of crime: Early risk factors and effective interventions*. Oxford: Oxford University Press.

Gray, E. (2013) *What Happens to Persistent and Serious Young Offenders When They Grow Up. A Follow-Up Study of the First Recipients of Intensive Supervision and Surveillance.* London: Youth Justice Board.

Gyateng, T., Moretti, A., May, T. and Turnbull, P.J. (2013) *Young People and the Secure Estate: Needs and Interventions.* London: Youth Justice Board.

HMI Probation, Care Quality Commission, Estyn, Healthcare Inspectorate Wales, Ofsted (2011) *A Joint Inspection of offending behaviour, health and education training & employment interventions in YOTs.* London: Ministry of Justice.

Hosmer, D. and Lemeshow, S. (2000) *Applied Logistic Regression,* 2nd edn. New York: John Wiley & Sons.

Lipsey, M.W, Howell, J.C., Kelly, M.R., Chapman, G. and Carver, D. (2010) *Improving the Effectiveness of Juvenile Justice Programs. A New Perspective on Evidence-Based Practice.* Washington: Center for Juvenile Justice Reform.

Marshall, K. and Weaver, P. (1991) *Targets for Change. Issue-focussed one-to-one work with offenders.* Nottinghamshire Probation Service.

Mason, P. and Prior, D. (2008) Engaging Young People who Offend. Source document. London: Youth Justice Board.

Merrington, S. (2001) *Objectives, Intervention and Reducing Risk.* Probation Studies Unit, ACE Practitioner Bulletin 3. Oxford: Centre for Criminology, University of Oxford.

Ministry of Justice (2012a) *2012 Compendium of re-offending statistics and analysis.* Paper 1 Impact of sentences on proven re-offending rates for young people. London: Ministry of Justice Statistics bulletin. https://www.gov.uk/government/organisations/ministry-of-justice/series/reoffending-statistics, accessed 6 June 2013.

Ministry of Justice (2012b) *Youth Justice Statistics 2010/11.* Chapter 12 – Characteristics and risk factors associated with proven re offending: Findings from the Juvenile Cohort Study. London: Ministry of Justice. https://www.gov.uk/government/publications/youth-justice-statistics, accessed 6 June 2013.

Ministry of Justice (2012c) *The Correctional Services Accreditation Panel Report 2010–2011.* London: Ministry of Justice/National Offender Management Services.

Moore, R., Gray, E., Roberts, C., Merrington, S., Waters, I., Fernandez, R., Hayward, G. and Rogers, R.D. (2004) ISSP: The Initial Report, London: Youth Justice Board for England and Wales.

National Audit Office (2010) *The youth justice system in England and Wales: Reducing offending by young people.* London: National Audit Office. http://www.nao.org.uk/report/the-youth-justice-system-in-england-and-wales-reducing-offending-by-young-people/, accessed 6 June 2013.

Ross, A., Duckworth, K., Smith, D.J., Wyness, G. and Schoon, I. (2010) *Prevention and Reduction: A review of strategies for intervening early to prevent or reduce youth crime and anti-social behaviour.* Research Report DFE-RR111, Department for Education/Centre for Analysis of Youth Transitions (CAYT).

Sadlier, G. (2010) Evaluation of the impact of the HM Prison Service Enhanced Thinking Skills programme on reoffending. Outcomes of the Surveying Prisoner Crime Reduction (SPCR) sample. London: Ministry of Justice Research Series.

Social Research Unit (2012) *Youth Justice. Investing in Children.* Dartington: Social Research Unit (SRU).

Sutherland, A. (2009) The ‘scaled approach’ in youth justice: Fools rush in…. *Youth Justice: An International Journal*, 9, 44–60.

Talking Heads Resources and Training Ltd, Teen Talk http://www.3craws.co.uk/teentalk.html, accessed 6 June 2013.

Taxman, F. (2002) Supervision – Exploring the Dimensions of Effectiveness, *Federal Probation*, 66, 14–27.

The No Way Trust Ltd., Prison! Me! No Way! Website http://www.pmnw.co.uk/, accessed 36 June 2013.

Ward, T. and Maruna, S. (2007). *Rehabilitation: Beyond the risk paradigm*. Oxon: Routledge.

Wilson, E. and Hinks, S. (2011) Assessing the predictive validity of the Asset youth risk assessment tool using the Juvenile Cohort Study (JCS). London: Ministry of Justice Research Series.

Youth Justice Board (2004) *National standards for youth justice services.* London: Youth Justice Board.

Youth Justice Board (2005) *Risk and protective factors.* London: Youth Justice Board.

Youth Justice Board (2006) Asset – an assessment framework for young people involved in the youth justice system. London: Youth Justice Board. http://www.justice.gov.uk/youth-justice/assessment/asset-young-offender-assessment-profile, accessed 14 December 2012.

Youth Justice Board (2007) Keeping young people engaged: A summary of an evaluation of the Keeping Young People Engaged education, training and employment project. London: Youth Justice Board.

Youth Justice Board (2008). *Assessment, planning interventions and supervision,* source document. London: Youth Justice Board.

Youth Justice Board (2009). Youth Justice Annual Workload Data 2007/2008. London: Youth Justice Board.

Youth Justice Board (2010a) *Youth Justice: the Scaled Approach. A framework for assessment and interventions.* London: Youth Justice Board.

Youth Justice Board (2010b) *Youth Justice Annual Workload data 2008/2009: England and Wales.* Youth Justice Board/Ministry of Justice Statistics bulletin.

Youth Justice Board (2010c) *National standards for youth justice services.* London: Youth Justice Board.

Youth Justice Board (2013) National Standards for Youth Justice Services 2013. London: Youth Justice Board.

Youth Justice Board. *Effective practice library* http://www.justice.gov.uk/youth-justice/effective-practice-library, accessed 6 June 2013.

Youth Justice Board. Innovation and evaluation in youth justice. http://www.justice.gov.uk/youth-justice/improving-practice/innovation-and-evaluation-in-youth-justice, accessed 6 June 2013.

Glossary

Asset: Asset is a structured risk assessment tool used by all Youth Offending Teams in England and Wales. It measures 12 dynamic factors (e.g. living arrangements, relationships, substance abuse) and four static factors (e.g. age at first conviction). Each dynamic factor is given a score of 0–4 based on practitioner ratings of the factor's impact on future offending. The total Asset score for a young person can range from 0 to 64 (0–48 for the dynamic factors and 0–16 for static factors). Higher Asset scores are associated with a higher risk of re-offending (e.g. Baker *et al*, 2003; 2005; Wilson and Hinks, 2011).

Binary logistic regression model: A statistical technique that models the relationship between a dichotomous (binary) outcome (e.g. re-offending) and a set of explanatory variables (e.g. risk factors). See Hosmer and Lemeshow (2000) for further information.

CJS: Criminal justice system.

CJS disposal: Disposal is an umbrella term referring to both sentences given by the court and pre-court decisions made by the police. Disposals may be divided into four separate categories of increasing seriousness starting with pre-court disposals then moving through first-tier and community-based penalties to custodial sentences. (Source: 2011/12 Youth Justice Statistics).

Community disposals: At the time of the JCS data collection period (1 February 2008 – 31 January 2009), this was an umbrella term used to refer to the following orders made at court: Attendance Centre Order, Action Plan Order, Drug Treatment and Testing Order, Curfew Order, Supervision Order, Community Rehabilitation Order, Community Punishment Order, Community Punishment and Rehabilitation Order and Youth Rehabilitation Order. (Source: 2007/08 Youth Justice Annual Workload Data). These were replaced by the Youth Rehabilitation Order at the end of November 2009.

Custodial sentence: This is an umbrella term used to refer to the following custodial sentences made at court: Detention and Training Order, Section 90, Section 91, Section 226 and Section 228. (Source: 2011/12 Youth Justice Statistics).

Detention and Training Order (DTOs): Detention and Training Orders (DTOs) are determinate custodial sentences which can last from four months to 24 months in length. A young person spends the first half of the order in custody and the second half released on licence. Should they offend while on licence, they may be recalled to custody. (Source: 2011/12 Youth Justice Statistics).

Dynamic factors: Those factors which are dynamic in nature and can change over time, such as living arrangements.

Final Warning: A warning is an out-of-court disposal for young offenders. It can be used following a reprimand or for a first offence if the offence is deemed serious enough. Following a warning the young person will be referred to the YOT for assessment and intervention. Further offending following a warning will normally result in prosecution. (Source: 2011/12 Youth Justice Statistics). Youth Cautions were introduced by the Legal Aid, Sentencing and Punishment of Offenders Act 2012. Following commencement of the 2012 Act in April 2013 reprimands and warnings are no longer issued to young offenders. Youth Cautions are intended to allow a more flexible response to offending than the preceding Final Warning Scheme. Youth Cautions and other out-of-court disposals such as Youth Conditional Cautions do not have to be used in a set order and are available if a young person has been previously convicted. (Source: Youth Cautions – Guidance for Police and Youth Offending Teams).[34]

First-tier disposal: At the time of the JCS data collection period (1 February 2008 – 31 January 2009), this was an umbrella term used for the following orders made at court: bind over; Compensation Orders; discharges; fines; Referral Orders; Reparation Orders and deferred sentences. With the introduction of the Youth Rehabilitation Order this was used as an umbrella term for the following orders made at court: bind over; discharges; fines; and deferred sentences. (Source: 2007/08 Youth Justice Annual Workload Data, 2011/12 Youth Justice Statistics).

Index disposal: A disposal is an umbrella term referring to both sentences given by the court and pre-court decisions made by the police. For the purpose of this report, the index disposal is the disposal which qualified the young person for inclusion in the JCS cohort. This was the first eligible disposal given between 1 February 2008 and 31 January 2009. In the

[34] http://www.justice.gov.uk/downloads/oocd/youth-cautions-guidance-police-yots-oocd.pdf accessed 16 September 2013.

case of multiple disposals on the same day the most serious was chosen. 'Eligible disposals' included Final Warnings; Referral Orders; Reparation Orders; Action Plan Orders (APOs); Attendance Centre Orders (ACOs); Community Punishment Orders (CPOs); Community Punishment and Rehabilitation Orders (CPROs); Community Rehabilitation Orders (CROs); Curfew Orders; Supervision Orders; Detention and Training Orders (DTOs). Only disposals which led to YOT interventions with the young person were included.

Intensive Supervision and Surveillance: Intensive Supervision and Surveillance (ISS) can be attached to a Youth Rehabilitation Order and is a high intensity alternative to custody. ISS combines a set period of electronic tagging with a comprehensive and sustained focus on tackling the factors that contribute to the young person's offending behaviour. ISS is aimed at young offenders on the custody threshold and must be considered as an option before a custodial sentence is given. ISS may also be attached to conditional bail. (Source: 2011/12 Youth Justice Statistics).

Intervention plan: This is a document produced by the YOT worker, which sets out the main objective and aims for the young person to help them to stop offending.

JCS: Juvenile Cohort Study.

JCS index disposal: see index disposal.

Pre-court disposals: These include police reprimands and Final Warnings.

Proven offence: A proven offence is defined as an offence which results in the offender receiving a reprimand, warning, caution or conviction. (Source: 2011/12 Youth Justice Statistics).

Referral Order: In 2009/10, when a young person pled guilty to an offence and appeared in court for the first time, the court had to make a Referral Order. The only exception to this is if the offence is so serious that it merits a custodial sentence (DTO, section 90/91, section 226 or section 228) or so minor that a fine or absolute discharge may be given. The order requires the young person to attend a youth offender panel consisting of a YOT representative and two lay members. The panel agrees a contract with the young person lasting between 3 and 12 months. The contract will include reparation and a number of interventions felt suitable for that young person (for example, a substance misuse assessment, anger management, etc.). If completed successfully, the Referral Order is

considered a ‘spent’ conviction and need not be declared. (Source: 2011/12 Youth Justice Statistics). Under the Legal Aid, Sentencing and Punishment of Offenders Act 2012 the restriction on the repeated use of the referral order was removed.

Reparation Order: Reparation Orders require a young offender to undertake reparation either directly for the victim or for the community at large (for example, cleaning up graffiti or undertaking community work). (Source: 2011/12 Youth Justice Statistics).

Scaled Approach: A tiered approach to intervening with young people to reduce re-offending, which is based on the assessment of risks and needs using the Asset tool. The Scaled Approach was formally introduced in England and Wales in November 2009.

Static factors: Factors such as offender characteristics that cannot be altered, e.g. age at first offence.

Statistically significant: Something is considered to be statistically significant if (upon applying a statistical test) it is unlikely to have occurred simply by chance.

A statistical test for significance will produce a probability value or ‘p-value’, which is a value between 0 and 1. The p-value represents the probability that random chance could explain the result and the higher the p-value, the less the result can be considered as reliable. In many areas of social research a p-value of 0.05 or 0.01 are conventionally used. A p-value of 0.05 (sometimes referred to as significant at the 5% level) means there is a 5% chance that the difference is due to chance, and a p value of 0.01 (or at the 1% level) means that there is a 1% chance that the difference is due to chance. However, other p-values can also be considered (e.g. 0.10 or significant at the 10% level).

Young person: In this publication, ‘young person’ covers people aged 10–17.

Youth Offending Teams (YOTs): Youth Offending Teams (YOTs) are multi-agency teams made up of representatives from police, probation, education, health and social services, and specialist workers, such as accommodation officers and substance misuse workers. (Source: 2011/12 Youth Justice Statistics).

Youth Rehabilitation Order (YRO): The Youth Rehabilitation Order (YRO) was implemented for offences committed from 30 November 2009. The YRO provides judges and magistrates with a choice of 18 rigorous community options from which they can create a sentence specifically designed to deal with the circumstances of the young offender before them.

There are 18 requirements possible on an YRO. These are: Activity Requirement; Curfew Requirement; Exclusion Requirement; Local Authority Residence Requirement; Education Requirement; Mental Health Treatment Requirement; Unpaid Work Requirement (16/17 years); Drug Testing Requirement; Intoxicating Substance Misuse Requirement; Supervision Requirement; Electronic Monitoring Requirement; Prohibited Activity Requirement; Drug Treatment Requirement; Residence Requirement; Programme Requirement; Attendance Centre Requirement; Intensive Supervision and Surveillance (based on the current ISSP); Intensive Fostering Supervision Order. Community Rehabilitation Order, Community Punishment Order, Community Punishment Order and Rehabilitation Order, Action Plan Order and Attendance Centre Order only apply to those young people who committed an offence before 30 November 2009. They have been replaced by, and are now a part of, the Youth Rehabilitation Order.

The definitions of these orders *at time of the JCS data collection* (1 February 2008 – 31 January 2009) are provided below:

- **Supervision Order:** These may last for up to three years and may have a number of 'specified activities' attached to them, such as ISSP, drug treatment and curfews. The young person may also be required to undertake programmes run by the YOT to address the offending behaviour (e.g. anger management) or redress the harm done to a victim (through reparation). (Source: 2007/08 Youth Justice Annual Workload Data).
- **Community Rehabilitation Order:** This sentence is only available for 16–17-year-olds and is the equivalent of a Supervision Order. It may include reparation, offending behaviour programmes or an ISSP. (Source 2007/08 Youth Justice Annual Workload Data).
- **Community punishment order:** This sentence is only available for 16–17-year-olds who are supervised by the Probation Service. It includes an element of unpaid work.

- **Community Punishment Order and Rehabilitation Order:** A sentence available to courts for young people aged 16–17 years old. It involves elements of both the Community Punishment Order and the Community Rehabilitation Order. It can last for 12 months to three years. The unpaid community work can last between 40 and 100 hours. (Source: 2007/08 Youth Justice Annual Workload Data).
- **Action Plan Order:** An intensive, community-based programme lasting three months, which is supervised by the YOT. (Source: 2007/08 Youth Justice Annual Workload Data).
- **Attendance Centre Order:** This order requires a young person to attend an attendance centre for up to 36 hours where they learn discipline, physical training and social skills. (Source: 2007/08 Youth Justice Annual Workload Data).

Appendix A
Overview of the Juvenile Cohort Study (JCS)

The Juvenile Cohort Study (JCS) was a joint initiative by the Ministry of Justice (MoJ) and the Youth Justice Board (YJB). The fieldwork was conducted by Morgan Harris Burrow (MHB) in association with researchers from the University of Surrey and the University of Oxford.

The JCS comprised records of 13,975 young people, which were drawn from the case management systems of 30 participating youth offending teams (YOTs) in England and Wales. Initially, the aim was to randomly select 30 YOTs to participate. However, when some YOTs were unable to take part, further YOTs with similar characteristics were specially targeted. All the young people between the ages of 10 and 17 years old who were subject to YOT supervision between 1 February 2008 to 31 January 2009, normally resident in the YOT area and had received a sentence were eligible for inclusion in the cohort.[35]

The JCS included information, collected by YOTs, on the characteristics of young people in terms of their needs, risks, and the interventions they received. The cohort study design enabled the follow-up of re-offences of this particular group through matching to the extract of the Police National Computer (PNC) held by the MoJ.

JCS cohort characteristics

Overall, the JCS cohort had the following characteristics: males accounted for 80% of the cohort; 20% were female. In age, 5% were 10–12, 42% were 13–15, and 53% were 16–17 years old. The average (mean) age was 15.3 years. The majority were White (86%), 5% were Black/Black British, 3% Asian/Asian British, 4% Mixed, and fewer than 1% were Chinese or Other. Ethnicity was unknown for 1%.[36] Overall, 40% of the cohort received a Final Warning; 30% received a Referral Order, while only 4% were given a Detention and Training Order.

Further information on the characteristics and needs of the JCS cohort can be found in Wilson and Hinks (2011) and Ministry of Justice (2012b).

[35] Eligible disposals included Final Warnings, Referral Orders, Reparation Orders, Action Plan Orders (APOs), Attendance Centre Orders (ACOs), Community Punishment Orders (CPOs), Community Punishment and Rehabilitation Orders (CPROs), Community Rehabilitation Orders (CROs), Curfew Orders, Supervision Orders, and Detention and Training Orders (DTOs). Only disposals which led to YOT interventions with the young person were included.

JCS representativeness

JCS total cohort

The JCS cohort was compared to the national population of young people (in the case of ethnicity) and to national offences by gender and age as reported in the 2008/09[37] Youth Justice Annual Workload data (Youth Justice Board, 2010b). (See Table A.1 for comparisons between the JCS cohort/JCS sub-samples and the youth justice workload statistics for 2008/09.)

The cohort was found to be broadly representative of the demographics of young people with a proven offence in England and Wales. The cohort was statistically representative of young people with a proven offence in England and Wales with regard to gender. However, statistical tests showed that the JCS cohort was significantly older and included a higher proportion of White young people, although these differences were small in absolute terms.

As part of the JCS sampling strategy, only disposals which led to YOT interventions or supervision were included, and more serious custodial disposals[38] were excluded because of the longer wait necessary until the start of the follow-up period upon release. The JCS was therefore less representative in terms of individual disposals. In particular, the number of Referral Orders was disproportionately high: 30% in the JCS compared to 14% nationally.

However, the JCS cohort reflected the national proportions of the four main disposal tiers:[39] pre-court (40% vs. 41% nationally), first-tier (33% vs. 35% nationally), community (23% vs. 21% nationally), and custody (4% vs. 4% nationally).

The samples used in this study are presented in Table A.1 and compared to the national caseload in 2008/09 and the overall JCS cohort. The proportion of males and White young people remained relatively stable across the JCS samples and are broadly similar to the national caseload. However, the proportions across disposal tiers differed for the samples used in this report; in particular the proportions of young people with pre-court disposals was

---

36 Ethnicity was recorded as defined by the young person.

37 This period broadly matches the JCS data collection period from 1 February 2008 to 31 January 2009.

38 i.e. sections 90, 91, 226 and 228.

39 There are four disposal tiers of increasing seriousness: 1. pre-court (Police Reprimand, Final Warning); 2. first-tier (Absolute Discharge, Bind Over, Compensation Order, Conditional Discharge, Fine, Referral Order, Reparation Order, Sentence Deferred); 3. community (Action Plan Order, Attendance Centre Order, Community Punishment and Rehabilitation Order, Community Punishment Order, Community Rehabilitation Order, Community Rehabilitation Order and Conditions, Curfew Order, Drug Treatment and Testing Order, Supervision Order, Supervision Order and Conditions); 4. custody (Detention and Training Order – four months, Detention and Training Order – four months to two years, Section 90–91, Section 226 – detention for life, Section 226 – detention for public protection, Section 228). The JCS cohort only includes a sub-set of all possible disposals.

lower. Also, proportions for first tier and community disposals were higher compared to the national caseload and the overall JCS cohort. Therefore, findings may not necessarily be representative by youth justice disposal tiers.

JCS qualitative practitioner study

The JCS included a small-scale study of qualitative interviews with YOT practitioners. The interviews were conducted to investigate the views of practitioners, to shed light on the context in which they work, and to provide a background to the administrative data collected in the JCS.

Face-to-face interviews, following a common semi-structured interview schedule, were carried out with three to four practitioners in 28 of the 30 YOTs taking part in the JCS. In total, 102 interviews were completed, and of these, 19 interviewees occupied management grades. Those interviewed in each YOT comprised a cross section of practitioners (e.g. caseworkers, those dealing with ISSPs, and practice managers) designed to represent a reasonable profile of the way each YOT operates. In view of this focus, very few specialist staff, such as those dealing only with reparation issues or substance misuse, were invited to take part. The selection was made in collaboration with the practice manager (or, where no such post existed, a senior caseworker). Although it recognised that the way in which different YOTs deliver interventions can vary widely, the study sought to target caseworkers with experience.

While the aim was to provide a reasonable profile of the way each participating YOT operated, the interviews cannot be seen to represent the views of all YOT practitioners. This is because the 28 YOTs from which the interviewees were drawn may not be representative of YOTs nationally (however, in demographic terms the 30 JCS YOTs are broadly representative). More importantly, there will have been some selection bias, both in the decision of practice managers about who they suggested for interview, as well as in the decision by individuals to consent or refuse to take part.

Table A.1: Characteristics of JCS samples

Comparators	National Caseload 2008/09	JCS cohort (n=13,975)	Intervention sample (n=10,944)	Intervention plan sample (n=8,078)	Intervention plan sub-sample (n=6,582)[a]	Intervention plan sub-sample (n=4,501)[b]	Contacts sample (n=7,918)	Contacts sub-sample (6,831)[c]	Contacts sub-sample (6,497)[d]	Contacts sub-sample (n=5,307)[e]	P&p sample (n=1,697)
	%	%	%	%	%	%	%	%	%	%	%
Age [f]											
10–13yrs	15	12	12	12	12	9	12	11	12	12	11
14–17yrs	85	88	88	88	88	91	88	89	88	88	89
Sex [g]											
Males	79	80	80	80	81	82	80	80	81	81	82
Ethnicity											
White	84	86	86	85	86	86	85	86	86	86	87
Disposal tiers											
Pre-court	41	40	35	24	24	N/A	23	18	24	20	10
1st tier	35	33	40	48	45	63	49	53	46	50	59
Community	21	23	22	24	26	32	24	25	26	25	28
Custody (DTO)	4	4	3	4	5	5	4	4	5	4	2

Sources: 2008/2009 Youth Justice Annual Workload statistics (YJB, 2010b) and JCS data. Notes:

Figures are rounded and may not add up to 100%.

[a] Asset selection criteria (timeliness, completeness) were applied.

[b] Final Warnings were removed; Asset selection criteria applied and PNC matching criteria were applied. Only young people whose records on age and sex matched between the JCS and PNC and were included.

[c] Only young people who had at least one face-to-face contact addressing a specific issue were included.

[d] Asset selection criteria were applied

[e] Asset selection criteria, PNC matching criteria, and age/sex match criteria were applied.

[f–g] Age/sex match criteria and Asset selection criteria were applied.

Appendix B
Intervention plan aims by Scaled Approach band

The analysis on intervention plan aims by CJS disposal was repeated, this time presenting intervention plan aims by replicated Scaled Approach score bands (see Table B.1) to see if resources were targeted at those young people who were at the greatest risk of re-offending.

Although the average (mean) number of intervention plan aims increased slightly with risk, overall there was little difference across replicated Scaled Approach bands, indicating that, on average, young people received a similar number of intervention plan aims regardless of level of risk (likelihood of future offending). This analysis excludes Final Warnings (as the Scaled Approach does not apply to these cases), which may explain why differences across Scaled Approach bands are not as marked as across disposal tiers.

The proportion of young people receiving cognitive behavioural, constructive pursuits, life skills, mentoring, offending behaviour, and 'other' intervention plan aims was similar across Scaled Approach bands (no statistically significant differences were found). The proportions of all other intervention plan aims were statistically significantly different by Scaled Approach bands.[40]

The 'intensive' band, representing those young people with the highest level of risks/needs (total Asset score 33–64) had on average 4.3 different intervention plan aims, compared with 4.1 for the 'enhanced' band (total Asset score 15–32) and 3.9 for the 'standard' band (total Asset score 0–14). The mean was 4.1,[41] and the median and the mode were both 4 across all score bands.

[40] Statistical analyses (Chi-square tests) were run to test if the proportions of young people with specific intervention plan items differed by Scaled Approach band. These tests were significant at the 1% significance level (except for 'engagement' which was significant at the 5% level).

[41] Statistically significant (at 1% level, Mann-Whitney Test) differences between the standard and the enhanced and the standard and intensive Scaled Approach band were found. Differences between the enhanced and intensive band were not statistically significant, indicating that the average number of intervention plan aims is similar between these two bands.

Table B.1: Intervention plan aims by Scaled Approach score band (n=4,501, excluding Final Warnings)

Intervention plan aims	Replicated Scaled Approach bands							
	Standard		Enhanced		Intensive		Total	
	N	%	N	%	N	%	N	%
Anger management	326	**19**	570	**24**	64	**15**	960	**21**
Cognitive behavioural	855	**51**	1,170	**49**	222	**51**	2,247	**50**
Constructive pursuits	289	**17**	460	**19**	91	**21**	840	**19**
Drugs & alcohol	650	**39**	1,078	**45**	279	**64**	2,007	**45**
Engagement	84	**5**	95	**4**	30	**7**	209	**5**
ETE	585	**35**	1,245	**52**	279	**64**	2,109	**47**
Family support	47	**3**	199	**8**	69	**16**	315	**7**
Health	155	**9**	351	**15**	113	**26**	619	**14**
Housing	20	**1**	123	**5**	54	**12**	197	**4**
Life skills	184	**11**	283	**12**	65	**15**	532	**12**
Mentoring	91	**5**	139	**6**	16	**4**	246	**5**
Offending behaviour	799	**47**	1,074	**45**	193	**44**	2,066	**46**
Reparation indirect	1,288	**76**	1,491	**63**	168	**38**	2,947	**65**
Reparation direct	155	**9**	132	**6**	18	**4**	305	**7**
Victim awareness	796	**47**	1,038	**44**	141	**32**	1,975	**44**
Other	249	**15**	363	**15**	85	**19**	697	**15**
Total number of people with at least one intervention plan aim	**1,685**		**2,379**		**437**		**4,501**	
Average (mean) number of different intervention plan aims (binary measure)	**3.9**		**4.1**		**4.3**		**4.1**	
Average (mean) number of intervention plan aims (frequency measure)	**4.8**		**4.9**		**5.4**		**4.9**	

Source: JCS data. Notes:

- Final Warnings are excluded from this analysis as the Scaled Approach does not apply to these cases.
- The category 'health' includes intervention plan aims relating to physical or mental health.
- ‘Reparation direct’ includes all reparation work involving direct offender/victim reparation.
- ‘Reparation indirect’ includes all reparation work not directly with the victim (as well as a small number of cases which were classified as both direct and indirect reparation).
- The category 'other' includes a number of aims which did not fall into any of the JCS framework categories. This could partly be explained by different recording practices, although each of the JCS YOTs had at least one person with an intervention plan aim falling into the 'other' category.
- The data excludes young people on ISSPs, which may partly explain a small number of intervention plan aims relating to 'surveillance'. These were removed from the subsequent analysis, as well as a small number of intervention plan aims relating to ‘advocacy’.

Appendix C
Combinations of aims included in the intervention plan

Another way of looking at intervention plan aims is to analyse the most frequent combinations of aims that were set. The analysis found a wide variety of different combinations of intervention plan aims. This may indicate that YOTs have used an individualised approach for supporting young offenders to desist from further offending by addressing their offending-related needs, as encouraged by the YJB (e.g. YJB, 2008).

The number of intervention plan aims that were set over the course of a disposal ranged from 1 to 13. As intervention plans were being reviewed and updated regularly, young people with a higher number of aims may have addressed these aims over a longer period of time. Due to the selection criteria, which included only young people with a valid intervention plan record, the analysis did not include any young people who did not have an intervention plan and aims.

Table C.1 details the five most frequent aims used in isolation (i.e. where there was only one aim included in the intervention plan). These were:

- indirect reparation (31%);
- offending behaviour (19%);
- cognitive behaviour (15%)
- ETE (5%); and
- drugs/alcohol (5%).

However, these aims each only accounted for between 1% to 6% of the aims of young people with intervention plans.

The five most frequent combinations for intervention plans with two to four different aims[42] were:

- indirect reparation & drugs/alcohol & offending behaviour & ETE (14%);
- indirect reparation & drugs/alcohol & ETE & cognitive behaviour (14%);
- indirect reparation & offending behaviour & cognitive behaviour & victim awareness (13%);

[42] As the total number of possible combinations is very large, only the five most frequent combinations of a maximum of four intervention plan aims were included.

- indirect reparation & cognitive behaviour & drugs/alcohol & victim awareness (12%); and
- indirect reparation & drugs/alcohol & offending behaviour & victim awareness (9%).

These aims each only accounted for less than 1% of the aims of young people with intervention plans.

Table C.1: Five most frequent combinations of intervention plan aims (showing combinations for 1–4 aims only, based on n=8,078)

Number of plan aims	N	% of total sample	% within number of plan aims	Intervention plan aims					
				Cognitive behaviour	Drugs/ alcohol	ETE	Offending behaviour	Reparation indirect	Victim awareness
1	462	5.7	30.9	.	.	.	.	x	.
1	286	3.5	19.1	.	.	.	x	.	.
1	228	2.8	15.3	x	.	.	.	.	.
1	82	1.0	5.5	.	.	x	.	.	.
1	82	1.0	5.5	.	x	.	.	.	.
2	98	1.2	16.6	.	.	.	x	x	.
2	78	1.0	13.2	.	.	.	.	x	x
2	78	1.0	13.2	x	.	.	.	x	.
2	66	0.8	11.2	.	.	x	x	.	.
2	63	0.8	10.7	.	.	.	x	.	x
3	71	0.9	15.0	x	.	.	.	x	x
3	57	0.7	12.1	x	x	.	.	x	.
3	54	0.7	11.4	.	.	.	x	x	x
3	50	0.6	10.6	.	.	x	x	x	.
3	49	0.6	10.4	.	x	.	x	x	.
4	53	0.7	13.6	.	x	x	x	x	.
4	53	0.7	13.6	x	x	x	.	x	.
4	51	0.6	13.1	x	.	.	x	x	x
4	48	0.6	12.3	x	x	.	.	x	x
4	37	0.5	9.5	.	x	.	x	x	x

Source: JCS data.

Note: Not all intervention plan aims are listed as only the most five most frequent combinations of up to four intervention plan items were included. Figures were rounded to the nearest decimal place.

Appendix D
Summary of logistic regression analyses

Factors associated with one-year proven re-offending were explored using multiple logistic regression analysis (i.e. re-offending as a binary outcome measure, yes/no). This form of analysis estimates the effect of each variable on an outcome (in this case one-year proven re-offending) while controlling for the effect of other variables in the analysis. It can, therefore, identify which variables are independently related to proven re-offending. Two logistic regression models are reported here.

Logistic regression model 1: Frequency of face-to-face contacts

The aim of this model was to assess if the frequency of contacts (i.e. total number of face-to-face contacts between a young person and a YOT practitioner/or external agency addressing specific offender rehabilitation issues) reduced proven one-year re-offending. A logistic regression model was run, controlling for young people's static characteristics (age, gender, copas rate[43]), with the frequency of contacts per person as a predictor variable. The time spent per contact type was explored but was not included due to data quality issues.

Indicative findings show that proven re-offending decreased with the number of contacts (not distinguishing by the type of contact). Findings were statistically significant at the 10% level (see Table D1; and the Glossary). On average, the likelihood of re-offending decreases by 6% (95% Confidence Interval: 0–12%) for a young person with each additional contact.[44]

[43] Copas rate = log (number of sanction occasions / (10 + years between first and current sanction)). It is a single measure which reflects both the intensity and length of the offender's criminal career.

[44] The odds ratio for the variable 'frequency of contacts' is 0.94, based on an proven one-year re-offending as the outcome variable where 1 is re-offending and 0 is not re-offending. The 6% reduction in re-offending is derived as follows: (1/0.94)-1=0.06. The confidence interval is calculated in the same way.

Table D.1: Logistic regression model output including offender characteristics, 12 Asset sections (risks/needs), and total frequency of contacts as predictor variables of one-year proven re-offending (0 = not re-offended, 1= re-offended) (n=5,307)

Variables	Coefficient	Odds ratio	95% confidence interval for odds ratio	p-value
Demographics				
Gender				
Male	*reference category*			
Female	-.69	.50	0.43–0.59	.00
Age (z transformed)	-.10	.90	0.85–0.97	.00
Copas rate (z transformed)	.54	1.72	1.60–1.85	.00
Asset needs (categorical variables with Asset scores ranging from 0–4)				
Living arrangements (Asset score=0)	*reference category*			.31
Living arrangements (Asset score=1)	.16	1.17	1.00–1.37	.04
Living arrangements (Asset score=2)	.17	1.19	0.96–1.47	.12
Living arrangements (Asset score=3)	.19	1.21	0.88–1.66	.24
Living arrangements (Asset score=4)	.18	1.19	0.65–2.19	.57
Family & personal relationships (Asset score=0)	*reference category*			.27
Family & personal relationships (Asset score=1)	.17	1.18	1.00–1.40	.05
Family & personal relationships (Asset score=2)	.09	1.10	0.90–1.35	.37
Family & personal relationships (Asset score=3)	.19	1.21	0.93–1.58	.15
Family & personal relationships (Asset score=4)	-.03	.97	0.62–1.51	.89
Education, training, employment (Asset score=0)	*reference category*			.14
Education, training, employment (Asset score=1)	.21	1.24	1.05–1.45	.01
Education, training, employment (Asset score=2)	.11	1.11	0.94–1.32	.22
Education, training, employment (Asset score=3)	.07	1.07	0.85–1.35	.55
Education, training, employment (Asset score=4)	.17	1.18	0.79–1.77	.42
Neighbourhood (Asset score=0)	*reference category*			.25
Neighbourhood (Asset score=1)	-.09	.91	0.79–1.04	.18
Neighbourhood (Asset score=2)	.09	1.10	0.91–1.33	.33
Neighbourhood (Asset score=3)	.17	1.18	0.83–1.69	.35
Neighbourhood (Asset score=4)	-.04	.96	0.45–2.04	.92
Lifestyle (Asset score=0)	*reference category*			.00
Lifestyle (Asset score=1)	.34	1.40	1.15–1.71	.00
Lifestyle (Asset score=2)	.46	1.58	1.27–1.96	.00
Lifestyle (Asset score=3)	.67	1.96	1.50–2.55	.00
Lifestyle (Asset score=4)	.58	1.79	1.11–2.89	.02
Substance use (Asset score=0)	*reference category*			.00
Substance use (Asset score=1)	.32	1.38	1.18–1.61	.00
Substance use (Asset score=2)	.19	1.21	1.02–1.43	.03
Substance use (Asset score=3)	.30	1.35	1.06–1.72	.02
Substance use (Asset score=4)	.31	1.37	0.85–2.20	.19
Physical health (Asset score=0)	*reference category*			.15
Physical health (Asset score=1)	.15	1.16	0.97–1.39	.10
Physical health (Asset score=2)	.35	1.42	1.01–2.00	.05
Physical health (Asset score=3)	.49	1.63	0.60–4.40	.33
Physical health (Asset score=4)	.07	1.07	0.19–5.97	.94
Mental health (Asset score=0)	*reference category*			.73
Mental health (Asset score=1)	-.01	.99	0.85–1.16	.94
Mental health (Asset score=2)	.12	1.12	0.92–1.37	.24
Mental health (Asset score=3)	.01	1.01	0.75–1.37	.95
Mental health (Asset score=4)	-.07	.93	0.50–1.72	.81
Perception of self & others (Asset score=0)	*reference category*			.27
Perception of self & others (Asset score=1)	.14	1.15	1.00–1.34	.06
Perception of self & others (Asset score=2)	.10	1.10	0.90–1.34	.34
Perception of self & others (Asset score=3)	.19	1.20	0.84–1.72	.31
Perception of self & others (Asset score=4)	-.42	.66	0.25–1.73	.40

Variables	Coefficient	Odds ratio	95% confidence interval for odds ratio	p-value
Thinking and behaviour (Asset score=0)	*reference category*			.33
Thinking and behaviour (Asset score=1)	-.10	.90	0.66–1.23	.52
Thinking and behaviour (Asset score=2)	-.02	.98	0.72–1.34	.91
Thinking and behaviour (Asset score=3)	-.10	.91	0.64–1.27	.57
Thinking and behaviour (Asset score=4)	.28	1.33	0.79–2.22	.29
Attitudes to offending (Asset score=0)	*reference category*			.67
Attitudes to offending (Asset score=1)	-.10	.91	0.77–1.07	.25
Attitudes to offending (Asset score=2)	-.05	.96	0.79–1.16	.64
Attitudes to offending (Asset score=3)	.01	1.01	0.76–1.35	.94
Attitudes to offending (Asset score=4)	-.27	.76	0.42–1.40	.38
Motivation to change (Asset score=0)	*reference category*			.00
Motivation to change (Asset score=1)	.22	1.25	1.07–1.45	.01
Motivation to change (Asset score=2)	.51	1.67	1.36–2.05	.00
Motivation to change (Asset score=3)	.94	2.56	1.76–3.70	.00
Motivation to change (Asset score=4)	.74	2.09	1.09–3.99	.03
Face-to-face contacts				
Frequency of contacts (z transformed)	-.06	.94	0.89–1.00	.06
Constant	-1.13	.32		.00

Notes:

- $\chi^2(52,N=5,307)=1001.1$, $p<.001$; Nagelkerke R Square = 0.23.
- Each Asset section is scored from 0 to 4, with 0 indicating no relationship with re-offending and 4 indicating a high relationship with re-offending; the frequency of contacts represents the sum of all face-to-face contacts a young person had addressing specific issues (it does not take account the duration of these contacts); age is negatively related to re-offending (i.e. young people who are older are less likely to re-offend). This contradicts the latest re-offending statistics; however, this may be accounted for by the relatively low number of young people on pre-court disposals in the sample compared to the published statistics.
- Age, copas rate, Asset needs, and frequency of contacts were standardised (z-transformation).
- A probability value (p-value) of less than 0.05 is considered to be statistically significant at the 5% level, a probability value of less than 0.10 but higher than 0.05 is statistically significant at the 10% level.
- The analysis does not control for potential differences within or between YOTs.

Logistic regression model 2: Young people's risks/needs and related contacts

The aim of this model was to assess if proven re-offending reduced for those young people who have contacts related to their needs. Based on the 'JCS interventions framework' (see Figure D.1), which had been set up as part of this study, the 14 contact types can be loosely mapped onto the 12 sections within the Asset youth risks/needs assessment tool. Five Asset sections (lifestyle, perceptions of self & others, thinking & behaviour, attitudes to offending, and motivation to change) were combined into a single variable labelled 'cognition & lifestyle' because these issues may more likely be addressed by a range of similar contacts. The logistic regression analysis was run on relevant contacts mapped to needs as predictor variables, controlling for static variables (age, gender, copas rate).

Figure D.1: JCS interventions framework and links to Asset for 'face-to-face contacts which address a specific issue'

Contact types ('issues being addressed by face-to-face contacts')	Asset section(s)	Combined Asset section(s) used for logistic regression analysis
Life skills	5. Lifestyle[45] 9. Perception of self and others 10. Thinking and behaviour 11. Attitudes to offending 12. Motivation to change	'Cognition & Lifestyle'
Mentoring		
Anger management		
Victim awareness		
Cognitive/behavioural skills		
Offending behaviour		
Constructive pursuits		
Reparation direct Reparation indirect		
Education/career support	3. Education, training and employment	Education, training and employment
Family support	2. Family and personal relationships	Family and personal relationships
Health awareness	7. Physical health 8. Emotional and mental health	'Health'
Housing support	1. Living arrangements 4. Neighbourhood	'Accommodation'
Drugs/alcohol awareness	6. Substance use	Substance use

Note: Some contact types (e.g. education/career support) have a one-to-one relationship with the relevant Asset section (in this case Asset section 3 ETE) while other sections have many-to-many relationships, i.e. one contact type can link to more than one Asset section and one Asset section can link to more than one contact type.

Indicative findings were as follows:

- Young people who had at least one contact related to a risk/need, compared with those who had a risk/need but no related contact, appear less likely to re-offend (as indicated by negative regression coefficients for all six Asset sections). However, the effects were not statistically significant for contacts related to all risks/needs, except for 'cognition & lifestyle' (see Table D.2).
- The combined Asset section 'cognition & lifestyle' was statistically significant at the 1% level (see Table D.2). Contact(s) addressing 'cognition & lifestyle' risks/needs reduced re-offending significantly regardless as to whether the young person had an assessed risk in these areas or not. In terms of effect size, a young person with a 'cognition & lifestyle' need but no related contact was 38% (95% Confidence Interval: 15–65%)[46] more likely to re-offend, compared with a young person who had the need met by a relevant contact.

[45] Lifestyle had been omitted from the framework document (see Appendix E) but was included for the purpose of this report. The section 'lifestyle' explores if the young person has age-inappropriate friendships, associations with pro-criminal peers, lack of structure during spare time, and other problems such as gambling.

[46] The odds ratio was 0.73, based on proven one-year re-offending as the outcome variable where 1 is re-offending and 0 is not re-offending. The 38% reduction in re-offending was calculated as follows: (1/0.73)-1=0.38 (figures are rounded). The confidence interval is calculated in the same way (figures are rounded).

- To put this into context, if (hypothetically) the average re-offending rate for the group of young people who had a cognition & lifestyle need ***and*** a related contact was 30%, the average re-offending rate for young people with a cognition & lifestyle need but ***no*** related contact would be 41% (95% Confidence Interval: 34%–50%).[47]
- On balance 'cognition & lifestyle' risks/needs are perhaps easier for YOTs to address directly than for example, neighbourhood, accommodation, or ETE needs.
- Young people with no need (in a particular area) and no contact (in this particular area) were significantly less likely to re-offend compared with those who had a need but no contact. This finding may be expected, as young people with no need had been assessed as having no or little risk of future offending-related to this need.

These findings should be treated as indicative as a number of caveats apply:

- Assessments may incorrectly identify the needs of offenders, e.g. wrongly recorded by the practitioner or the issues identified via Asset are not actually related to the young person's offending behaviour. Any interventions (contacts) which address these factors may therefore not affect future offending.
- Data recording issues may apply. The JCS captures 14 different contact types addressing issues the young person may have. Nine of these were grouped into one broad category labelled 'cognition & lifestyle'. Within each of these contact types a wide range of methods or resources may be employed. Based on the available data, no assessment could be made on the specific content or the quality of the delivery of the contacts. For example, this could include the quality of the relationship between the practitioner and the young person (see Mason and Prior, 2008), or if the contact was part of a wider programme, whether it was delivered in accordance with instructions (e.g. Ross *et al*, 2010; Lipsey *et al*, 2010). It is also not known what the young person's 'take out' from the contact was in terms of behaviour modification.
- Young people may also experience a range of risks/needs, which may be addressed in combination rather than in isolation.

[47] Based the following calculation: 0.3*1.38=0.41.

- Findings on intervention plan aims, presented earlier in this report, suggested that a wide range of different combinations of plans were being used and it was therefore not possible to include the potentially wide range of combinations of contacts related to risks/needs into the model. Therefore, looking at contact types in isolation may not take account of the effect of 'multi-modal' interventions (as for example suggested by Farrington and Welsh, 2007), or the interplay of different contact types on reducing re-offending.

Table D.2: Logistic regression model output including offender characteristics and whether needs had related contacts (based on 'combined Asset' sections – see Figure 1) as predictor variables of one-year proven re-offending (0=not re-offended, 1= re-offended) (n=5,307)

Variables	Coefficient	Odds ratio	95% confidence interval for odds ratio	p-value
Demographics and criminal history				
Gender				
Male	*reference category*			
Female	-0.66	0.51	0.44–0.60	0.00
Age	-0.13	0.88	0.82–0.93	0.00
Copas Rage	0.61	1.84	1.72–1.97	0.00
Asset needs and contacts				
Accommodation (living arrangements & neighbourhood)				
need & no contact	*reference category*			0.00
need & contact	-0.10	0.91	0.62–1.34	0.62
no need & contact	0.15	1.17	0.75–1.82	0.50
no need & no contact	-0.37	0.69	0.60–0.80	0.00
Family & personal relationships				
need & no contact	*reference category*			0.10
need & contact	-0.06	0.94	0.70–1.26	0.68
no need & contact	0.13	1.14	0.79–1.64	0.50
no need & no contact	-0.16	0.85	0.73–0.99	0.03
Education & Training				
need & no contact	*reference category*			0.06
need & contact	-0.03	0.97	0.79–1.18	0.73
no need & contact	-0.20	0.82	0.67–1.00	0.05
no need & no contact	-0.19	0.83	0.70–0.97	0.02
Substance use				
need & no contact	*reference category*			0.00
need & contact	-0.01	0.99	0.80–1.23	0.93
no need & contact	0.06	1.06	0.83–1.35	0.64
no need & no contact	-0.28	0.75	0.62–0.91	0.00
Health (mental & physical health)				
need & no contact	*reference category*			0.05
need & contact	-0.14	0.87	0.67–1.13	0.30
no need & contact	-0.15	0.86	0.67–1.11	0.26
no need & no contact	-0.24	0.79	0.67–0.93	0.01
Cognition & lifestyle (lifestyle, perception of self/others, thinking & behaviour, attitudes to offending, motivation to change)				
need & no contact	*reference category*			0.00
need & contact	-0.32	0.73	0.61–0.87	0.00
no need & contact	-0.63	0.54	0.42–0.67	0.00
no need & no contact	-0.39	0.68	0.49–0.94	0.02
Constant	1.03	2.80		.00

Notes:

- $\chi^2(21,N=5,307)= 852.1$, $p<.001$, Nagelkerke R Square = 0.20.
- Variable coding: *need (Asset score 2+) & no contact* – (used as reference category), young person had a need but no related contact; *need (Asset score 2+) & contact* – young person had at least one contact related to a need; *no need (Asset score <2) & contact* – young person did not have a need in an area but at least one related contact in this area; *no need (Asset score <2) & no contact* – young person neither had a need in a particular area or a contact in this area.
- Age and copas rate were standardised (z-transformation).
- A probability value (p-value) of less than 0.05 is considered to be statistically significant at the 5% level, a probability value of less than 0.10 but higher than 0.05 is statistically significant at the 10% level.
- The analysis does not control for potential differences within or between YOTs.

Appendix E

Average number of needs by whether need is addressed in the intervention plan or by a contact

Table E.1 presents the average (mean) Asset score for the 12 Asset sections by whether the need was addressed in the intervention plan. Table E.2 presents the same analysis by contact between the young person and a practitioner.

Table E.1: Average (mean) Asset scores of young people with an identified need by whether the need was addressed in the intervention plan (n=6,582)

Asset section	Average Asset score			
	Need addressed in plan (Asset 2+)		Need addressed in plan (Asset 3+)	
	No	Yes	No	Yes
Living arrangements	2.4	2.7	3.2	3.3
Family & relationships	2.5	2.6	3.2	3.2
ETE	2.4	2.5	3.2	3.2
Neighbourhood	2.3	2.4	3.2	3.2
Lifestyle	2.5	2.4	3.3	3.2
Substance use	2.3	2.4	3.2	3.2
Physical health	2.1	2.3	3.2	3.3
Mental health	2.4	2.4	3.2	3.2
Perception of self & others	2.3	2.2	3.1	3.1
Thinking & behaviour	2.4	2.4	3.2	3.2
Attitudes to offending	2.4	2.3	3.3	3.2
Motivation to change	2.6	2.3	3.2	3.2

Source: JCS data

Table E.2 Average (mean) Asset scores of young people with an identified need by whether the need was addressed by contacts (n=6,497)

Asset section	Average Asset score			
	Need addressed by contact (Asset 2+)		Need addressed by contact (Asset 3+)	
	No	Yes	No	Yes
Living arrangements	2.4	2.6	3.2	3.3
Family & relationships	2.5	2.6	3.2	3.2
ETE	2.4	2.5	3.2	3.2
Neighbourhood	2.3	2.2	3.2	3.1
Lifestyle	2.5	2.4	3.2	3.2
Substance use	2.4	2.4	3.2	3.2
Physical health	2.2	2.2	3.2	3.3
Mental health	2.4	2.4	3.2	3.2
Perception of self & others	2.3	2.2	3.1	3.1
Thinking & behaviour	2.5	2.4	3.2	3.1
Attitudes to offending	2.4	2.3	3.3	3.1
Motivation to change	2.5	2.3	3.3	3.2

Source: JCS data