



Evaluation of the Offender Liaison and Diversion Trial Schemes

Emma Disley*, Celia Taylor**, Kristy Kruihof*, Eleanor Winpenny*,
Mark Liddle***, Alex Sutherland*, Richard Lilford**, Sam Wright***,
Lyndsay McAteer*** and Viv Francis***

* RAND Europe

** University of Warwick Medical School

*** Applied Research in Community Safety



This report presents findings from independent research commissioned and funded by the Department of Health Policy Research Programme (Project PR-R8-0913-11005). The views expressed in this publication are those of the author(s) and not necessarily those of the Department of Health.

For more information on this publication, visit www.rand.org/t/rr1283

Published by the RAND Corporation, Santa Monica, Calif., and Cambridge, UK

© Copyright 2016 RAND Corporation

RAND® is a registered trademark.

RAND Europe is a not-for-profit organisation whose mission is to help improve policy and decisionmaking through research and analysis. RAND's publications do not necessarily reflect the opinions of its research clients and sponsors.

Limited Print and Electronic Distribution Rights

This document and trademark(s) contained herein are protected by law. This representation of RAND intellectual property is provided for noncommercial use only. Unauthorized posting of this publication online is prohibited. Permission is given to duplicate this document for personal use only, as long as it is unaltered and complete. Permission is required from RAND to reproduce, or reuse in another form, any of its research documents for commercial use. For information on reprint and linking permissions, please visit www.rand.org/pubs/permissions.html.

Support RAND

Make a tax-deductible charitable contribution at

www.rand.org/giving/contribute

www.rand.org

www.randeurope.org

Preface

This document is the final report of an independent evaluation of the Offender Liaison and Diversion Trial Schemes. Liaison and diversion schemes operate primarily in police custody suites and courts and aim to identify and assess people with vulnerabilities as they pass through the criminal justice system, to ensure their needs are identified and that they are referred to appropriate interventions. In April 2014 a new model for liaison and diversion schemes was implemented in ten areas of England. An evaluation was commissioned by the Department of Health to look at the implementation of the new model in these sites, and to investigate any impacts on the criminal justice process, impacts on local organisations and impacts on the health and criminal justice outcomes of service users.

The evaluation was funded by the Department of Health Policy Research Programme (Project PR-R8-0913-11005) and undertaken by RAND Europe in collaboration with the University of Warwick and Applied Research in Community Safety Ltd.

This report has been prepared for the Department of Health as the final output from the evaluation, but will also be of interest to policy makers and practitioners responsible for designing and implementing liaison and diversion schemes, as well as those commissioning such schemes. It is also of relevance to anyone designing future research or evaluation into liaison and diversion services.

RAND Europe is an independent, not-for-profit research institution. For further information about RAND Europe or this evaluation please contact:

Dr. Emma Disley
Associate Group Director
RAND Europe
edisley@rand.org
+44 1223 353 329

Table of contents

Table of Contents	v
Figures	vii
Tables	ix
Acknowledgements	xi
Summary and key findings	xiii
Chapter 1: Background to the Offender Liaison and Diversion Trial	1
1.1. Introduction to liaison and diversion	1
1.2. Developing a National Model of liaison and diversion.....	1
1.3. Existing evidence on the effectiveness of liaison and diversion	4
Chapter 2: The evaluation of the liaison and diversion trial	7
2.1. Research objectives and questions	7
2.2. Overview of the approach	7
2.3. Strengths of the evaluation and challenges in data availability	8
2.4. Description of the scoping and feasibility stage and the four strands of the evaluation	10
2.5. Public and patient involvement in the evaluation	30
Chapter 3: Findings regarding the implementation of the National Model for liaison and diversion	31
3.1. Implementation of the National Model.....	31
3.2. What the National Model liaison and diversion service meant in practice	34
3.3. The implementation and operation of the National Model liaison and diversion service for young people.....	39
Chapter 4: A description of adult cases in the first year of the trial	43
4.1. Numbers of referrals and attrition of cases	43
4.2. Declining contact	45
4.3. Demographic characteristics and offence type	45
4.4. Needs identified	46
4.5. Interventions and activities following identification of needs	48
4.6. Communication with the criminal justice system	50
4.7. Criminal justice outcomes – remand and sentencing	51
Chapter 5: A description of youth cases in the first year of the trial	53
5.1. Numbers of referrals.....	53
5.2. Declining contact	53
5.3. Characteristics and offence type	54

5.4.	Needs identified	55
5.5.	Interventions and activities following identification of needs	57
5.6.	Communication with the criminal justice system and other agencies	60
5.7.	Criminal justice outcomes	61
Chapter 6: Working with partners and making referrals		63
6.1.	Partnerships developed by the L&D service	63
6.2.	Experiences of making referrals	66
Chapter 7: Impacts of the National Model for liaison and diversion		69
7.1.	Impacts on the numbers of cases, needs identified and numbers of appointments and interventions offered	69
7.2.	Impacts on police custody	76
7.3.	Impacts on courts	78
7.4.	Health impacts	86
7.5.	Impact on reoffending	87
Chapter 8: Cost-benefit analysis of the National Model compared to local L&D models		89
8.1.	Impacts on numbers of service users brought into L&D services	89
8.2.	L&D Service Costs	89
8.3.	Criminal Justice System outcomes	91
8.4.	Health Service outcomes	94
8.5.	Overall incremental net monetary benefit	95
Chapter 9: Service user views on the L&D service		97
9.1.	Entry into the service	97
9.2.	Subsequent contact, follow-up and referrals	98
9.3.	Impacts of the L&D service	100
Chapter 10: Conclusions		103
10.1.	How has the national L&D model been implemented in each trial site and how is the model functioning locally?	104
10.2.	What are the immediate, and possible longer term, impacts on local organisations of L&D services?	105
10.3.	What are the impacts on children, young people and adults in contact with L&D services?	106
10.4.	What are the costs and benefits associated with the national L&D model, against appropriate comparators?	106
10.5.	Conclusion and policy implications	107
References		109
Appendix A: Description of the Adult L&D population (April 2014 to March 2015)		113
Appendix B: Further information about the economic evaluation		119
Appendix C: Fields in the Minimum Data Set		127
Appendix D: Evaluation and Data collection approaches investigated in the scoping and feasibility stage		131
Appendix E: Overview of data collected in each area		133
Appendix F: Survey instruments		135

Table of figures

Figure 3.1:	Responses to stakeholder survey - 'To what extent are the following features of the new national L&D model implemented in the L&D scheme in your area?'	32
Figure 4.1:	Number of referrals of adult cases into the L&D service in each area	43
Figure 4.2:	Number of referrals of adult cases into the L&D service in each month (all areas)	44
Figure 4.3:	Flow of adult cases through the L&D services (all areas)	44
Figure 4.4:	Main offence at charge for adult cases (all areas)	46
Figure 4.5:	Number of adult cases with each need identified (all areas)	47
Figure 4.6:	Number of adult cases with previous contact with services (all areas)	47
Figure 4.7:	Activities and follow up for adult cases across each category of need (all areas)	48
Figure 4.8:	Activities and follow-up for adult cases identified as having mental health needs (all areas)	49
Figure 4.9:	Number of adult cases in which appointments were offered for each type of need (all areas)	49
Figure 4.10:	Number of adult cases in which information was communicated to other services (all areas)	51
Figure 4.11:	Remand status of adult cases excluding unknown or missing data (all areas)	52
Figure 4.12:	Percentage of adult cases resulting in each sentencing or criminal justice outcome excluding missing data (all areas)	52
Figure 5.1:	Number of referrals of youth cases into the L&D service in each month (all areas)	53
Figure 5.2:	Main offence at charge for youth cases (all areas)	55
Figure 5.3:	Number of youth cases with each need identified (all areas)	56
Figure 5.4:	Number of youth cases with each mental health need identified (all areas)	56
Figure 5.5:	Number of youth cases with previous contact with services (all areas)	57
Figure 5.6:	Activities and follow up for youth cases across each category of need (all areas)	58
Figure 5.7:	Activities and follow-up for youth cases identified as having mental health needs (all areas)	59
Figure 5.8:	Number of youth cases in which information was communicated to other services (all areas)	61
Figure 7.1:	Number of adult cases after implementation of the National Model and during the pathfinder period (areas 4, 7b, 8 and 10)	70
Figure 7.2:	Total number of adult cases and number of adult cases in which mental health, alcohol misuse and substance misuse needs were identified (pathfinder and trial periods, area 4)	73
Figure 7.3:	Total number of adult cases and number of adult cases in which mental health, alcohol misuse and substance misuse needs were identified (pathfinder and trial periods, area 7b)	74

Figure 7.4:	Proportion of adult cases offered alcohol misuse services per month (pathfinder and trial periods, areas 4, 7b, 8 and 10)	75
Figure 7.5:	Proportion of adult cases referred to substance misuse services (pathfinder and trial periods, areas 4, 7b, 8 and 10)	76
Figure 7.6:	Judges' responses to web survey – 'to what extent do you find information provided by the L&D service to be useful, timely, relevant and accurate?'	79
Figure 7.7:	Proportion of adult cases remanded to custody (pathfinder and trial periods, areas 4, 7b, 8 and 10)	83
Figure 7.8:	Judges' responses to web survey – 'to what extent have you used information provided by L&D services to inform the following decisions made at court?'	84
Figure 7.9:	Proportion of adult cases in which a criminal justice outcome was recorded, who were sentenced to custody (pathfinder and trial periods, areas 4, 7b, 8 and 10)	85
Figure 8.1:	Comparison of costs and population/arrests across sites (trial period), with cost per arrest (£) for economic evaluation sites (areas 2, 4, 6, 7b, 8, 9 and 10)	90
Figure 8.2:	Percentage of total expenditure spent on staffing, by site and time period (areas 2, 4, 6, 7b, 8, 9, 10)	91
Figure A1:	Distribution of age of L&D cases	113
Figure A2:	Number of needs identified for each case referred to L&D services	116
Figure A3:	Percentage of those with mental health needs identified who were identified with each kind of primary mental health need	117
Figure B1:	Outcome of the elicitation exercise: satisfactory discharge rate	120

Table of tables

Table 1.1:	Population covered by the National Model in each of the ten trial sites.....	4
Table 2.1:	Number of interviewees (including interviewees for case studies) per area	11
Table 2.2:	Number of responses to stakeholder web survey, by area.....	13
Table 2.3:	Number of responses to the judges and magistrates' web survey, by area	14
Table 2.4:	Number of service user interviews, by area	15
Table 2.5:	Topics and data collection for case studies	17
Table 2.6:	Summary of areas included in economic evaluation	20
Table 2.7:	Cost and benefit perspectives	22
Table 2.8:	Criminal justice system costs and economic consequences	24
Table 2.9:	Details and costs of initial appointments	26
Table 2.10:	Details and costs of subsequent treatment and costs	27
Table 2.11:	QALY gains from treatment from the Bayesian elicitation exercise	28
Table 4.1:	Adult cases declining contact with L&D services, by identified need (all areas)....	45
Table 4.2:	Adult cases attending appointments, awaiting appointments and not attending appointments for each type of need (all areas)	50
Table 5.1:	Youth cases declining contact with L&D services, by identified need (all areas) ...	54
Table 5.2:	Age of youth cases (all areas)	54
Table 5.3:	Youth cases attending appointments, awaiting appointments and not attending appointments for each type of need (all areas)	60
Table 7.1:	Mean number (and standard deviation) of adult cases with each need identified per month (pathfinder and trial periods, areas 4, 7b, 8 and 10)	71
Table 7.2:	Mean percentage of adult cases with each need identified per month (pathfinder and trial periods, areas 4, 7b, 8 and 10)	72
Table 7.3:	Average percentage of adult cases receiving appointments (pathfinder and trial periods, areas 4, 7b, 8 and 10)	75
Table 8.1:	L&D costs, arrests and case numbers (areas 2, 4, 8 and 10).....	89
Table 8.2:	Criminal Justice Outcomes summary (areas 2, 4, 8 and 10)	92
Table 8.3:	Incremental effects and costs on the criminal justice system, per 1,000 arrests. ..	94
Table 8.4:	Health care appointment attendance (areas 2, 4, 8 and 10).	94
Table 8.5:	Economic evaluation results summary	96
Table A1:	Gender and ethnicity of L&D cases	114
Table A2:	Accommodation and employment status of L&D cases.....	115
Table A3:	Membership of armed services among L&D cases	115
Table A6:	Adult cases registered with a GP.....	116
Table A5:	Health and social needs of L&D services users, compared to main offence at charge	118
Table B1:	Example output from elicitation exercise: HRQOL gains and duration.....	121
Table B2:	Estimated cost per QALY gained for each health need, for both initial appointments and satisfactory discharge.....	121
Table B3:	Calculation of effects of moving from the local to National Model of L&D on criminal justice outcomes	122
Table B4:	Summary of assumptions and exclusions for the economic evaluation	123

Acknowledgements

The research team would like to express our thanks to all those who took the time to be interviewed or to participate in surveys to inform this report – including members of liaison and diversion team service staff and their managers, local commissioners and a range of representatives from local partner agencies working with liaison and diversion service users. We are especially grateful to those service users who allowed the research team to join their discussion groups and those who took part in one-to-one discussions, in which they shared their experiences of liaison and diversion services.

Local project managers, area leads for liaison and diversion services across the ten sites as well as data managers were very cooperative with the research. This allowed the research team to attend local meetings, facilitating our contact with interviewees and survey respondents, as well as service users, and arranging access to local data sets. Police forces in the sites provided essential data on arrests to inform the economic evaluation.

Members of court staff across the sites were instrumental in cascading links to the web survey to judges and magistrates and helping the research team arrange interviews with members of the judiciary. The office of the Senior Presiding Judge processed our application to conduct research with the judiciary and the HMCTS Data Access Panel and members of the HMCTS Performance, Analysis, Reporting Team who approved and supported access to court files during the scoping and feasibility stage. Finance leads at NHS England across the ten sites provided costs data to inform the economic evaluation.

The central team at NHS England have provided continuous support for the evaluation and we are very grateful for their collaboration in decision-making about the design of the research.

Four anonymous peer reviewers appointed by the Department of Health provided helpful comments on earlier drafts of this report (as well as on our original research proposal), for which the research team are grateful. We would like to thank Sarah Ball at RAND who acted as quality assurance reviewer, providing constructive input throughout the project and on earlier drafts of this report.

Members of the expert panel, Isabel Clare, Adrian Grounds, Peter Neyroud, Mike Maguire and Ed Wilson, provided helpful guidance at the outset of the study and valuable feedback on the draft final report, in addition to participating in the Bayesian Elicitation workshop. The research team also benefited from the expertise of Dr Vivek Furtado and Dr Tim Millar who participated in the Elicitation workshop.

Data were collected by the study authors and by Joanna Miler (RAND), Vivien Francis and Helen Shaw (ARCS).

Summary and key findings

Background to liaison and diversion schemes

Liaison and diversion (L&D) services aim to identify those in the criminal justice system who have mental health needs and other vulnerabilities and refer them to appropriate support services to ensure that information about those needs is available to decision-makers in the criminal justice system.

L&D services have been operating in England for at least 25 years. Not all areas have L&D services and among those that do, there is considerable variation in the nature of the services. In 2009, Lord Bradley reviewed the provision of services for people with mental health problems and learning disabilities in the criminal justice system and recommended that a national L&D model be created. Between 2011 and 2013, the Department of Health was supported by an external partner, the Offender Health Collaborative, to develop a national L&D model.

The National Model for L&D, commissioned by NHS England, has the following key features:¹

- Services for all ages (adults and young people), ‘providing an age appropriate response for anyone over the age of criminal responsibility’ (NHS England Liaison and Diversion Programme 2014, 15).
- Twenty-four hour, seven days a week coverage of services.
- Available at all points within the adult and youth justice pathway (including but not limited to police custody and courts).
- Coverage of a range of health issues and ‘vulnerabilities’:² including mental health, physical health and learning disabilities.

The aims of the National Model are to:

- Improve access to healthcare and support services for vulnerable individuals and a reduction in health inequalities.
- Divert individuals, where appropriate, out of the youth and criminal justice systems into health, social care or other supportive services.
- Deliver efficiencies within the youth and criminal justice systems.
- Reduce reoffending or escalation of offending behaviours (Liaison and Diversion Programme 2014, 7).

The National Model for L&D was implemented in ten trial sites in England in April 2014.

¹ The National Model for L&D is contained in two documents: an operating model (NHS England Liaison and Diversion Programme 2014) and a service specification (Liaison and Diversion Programme 2014). The service specification is based on the operating model.

² ‘Vulnerabilities’ is the term used in the operating model and service specification.

Evaluation of the National Model for L&D

An independent evaluation of the implementation of the National Model for L&D in these ten sites was commissioned to address the following objectives:

1. Does the National Model for L&D being trialled have benefits over locally-developed L&D services?
2. Do L&D services, in general, offer benefits in terms of health and criminal justice outcomes, compared to areas with no L&D services?

More specifically, the evaluation aimed to look at the following questions:

- i. How the National Model had been implemented in each trial site and how the model was functioning locally.
- ii. The immediate and possible longer term impact on local organisations of L&D services.
- iii. Impacts on children, young people and adults in contact with L&D services.
- iv. The costs and benefits associated with the National Model for L&D, against appropriate comparators (locally developed L&D services/no L&D services).

The evaluation employed a number of data collection strategies and approaches to analysis, including: an extensive process evaluation (involving interviews across all sites, two web surveys, collection of feedback from a small number of service users and case studies); descriptive and 'before and after' analysis of case management data and an economic evaluation. These approaches are described in detail in Chapter 2.

Strengths and limitations of the evaluation

The strength of this evaluation lies in the qualitative data collected from the wide range of stakeholders involved in or affected by the L&D services across the ten sites. These data provide a detailed picture of how the National Model operated and offer indications of potential impacts and benefits from the National Model.

The evaluation encountered challenges in relation to the availability of quantitative data and identifying a suitable counterfactual. For these reasons it was not possible to address objective 2 (whether the National Model for L&D offered benefits compared to areas with no L&D services). Objective 1 (does the National Model for L&D have benefits over locally-developed L&D services) could only be addressed quantitatively in relation to four of the ten trial sites and in relation to selected criminal justice and health impacts. Key limitations of the evaluation, stemming from a lack of data, are set out in Box S1 and should be taken into account when interpreting findings, particularly from the quantitative analysis. These are described in further detail in Chapter 2. The steps taken by the research team to overcome these challenges are summarised in Chapter 2 and explained in more detail in Appendix D.

The research team advise policy makers, commissioners and practitioners to be cautious in relying on findings from the before and after analysis or the economic evaluation to inform decisions about further roll-out or assessments of cost effectiveness. The limitations of the quantitative elements of the evaluation are such that the findings do not provide a definitive basis for such decision-making. The qualitative findings are a somewhat stronger evidence base, to the extent that they provide insight into the ways in which L&D services work and the barriers and facilitators to implementation and operation of these schemes.

Box S.1 Limitations of the evaluation approach

It was not possible to devise a robust evaluation approach that compared the National Model for L&D with areas with no L&D services. This was due to a lack of data available about the population who would have accessed L&D services if they had existed in these areas. The research team went to considerable lengths to devise an approach to address this and to identify a suitable counterfactual (see Box 2.1), but lack of data meant this was not possible. Appendix D provides further information about this. The evaluation therefore does not address objective 1.

The ten trial sites all had existing, locally-designed L&D services before the introduction of the National Model of L&D: These sites were selected for the trial because they had the most developed services of all areas applying to be in the trial. Findings may therefore not be generalisable to areas with no existing L&D services. The evaluation looks at the incremental impact of moving from the existing, local models of L&D to the National Model – it does not look at the differential impact of introducing the National Model in an area with no L&D services (which might have potential for greater impact).

There were limited quantitative data on the impacts of the National Model for L&D on health outcomes and on the range of vulnerabilities covered by the operating model: The quantitative ‘before and after’ analysis and economic analysis are limited to examining impacts on mental health, alcohol misuse and substance misuse and do not cover the wider range of vulnerabilities included by the National Model of L&D. Even for these three issues, the evaluation explores outcomes only through proxy indicators (referrals made by L&D services to other services and whether first appointments with these services were kept). The evaluation relied on information recorded by the trial sites in their case management database (the minimum data set) and there was a relatively high proportion of missing data, especially in relation to health and criminal justice outcomes.

Before and after comparison and economic analysis was possible in only four of the ten sites: Due to changes in the geographic area covered by the L&D schemes before and after the implementation of the National Model and limited data availability, only four sites are included in the quantitative before and after analysis to determine the impact on health and criminal justice outcomes. The four sites included were selected because of the consistency of coverage during the pre and post periods and because they had good data quality and availability. This means that these sites were amongst the most mature and developed even before the introduction of the National Model for L&D, which diminishes the likelihood that the evaluation will detect an incremental impact of the National Model.

Lack of a control group: The before and after comparison cannot adequately control for other factors that have changed over the period of interest.

This summary sets out key findings in relation to each of the four research questions.

How has the National Model for L&D been implemented in each trial site and how is the model functioning locally?

Implementation status and the functioning of the trial schemes

The implementation of the National Model for L&D had resulted in significant changes in all ten sites. The National Model was, on the whole, implemented by the second year of operation across all ten sites. Compared to the L&D services operating before the trial:

- There were more members of L&D staff – many of whom were co-located in police stations, magistrates’ courts and some crown courts. Interviews with L&D practitioners and representatives from partner agencies indicated that, generally, members of L&D staff were working routinely in police custody suites and had become part of the normal functioning of detention processes.
- Members of L&D staff based in police custody suites were able to gain access to patient information systems from mental health and other services – this was a vital element of the National Model allowing members of L&D staff to determine if detained persons were known to services and learn about their needs and case histories.
- Courts and police stations were covered for more days of the week and hours of the day.

- L&D services were screening for and assessing a wider range of vulnerabilities.
- As a result, information was being provided to police and courts that was not previously available.

That is not to say that all elements of the National Model specification were fully implemented in all sites. Securing service user involvement in L&D services and operating in the crown courts were mentioned in a number of areas as not fully implemented. The extent to which each element was implemented differed between sites.

Initial entry into the L&D service was primarily through police custody, but a range of other referral routes had also been established (in particular for young people who tend not to be brought into police custody suites). The service specification for the National Model lists a large number of possible referral routes into the L&D service and referrals from a wide range of sources were mentioned by interviewees – including appropriate adult services, schools and social services. Referral routes from voluntary attendance³ were still in development and proved challenging to arrange. Sites often had many possible voluntary attendance locations and without members of L&D staff based in these locations to pick-up referrals, the system relied on police officers being aware of the L&D scheme.

The National Model specifies the provision of support workers as part of the L&D service and these members of staff were thought to play a valuable role and were seen as a strength of the National service. This role is to support service users in accessing services to which they are referred and to ensure they attend at least the first appointment. There was a strong view across interviewees and across sites that support workers were able to fill a possible service gap between contact with members of L&D staff in custody and the first appointment with a service in the community. Support workers provided ‘hands-on’ practical help to service users, supported engagement and referrals, but would also meet with service users to just talk.

As well as assessment and referral, important parts of the L&D worker and support worker role were engaging service users, providing reassurance in custody or in court and motivating service users to accept support. Being able to engage service users in the assessment process and further referrals were considered important skills for members of L&D staff. The roles were also said to involve acting as an advocate on behalf of service users to negotiate access to services.

Partnerships between police and L&D services were generally strong and the L&D service was valued in the custody suite. The operation of the L&D service rests on cooperation and partnership with other agencies and working with the police was seen as essential for the service. The expertise and knowledge of members of the L&D staff was appreciated by a range of professionals who worked for other partner agencies, in particular, police in the custody suite. Some areas reported that the L&D service worked more effectively when staff members were based close to, but not in, police custody. This helped staff maintain the perception (among service users) that they were independent of the police and could be a practical solution to limited physical space in some police custody environments.

L&D services were intertwined with a number of existing services and partnerships. The evaluation aimed to isolate the impact of the L&D service from services and resources from other funding sources, agencies and so on. In reality, L&D services sometimes shared resources with other services. This was particularly the case with young people, where L&D services made use of professionals based in youth offending services.

The vast majority of stakeholders, across the range of partnership agencies, reported that the information provided by L&D services was useful. A small number raised questions about the quality of the reports. A template for court reports was introduced in March 2015 to provide a consistent approach to information reporting.

Stakeholders expressed generally positive views concerning the implementation of the service for young people. The extent to which L&D services for young people were already established in trial sites before the introduction of the National Model varied. A reduction in the numbers of young people entering the criminal justice system via police custody in recent years meant that trial sites needed to establish alternative routes through which young people entered the L&D service.

³ Voluntary attendance refers to those individuals who have voluntarily agreed to be interviewed by the police but have not been arrested and taken to police custody.

As with adults, an important part of the role of L&D practitioners was engaging young people in the assessment process. Most of the young people entering the L&D services were already connected to other services and members of L&D staff reported good links with these other services. The provision of L&D services to young people benefited from the partnerships with other agencies already developed by local Youth Offending Teams (YOTs), although this varied across sites.

Impacts on the numbers of cases, needs identified and numbers of appointments and interventions offered

Analysis comparing four sites⁴ before and after the implementation of the National Model shows an increase in the number of adult cases identified. However, the percentage of adult L&D cases (in those four sites) in which needs were identified was lower in the National Model trial period than before. It appears that the increase in cases did not result in a *proportionate* increase in the number of needs identified. This finding should be interpreted in light of the important limitation that these four sites likely had the most developed L&D services before the implementation of the National Model. The change in the proportion of cases in which needs were identified varied between sites.

In the four comparable sites, there was no significant difference in the number and proportion of appointments offered⁵ to adult service users following implementation of the National Model, apart from appointments relating to learning disabilities and financial needs. There was little difference in the number and proportion of appointments offered in the sites before and after the introduction of the National Model. Further analysis found that in many cases any increase in appointments offered was not significant. There was a small, statistically significant increase in the *number* of cases in which an L&D service user was offered an appointment with local services providing support for learning disabilities ($b=0.85$, S.E. 0.237, $p=0.001$) and for financial issues ($b=0.518$, S.E. 0.202, $p=0.012$). The only change in the *proportion* of L&D cases where an appointment was offered for any given need was for learning disability appointments, where there was a small but significant increase ($b=2.05$, S.E. 0.762, $p=0.008$). This is important, as one objective of the National Model was to widen the scope of vulnerabilities covered, beyond mental health issues, to cover learning disabilities.

These findings regarding the number of appointments offered before and after introduction of the National Model should be interpreted with the knowledge that all four sites had existing L&D services similar to the National Model. In the four sites in which data were available, the number of appointments offered for particular needs became more consistent across sites after introduction of the National Model, potentially indicating a more standardised approach.

As with adult cases, the numbers of young people referred to the L&D service varied between sites. Between April 2014 and January 2015, the number of referrals of young people increased slowly. Mental health needs were the most frequent type of need identified among young people. There was very little information available on criminal justice outcomes for young people.

⁴ As explained above, before and after comparison and economic analysis was possible in only four of the ten sites: Due to changes in the geographic area covered by the L&D schemes before and after the implementation of the National Model and limited data availability

⁵ This refers to appointments offered to L&D service users with, for example, mental health or learning disability services, by members of L&D staff. 'Offered' includes appointments attended, appointments not attended and appointments awaited.

What are the immediate, and possible longer term, impacts on local organisations of L&D services?

Impacts on the police

The evaluation found evidence of the following impacts in the first 18 months of implementation:

- Increased numbers of people with vulnerabilities are identified in custody.
- Through the provision of expert assessment, members of L&D staff were said to be providing valuable advice to the police. The presence of L&D services meant that information was available more quickly. Interviewees from the police described L&D as providing reassurance to police custody staff, sharing responsibility for assessment and decision-making about difficult cases.
- Information from the L&D service has informed police charging and remand decisions in some instances.
- Information about detainees' vulnerabilities could increase, as well as decrease, the likelihood that a case was prosecuted rather than diverted.
- L&D was perceived to lead to more efficient processing of detainees in police custody in some cases, which could lead to time savings for the police

Impacts on the courts

Following the introduction of the National Model of L&D, there was a consensus among judges, magistrates and other stakeholders participating in the evaluation that there had been an improvement in terms of the amount and quality of information reaching the court.

- The L&D service was reported to provide relevant and timely information to the court.
- Judges and magistrates reported that the service was providing information that was not previously available (or would only have been available if a report was ordered). This quicker availability of information could speed up court processes in some instances.
- Similar to comments made by police officers working in police custody, information from the L&D services could enhance magistrates' confidence in their decision-making, provide reassurance and verify claims made by defendants that they had mental health problems.
- There is evidence that information from the L&D service has avoided the need for an adjournment in some cases, but judges and magistrates were cautious in claiming that the L&D service had an impact on the number of adjournments.
- Judges, magistrates and other stakeholders thought the L&D service could inform case management decisions, such as decisions about the use of special measures.

Impacts on service delivery agencies to which L&D services make referrals

- Based on the interview and web survey data, there is no indication that the L&D services were dramatically increasing demands on referred-to agencies and services in a way that resulted in capacity issues for those agencies. However, most agencies to which L&D services users might be referred were operating under more general resource constraints.
- The evaluation team are not able to draw conclusions about the extent to which L&D services were consistently experiencing problems in getting other agencies to take on L&D service users. Taking all sites together, housing and benefits were perceived to be the most difficult services to refer to. There were comments in some sites that service users with learning disabilities, in particular, often did not meet the local threshold for learning disability services. However, reported capacity issues were specific to particular agencies in particular areas (and perhaps at particular times). It was not always easy to distinguish in the interview data between capacity issues and threshold issues. As mentioned above, L&D workers saw their role as including acting as an advocate for service users and in some cases described challenging decisions by agencies not to accept referrals.
- The flexibility of L&D to provide short-term support, through the support workers and through work undertaken by members of L&D staff, was reported by interviewees to fill a gap in immediate access to support. Where there were waiting lists for appointments with other agencies and services, the support

workers were able to maintain contact with service users, remind them about appointments and work to sustain service users' motivation to engage.

- There was a perception that L&D services might increase short term and decrease longer-term demand. Some stakeholders thought that the L&D services were acting as an early intervention service, identifying people in need of support early on, which, although creating additional short-term demand, could mean that long-term consumption of services was reduced.
- L&D practitioners did not always know whether service users continued to engage with a service, or what the outcomes were. This was commented on by some interviewees as hampering their ability to monitor the effectiveness of different referral routes. Interviewees expressed an appetite for increased feedback from agencies about the progress of referrals.

What are the impacts on children, young people and adults in contact with L&D services?

Impacts on needs identified and referrals for interventions for adult cases

Of all adult cases referred to L&D across the ten sites, about 40 per cent were referred for one or more interventions. Seventy per cent had information about the case communicated to the criminal justice services. Forty-two per cent of those referred to the L&D service (or 53% of those who were initially screened) were referred to one or more interventions.

Impacts on remand

There was some evidence from interviewees and web survey respondents that information from the L&D service could inform decisions on whether to remand an individual to custody from court. This received some support from work undertaken as part of the economic analysis, which found that the National L&D model diverted a higher proportion of cases away from remand compared to the local service. However, other analysis of information in the case management minimum data set found a reduction in remand that was not statistically significant.⁶ Given the high proportion of missing data, these results should be treated with caution.

Impact on sentencing

Interviewees thought that the L&D service could inform sentencing decisions. Judges and magistrates indicated that they had used the information from L&D services to inform decisions about the conditions to attach to a community sentence and to decide whether to impose a custodial or community sentence.

However, the consensus among stakeholder interviewees, judges and magistrates that the L&D service had impacted sentencing decisions was not reflected in findings from analysis of data from four trial sites. This found little difference in the proportion of cases receiving a custodial sentence. However, this result should be interpreted cautiously. It could be that impacts on sentencing take time to materialise and were either not captured, or not captured accurately in the data sets.

Health impacts

The evaluation was not able to collect any quantitative data on health impacts, but interviewees were asked to comment on whether they thought the L&D service resulted in health impacts for service users. Overall, interviewees hoped that impacts would materialise as a result of early identification of vulnerabilities and referrals to support services.

Respondents commented on individual cases where positive health impacts were identified. While descriptions of this kind are difficult to quantify and it is hard to assess the extent to which they were typical or the extent to which such impacts were widespread, they resonated with feedback from service users, who often noted in relation to their own case that they would have been much worse off if not for the L&D involvement.

⁶ These two analyses used different methods, baselines and looked at different areas.

Service user views on the L&D service

The evaluation was able to gather feedback from a small number (18) of service users. The experiences of those participating in the evaluation, however, is probably not representative of others' experience; all had engaged in the service and those agreeing to participate in the evaluation are likely to be different from those who did not. With those limitations in mind, the following key points were made by those participating in the research:

- Service users reported developing rapport with members of L&D staff.
- The L&D service could provide reassurance during a distressing time.
- The L&D service provided practical support to access referrals.
- 'Being available to talk' was an equally important element of the service as receiving referrals and practical support.

What are the costs and benefits associated with the national L&D model, against appropriate comparators?

For the economic analysis, the evaluation considers the incremental effects of the National Model of L&D compared to the local models operating in the areas before the National Model was rolled-out. It looks at effects on the health service and the criminal justice system, as well as impacts in terms of service users' net contribution to the economy. The evaluation considers costs and benefits accruing in a one-year period.

The findings of the economic analysis should be interpreted in light of the broader limitations of the evaluation (summarised in Box S1 and outlined in Chapter 2). In particular, the economic evaluation compares previous, local L&D services with the National Model using an uncontrolled before and after study design. It does not consider the costs or benefits of moving from no L&D services to the National Model. Key limitations of the economic evaluation are summarised in the box below.

Box S2: Key limitations of economic evaluation

Data availability meant that only four of the ten areas in the trial were included in the economic evaluation – the findings might not be generalisable to other areas – and the analysis combines data from across these sites.⁶

There was a significant proportion of missing data, particularly related to final criminal justice outcomes (68% missing across the four sites) and first health care appointment attendance (76% missing across the four sites) in the trial period.⁷

There was no information available about whether L&D service users continued to engage in services to which they were referred and the outcomes of that treatment (and how long those outcomes lasted). These outcomes had to be estimated.

The 'before and after' approach cannot control for changes, other than the L&D service, which might have impacted outcomes.

There is a lack of clarity regarding the appropriate criminal justice counterfactual for incrementally referred cases (i.e. those cases entering the L&D service in the National Model, but who would not have done so in the local model). There is no information about whether their risk of reoffending, risk of being remanded and risk of receiving a custodial sentence is the same as for cases in the L&D services before the implementation of the National Model.

The specific needs of the L&D service user population may require alternative treatment pathways to be developed if the value of their health care is to be judged by the same yardstick as that for other health care interventions for the general population.

⁷ Of the four sites included in the economic evaluation, only three of these were also included in the before and after analysis of the trial minimum data set.

⁸ The proportion of missing data varied between sites.

The key findings from the economic evaluation are as follows:

- The mean cost of the national L&D service per head of general population across the seven sites supplying cost data⁹ was £0.77 (range £0.44 to £1.35). Across the four sites included in the economic evaluation the comparable mean cost was £0.83 (range £0.58 to £1.35). The cost per arrest varied considerably across the four sites included in the economic evaluation, from £26 to £54.
- The incremental cost of moving from the local to the National Model of L&D service provision in the four sites was £14,110 per 1,000 arrests (relative increase of 68%) and -£34 per service user (relative decrease of 8%).
- In the four sites included in the economic evaluation the National Model diverted a higher proportion of cases away from remand compared to the local service (14.1% (95% CI 13.2 to 14.9%) cf. 26.7 per cent (95% CI 25.5 to 27.9%, $p < 0.001$). The effect on ‘final’ criminal justice outcomes was less clear: the reduction in the custodial sentence rate was small and not statistically significant (14.1% (95% CI 13.0 to 15.4%) cf. 15.6% (14.4 to 16.9%, $p = 0.089$), with no real evidence of diversion from custodial to community sentences.
- Because those entering L&D in both periods had a higher propensity to be held on remand or sentenced to custody compared with national average figures (Ministry of Justice 2014), the incremental net monetary benefit of the National Model in terms of criminal justice outcomes (remand and custody) would have been positive if the probability of each criminal justice outcome amongst those incrementally referred by the National Model was the same as that amongst those referred by the local model. Had this probability been closer to the national average for all arrestees, the net monetary effect of the National Model would have been negative. The implications of this finding relate more to the need for better data on which to base evaluation of L&D services, than they do to the need for action by policy makers. The evaluation team urge caution in using these findings as the basis of decision-making about roll-out. These findings point to the need for better information about a comparison group with which L&D service users could be compared.
- Compared to the local models operating in the areas before the roll-out of the National Model, there was a fall in the proportion of L&D cases (13.3%) being given an initial health care appointment with services providing support for mental health, alcohol misuse and substance misuse (the three needs included in the economic evaluation) (95% CI 12.7 to 14.1%) cf. 14.6% (95% CI 13.6 to 15.5%), $p = 0.039$) but an increase in the attendance rate (85.8% (95% CI 82.0 to 89.5%) cf. 78.7% (95% CI 75.9 to 81.7%), $p = 0.007$).
- The estimated impacts on health service costs and health benefits to L&D cases, for the three health needs considered in the economic evaluation, were (per 1,000 arrests): (1) an additional 5.48 initial appointment attendances, (2) an additional 1.85 satisfactory discharges, (3) additional health service treatment costs resulting from this additional care of £2,996 and (3) 0.2 additional Quality Adjusted Life Years (QALYs).
- Including both the L&D service and health service costs, the mean cost of getting one additional service user to an initial appointment was estimated at £2,641. This cost should be interpreted with the knowledge that the L&D service is expected to lead to wider benefits beyond health care – not all of the L&D service cost should be allocated to health care.
- Using only health service treatment costs and the mean expected QALY gains, only the treatment for mental health needs would be considered cost-effective using what is considered to be the National Institute for Clinical Excellence’s lower threshold of £20,000 per QALY.
- Combining the effect of moving from the local to National Model of L&D on L&D service costs, criminal justice service costs and economic consequences, health service costs and health benefits to L&D cases, an overall incremental net benefit would only be realised if the incremental service users entering the National Model L&D service were ‘more of the same’ in terms of their likely criminal justice outcomes. However, this finding should be treated cautiously, given the limitations of the data available.

⁹ Cost data were requested from all ten sites. Cost data were provided by the four sites included in the economic analysis (areas 2, 4, 8 and 10) and by three additional sites (areas 6, 7b and 9).

Evaluation conclusions

The main strength of this evaluation is the qualitative information collected from the wide range of stakeholders involved in or affected by the L&D services across the ten sites. These data provide a detailed picture of how the National Model operated and offer indications of potential impacts and benefits from the National Model.

Stakeholders were overwhelmingly positive about the National Model. It was perceived to have resulted in an increase in useful information about vulnerabilities being provided to decision-makers in the criminal justice system and closer working between mental health, other professionals and the police and courts.

Findings from interviews and web surveys make an important contribution to the knowledge base and highlight potentially promising practices for further roll-out and possible impacts of the new National Model service.

The evaluation encountered many challenges in collecting robust quantitative data about the impacts of the National L&D Model. These challenges can be best overcome if further roll-out of the National Model is designed to maximise the opportunities for evaluation (for example, phasing roll-out randomly to provide a more robust counterfactual). It is also important that data on health and criminal justice impacts are consistently collected in order to facilitate robust evaluation of impacts on a range of outcomes, including but not limited to health and mental health needs.

Chapter 1 Background to the Offender Liaison and Diversion Trial

1.1. Introduction to liaison and diversion

In recognition of the higher prevalence of mental health problems and other vulnerabilities of those involved with the criminal justice system, there have been a number of initiatives and policies designed to improve access to services. Liaison and diversion (L&D) is one such initiative. The term ‘Liaison and Diversion’ has been used to refer to a range of activities, but broadly:

- The term ‘liaison’ is used to describe making a link or a connection between criminal justice services and health or social care services.
- The term ‘diversion’ is used to indicate referrals into health and other services, possibly diverting individuals out of the criminal justice system altogether (not charging or prosecuting) or diverting them from a custodial to a non-custodial sentence.

L&D services have been operating in England for at least 25 years. The first court L&D scheme was set up in 1989 and several L&D schemes were established in police stations in the 1990s (James 1999). These schemes included elements of liaison and/or diversion and some had both. A 1990 Home Office circular to courts outlined the government’s policy on dealing with ‘mentally disordered’ offenders, including the options of diverting these people away from the criminal justice system when prosecution was not in the public interest (Home Office 1990). Furthermore, the circular stated that:

[...] this policy can be effective only if the courts and criminal justice agencies have access to health and social services [which] requires consultation and co-operation, and this circular aims to provide guidance on the establishment of a satisfactory working relationship between courts, criminal justice agencies and health and social services

Home Office, 1990

Until the L&D trial that is the subject of this evaluation was launched in April 2014, the provision of L&D services was decided locally and as such ‘had grown up through sporadic, local innovation’ (NHS England 2014a, 11). This meant that some areas had these services and others did not, but also meant that there was a great deal of variation as to what L&D services included and in the quality and accessibility of those services (James 1999; Offender Health Research Network 2011). L&D services for children and young people were particularly underdeveloped (Harrington and Bailey 2005; Healthcare Commission and HM Inspectorate of Probation 2009; HM Government 2009a).

1.2. Developing a National Model of liaison and diversion

In 2009, Lord Bradley reviewed the provision of services for people with mental health problems and learning disabilities in the criminal justice system and recommended that a national L&D model be created (Bradley 2009). In the same year, the government committed to the development of a standard, national L&D model (HM Government 2009b; Liaison and Diversion Programme 2014). While these initial commitments focused on adults in the criminal justice system, the government published a report alongside this in which it acknowledged the need to divert young people from the youth justice system into health services (HM Government 2009a).

Between 2011 and 2013 the Department of Health was supported by the Offender Health Collaborative¹⁰ to develop a national L&D model (NHS England 2014a). This National Model was laid down in a standard service specification (NHS England 2014a). A standard minimum data set to be recorded by L&D services was also developed (NHS England 2014b). The fields included in this data set (which was the main source of information about L&D services available to this evaluation) are listed in Appendix C.

Aims and objectives of the National Model for L&D

As set out in the service specification, the National Model for L&D has the following aims:

- 'Improved access to healthcare and support services for vulnerable individuals and a reduction in health inequalities.
- Diversion of individuals, where appropriate, out of the youth and criminal justice systems into health, social care or other supportive services.
- To deliver efficiencies within the youth and criminal justice systems.
- To reduce re-offending or escalation of offending behaviours' (Liaison and Diversion Programme 2014, 7).

An overview of the National Model for L&D

The National Model for L&D is commissioned by NHS England and has the following key features:

- Services for all ages (adults and young people).
- Twenty-four hour, seven days a week coverage of services, with exact service hours based on local needs and views of stakeholders and 'consisting of a mix of operating times and out-of-hours arrangements, including links to existing services and provision' (NHS England Liaison and Diversion Programme 2014, 5).
- Available at all points within the adult and youth justice pathway (including police custody, courts and voluntary attendance).¹¹
- Coverage of 'a wide range of health issues and vulnerabilities' (NHS England Liaison and Diversion Programme 2014, 5). These are listed in Box 1.1.

The service specification and the operating model outline three phases (Liaison and Diversion Programme 2014; NHS England Liaison and Diversion Programme 2014):

- **Case identification.** This is described as:

A lay activity carried out by youth or criminal justice practitioner[s] to identify an initial cohort of individuals for further scrutiny and, where appropriate, assessment by a liaison and diversion practitioner. Case identification should be completed using a validated tool and/or agreed method. This also allows for self-referral or referral from family, friends and carers or from relevant agencies

NHS England Liaison and Diversion Programme 2014, pp. 15-16.

The service specification lists a wide range of agencies and individuals that might make referrals into the service (see Box 1.2).

¹⁰ The OHC 'is a partnership between specialist organisations which has been set up to develop an operating model to meet the needs of all those who are in contact with the criminal justice system with mental health problems and/or a learning disability. It advances and promotes better thinking, practice and outcomes in offender health and criminal justice for the National Liaison and Diversion Development Network' (Nacro 2015). The following organisations are part of the OHC: Nacro, Cass Business School, the Centre for Mental Health, Revolving Doors Agency and the Centre for Health and Justice, Institute for Mental Health at the University of Nottingham (Nacro 2015).

¹¹ The national L&D model does not include street triage, removal and detention as laid down in Section 136 of the Mental Health Act 1983 or intervention in prison.

Box 1.1: Examples of conditions to be covered under the National Model of L&D

For adults:	For children and young people:
<ul style="list-style-type: none"> • Acquired brain injury • Autistic spectrum • Learning disabilities • Mental health • Personality disorder • Physical health • Safeguarding issues • Substance misuse. 	<ul style="list-style-type: none"> • Acquired brain injury • Attention deficit hyperactivity syndrome • Autistic spectrum • Learning disabilities • Looked after children (LAC) status • Mental health (including conduct disorder, emerging symptoms and multiple risk factors for poor mental health) • Physical health • Safeguarding issues • Child protection issues • Speech, language and communication needs • Substance misuse.

Source: *Liaison and Diversion Programme 2014, 9-10*. Note that this is a non-exhaustive list.

- **Screening.** L&D practitioners use screening tools to identify whether individuals have any of the specified vulnerabilities, and if so, to identify the need for involvement by an L&D practitioner, levels of risk and urgency and the need for further screening or assessment. At this stage an individual can be taken onto the L&D case load and/or referred to another agency.
- **Assessment.** 'Individuals identified as needing the involvement of the practitioner will be offered an assessment to identify any needs they have in regards to mental health, learning disabilities, drug and alcohol, physical health and social care needs' (Liaison and Diversion Programme 2014, 11).

Box 1.2: Agencies and individuals able to make referrals into the L&D service, under the National Model

<ul style="list-style-type: none"> • A&E staff (if covering IOM service and able to accept referrals from A&E) • Alcohol and drug services • Appropriate Adults • Arrest-referral workers • Carers and family members/friends • Community mental health teams • Criminal courts • Crown Prosecution Service • Custody escort services 	<ul style="list-style-type: none"> • Custody healthcare providers • Defence lawyers • Police • Prisons • Probation service • Self-referrals • Social workers • Youth offending teams
--	--

Source: *Liaison and Diversion Programme, 2014*

In practice, a person identified as vulnerable or in need of services (at any point of the criminal justice system) is invited to meet with an L&D practitioner. The practitioner then conducts an assessment to identify any needs that the person has. Specialist assessment is sought when appropriate. The practitioner can then use the information collected in two ways:

- To refer the person to health or social care services – for example, treatment for depression or anxiety or support with learning disabilities.
- To help the police, Crown Prosecution Service and courts make better decisions about how to deal with that person – for example, a court might decide that a person experiencing mental health problems, who is receiving treatment, should get a community sentence rather than go to prison.

Roll-out of the National Model

The National Model for L&D was implemented in ten trial sites in England in April 2014 (one in each NHS England region). These sites - referred to as ‘wave one’ sites - are using the service specification for the National Model to commission L&D services in the area. The National Model was rolled-out to a further 13 sites in April 2015 during ‘wave two’ (NHS England 2014c) and as such now covers around 50 per cent of the population of England. Pending the production of a business case, roll-out across England is under discussion within NHS England.

The wave one sites were selected on the grounds that they all had established L&D services (although none had all the elements of the National Model). Areas included in later ‘waves’ of roll-out will have progressively less experience of L&D schemes and ‘waves’ three and four would include sites which previously had no dedicated L&D scheme.

The ten wave one sites are not named in this report, but are referred to by an area number. The table below shows the population covered by the National Model in each area, showing that there is considerable variation in the population covered by each scheme.

Table 1.1: Population covered by the National Model in each of the ten trial sites

Area	Population covered by National Model
1	316,960
2	750,300
4	800,000
4	1,000,000
5	2,559,407
6	1,575,075
7	667,222
8	1,645,022
9	338,738
10	1,555,816

Source: information provided by the areas in their bids to be a trial site

1.3. Existing evidence on the effectiveness of liaison and diversion

While hypotheses have been generated as to what impact L&D services might have, there is not much existing systematic research into these schemes and the evidence base on when and how they can be effective is extremely limited. A literature review conducted by the research team found that existing studies into L&D services employed research designs which do not allow firm conclusions to be drawn about the outcomes and impacts of these schemes. Similarly, a narrative review found that ‘much of the published literature is based on a mixture of expert

opinion and descriptive work rather than robustly designed quantitative or evaluative studies' (Kane et al. 2013, 4).¹² Existing research also evaluated schemes targeting different service user groups implemented in different countries, which makes it difficult to identify relevant and generalisable conclusions for the current, English context.

A systematic review on the effectiveness of diversion schemes in North America concluded that 'diversion programs exist at multiple levels within the criminal justice process, and likewise, have variations in their effectiveness for each of the desired outcomes evaluated, as well as in their breadth of research support' (Lange et al. 2011, 200). A recent systematic review of L&D schemes, while generally reporting a positive impact (Scott et al. 2013), only included one UK study, which evaluated a compulsory diversion system for those with serious mental health needs in London (James et al. 2002).

The five-year progress report of the Bradley Review stated that 'clear evidence of benefits [of the impact of L&D] remains unavailable', but that 'there is sufficient evidence to justify further service development and research' (Durcan et al. 2014, 5). Based on a literature review conducted by the research team, previous research findings are as follows:

- Diversion schemes have increased the numbers of people who are referred to mental health services (James 1999; James & Harlow 2000; James & Hamilton 1991; Kingham & Corfe 2005; Pakes & Winstone 2009).
- There is some tentative evidence that court diversion schemes were associated with positive impacts on mental health (but this seems to vary by types of health problem) (Joseph and Potter 1993; Rowlands et al. 1996).
- There is similar, tentative evidence that youth diversion schemes were associated with significant reductions in overall health needs, levels of depression and self-harm (Haines et al. 2012).
- One study found no evidence that a youth L&D scheme resulted in lower reconviction rates but did find longer periods of desistance from offending (Haines et al. 2012).
- A narrative review by Kane et al. (2013) found some limited evidence that diversion schemes could reduce time spent in court.
- An evaluation of liaison services in England found that the implementation of a formal Service Level Agreement between mental health services and the criminal justice system led to a reduction in adjournments (Hean et al. 2009).

There are also significant evidence gaps in relation to economic evaluation. L&D schemes cost money and while they may result in savings in the criminal justice system, they generate additional costs to health, social and community care services (Hughes et al. 2012; Cowell et al. 2013). Economic evaluations of L&D schemes undertaken to date have predominately been undertaken in the United States (Cowell et al. 2004; Cowell et al. 2013; Zarkin 2012; Ridgely et al. 2007). Neither these studies, nor those which have been undertaken in the UK (Parsonage 2009; Haines et al. 2012) incorporate the value of the health improvements gained by those receiving healthcare that they otherwise would not have gained and thus underestimate the total societal gain of L&D services.

To fill some of the gaps in knowledge, an independent evaluation of the implementation of the National Model of L&D model in the ten wave one sites was commissioned. The following chapter describes the aims of the evaluation and the methods used.

¹² A review conducted by the Offender Health Research Network (2011) indicated that 'there is no particularly strong national, or indeed international, research evidence base to inform the continued proliferation and expansion of diversion services. [...] Of the research that has been published, most studies do not evaluate anything other than immediate outcomes through, for example, the reporting of short-term routine data, for example numbers of clients seen and types of immediate disposal. Other types of evidence consist of papers commonly written by practising diversion clinicians, frequently offering qualitative, process-driven descriptions of the services they offer, often without any meaningful or objective critique of their work' (pp. 15-16). For examples of studies found by the Offender Health Research Network, of which some are included in this section, see Offender Health Research Network (2011).

Chapter 2: The evaluation of the liaison and diversion trial

RAND Europe, in collaboration with the University of Warwick and Applied Research in Community Safety Ltd (ARCS), was commissioned by the Department of Health, and funded by the Department of Health Policy Research Programme (Project PR-R8-0913-11005), to undertake an evaluation of the offender Liaison and Diversion trial schemes. The evaluation was commissioned in May 2014 and data collection took place between April 2014 and August 2015.

Research ethics approval was granted by the National Research Ethics Service Committee East of England – Essex. NHS research governance approval was granted by the relevant NHS trusts. In addition, the study was reviewed and approved by the National Offender Management Service (NOMS) National Research Committee.

2.1. Research objectives and questions

The evaluation sought to answer the following questions in relation to the ten wave one sites:

1. Does the National Model for L&D being trialled have benefits over locally-developed L&D services?
2. Do L&D services, in general, offer benefits in terms of health and criminal justice outcomes, compared to areas with no L&D services?

More specifically, the evaluation looked at the following four questions:

- i. How the National Model for L&D had been implemented in each trial site and how the model was functioning locally.
- ii. The immediate, and possible longer term, impact of the implementation of the National Model on local organisations of L&D services.
- iii. Impact on children, young people and adults in contact with L&D services.
- iv. The costs and benefits associated with the National Model for L&D, against appropriate comparators (locally developed L&D services/no L&D services).

As described further in Section 2.3, lack of data meant that it was not possible to address objective 2 (whether the National Model of L&D offered benefits compared to areas with no L&D services) and objective 1 (does the National Model of L&D have benefits over locally-developed L&D services) could only be addressed *quantitatively* in relation to four of the ten trial sites, and in relation to selected criminal justice and health impacts.

2.2. Overview of the approach

Following an initial six-month scoping and feasibility period (described in Section 2.4) a research approach involving the following four strands of data collection and analysis was devised:

- Strand 1: Process evaluation
 - Data collection in all sites via: interviews with stakeholders; web survey of stakeholders; web survey of judiciary; service user feedback.
 - Data collection in selected sites through case studies on: impact on courts; the role of support workers;

impacts on referred-to agencies and services; impacts in the police custody suite; pathways into L&D for young people.

- Strand 2: Descriptive analysis of information recorded in the trial minimum data set.
- Strand 3: Before and after comparison using information in the trial minimum data set.
- Strand 4: Economic analysis.

Each of these strands is described in detail in Sections 2.3 to 2.4.9. Appendix E provides an overview of the areas included in each strand of the evaluation and the data collected in each.

2.3. Strengths of the evaluation and challenges in data availability

The strength of this evaluation is the qualitative data collected from the wide range of stakeholders involved in or affected by the L&D services across the ten sites. These data provide a detailed picture of how the National Model operated and offer indications of its potential impacts and benefits.

In Sections 2.3 to 2.4.9 limitations for each of the data collection and analysis approaches are outlined. In addition to these specific issues there are a number of important limitations that apply across all the evaluation activities that should be borne in mind when interpreting findings from this evaluation. These are outlined in the list below.

The research team advise policy makers, commissioners and practitioners to be cautious in relying on findings from the before and after analysis or the economic evaluation to inform decisions about further roll-out or assessments of cost effectiveness. The limitations of the quantitative elements of the evaluation are such that the findings do not provide a definitive basis for such decision-making. The qualitative findings are a somewhat stronger evidence base, to the extent that they provide insight into the ways in which L&D services work and the barriers and facilitators to implementation and operation of these schemes.

- **It was not possible to devise a robust evaluation approach that compared the National Model for L&D with areas with no L&D services.** This was due to a lack of data available about the population who *would* have accessed L&D services if they had existed in these areas. The research team went to considerable lengths to devise an approach to address this and to identify a suitable counterfactual (see Box 2.1), but lack of data meant this was not possible. Appendix D provides further information about this. The evaluation therefore does not address objective 1.
- **The lack of a control group and the use of a before and after design in comparing the National Model to local L&D services.** The evaluation employs a before and after design in looking at the impacts on service users. The before and after comparison cannot adequately control for other factors that have changed over the period of time of interest.
- **Challenges of a before and after design are exacerbated because the ten trial sites had well-developed locally-designed L&D services before the introduction of the National Model of L&D:** The approach to roll-out of the National Model posed some challenges for evaluation. Sites were selected because they had the most developed services of all areas applying to be in the trial. Findings may therefore not be generalisable to areas with no existing L&D services or those with less developed local services. The evaluation looks at the incremental impact of moving from the existing, local models of L&D to the National Model – *it does not look at the differential impact of introducing the National Model in an area with no L&D services* (which might have potential for greater impact).
- **Before and after comparison and economic analysis were possible in only four of the ten sites:** Due to changes in the geographic area covered by the L&D schemes before and after the implementation of the National Model and limited data availability, only four sites are included in the quantitative analysis undertaken to determine the impact on health and criminal justice outcomes. The four sites included were selected because of the consistency of coverage during the pre and post periods and because they had good data quality and availability. This means that these sites selected were amongst the most mature and developed even before the introduction of the National Model for L&D, which diminishes the likelihood that the evaluation will detect an incremental impact of the National Model.
- **There were limited quantitative data on the impacts of the National Model of L&D on health outcomes.** Health outcomes are not recorded in the trial minimum data set. The data set records referrals

to services to address identified needs and whether first appointments were kept. The evaluation uses these as proxy indicators for health outcomes.¹³ Data were not available on whether a service user continued with a course of treatment to which they were referred by the L&D service. This meant that the costs of using the health care system and other services needed to be estimated. An important element of the effectiveness of the L&D trial is its impacts on health, but these were not able to be determined by the end of the data collection period. The evaluation has explored health outcomes qualitatively.

- **The evaluation looks at a narrow range of outcomes.** The before and after analysis and economic evaluation focuses on L&D cases recorded as having one of three kinds of need: mental health, alcohol misuse and substance misuse. The National Model covers a much wider range of vulnerabilities.
- **Variation between sites:** While all ten sites implemented the National Model, their experience of implementation and operation of the scheme varied. For this reason, the evaluation team are cautious in generalising findings between sites, especially those related to barriers and facilitators to operation and local partnership arrangements.
- **Missing data.** The quantitative elements of the evaluation relied on information recorded in the trial minimum data set. Unfortunately, there was a relatively high proportion of missing data, in particular in relation to the criminal justice outcomes of L&D cases – whether a service user was remanded to custody and whether, and if so how, they were sentenced (40% missing data on whether the case was remanded to custody and 74% missing data on the final criminal justice outcome of the case).

Box 2.1 lists the approaches to the evaluation that were investigated by the evaluation team (and in many cases were the preferred approach), but were not possible to implement, due to lack of data availability. Further details are provided in Appendix D.

Box 2.1: Evaluation approaches investigated in the scoping and evaluation phase, but not implemented

- Comparisons between Liaison and Diversion Trial sites and areas with no dedicated Liaison and Diversion service.
- Constructing a matched comparison group with which to compare L&D service users using Police National Computer data.
- Using a difference-in-difference design to compare the trial sites to sites using local models of L&D.
- Linking to L&D service users' records in the Hospital episode statistics inpatient data set; Hospital episode statistics accident and emergency data set; Mental Health Minimum Data Set – to further describe the population of L&D service users.
- Linking to L&D service users' records in the Police National Computer, the Ministry of Justice Linked data set and the Offender Assessment System (OASys) database – to further describe the population of L&D service users.
- Accessing quantitative data from the courts service about the number of adjournments and numbers of psychiatric reports.

The best option for ascertaining the causal effect of the National Model for L&D would have involved the randomisation of the roll-out (areas would be randomly assigned into implementation and non-implementation groups using a standard 'wait-list' approach from the pool of eligible areas, some would be randomised to begin 'now', some in one year, others the year after). As mentioned in the conclusions to this report, the evaluation team recommended that further roll-out of the National Model is designed to maximise the opportunities for evaluation including phasing roll-out randomly to provide a more robust counterfactual.

Given the lack of data available for this evaluation, it is also important that data on health and criminal justice impacts are consistently collected (either by L&D schemes themselves, or from national databases such as the Police

¹³ Data about health outcomes could have been accessed by linking to health data sets, for which service user consent would have been required. Attempts were made, with the support of NHS England, to ask L&D service users to consent to data linkage. As explained in Appendix D, it was not possible to secure this consent.

National Computer). To do this, L&D service users are required to consent to their records being linked to other data sets holding information about criminal justice and health outcomes. Of course, this should be done in compliance with ethical standards of research, data protection and confidentiality. The research team are also aware that increased data collection could place additional burdens on members of L&D staff.

2.4. Description of the scoping and feasibility stage and the four strands of the evaluation

2.4.1. Scoping and feasibility assessments

The evaluation included a six-month scoping phase to determine the methodological approach to be employed for the outcome and economic evaluation. This involved:

- A workshop with the central team overseeing roll-out of the National Model in order to select the key outcomes on which the evaluation should focus and to explore the availability of data.
- Visits to each of the ten trial sites.
- Sixty-eight interviews with members of L&D staff across ten sites.¹⁴
- Interviews with national policy leads from key government departments.
- A review of previous research into L&D services.
- A review of data collected by the sites before and after the implementation of the National Model, in order to establish data availability and quality.

2.4.2. Stakeholder interviews

In addition to the 68 interviews conducted in the scoping and feasibility phase, the research team conducted interviews with 177 respondents across all ten trial areas (with respondent numbers in each area ranging from 11 to 28)¹⁵ (see Table 2.1). Interviews were conducted across a wide range of organisations and roles, including:

- Representatives at strategic level and those who participated on local L&D boards.
- Frontline members of L&D staff such as nurses and outreach workers.
- Custody staff such as custody sergeants.
- Court staff.
- Staff from referred-to-agencies such as substance misuse agencies and mental health services.

A number of individuals were interviewed both during the scoping and feasibility and in the later stages of the research. Some interviewees were specifically invited to participate because of their knowledge in relation to the five case study topics (see Section 2.4.6). As a result of interviewing this variety of stakeholders from different organisations the research team is confident that a wide range of views were captured.

¹⁴ Respondent numbers in each area ranged from five to nine. Interviewees were primarily representatives at strategic level and those who participated on local L&D Boards. Potential respondents were selected by the research team from lists of key stakeholders used locally, sometimes in discussion with project coordinators

¹⁵ In some areas, more interviews were conducted as part of case studies (see Section 2.4.6).

Table 2.1: Number of interviewees (including interviewees for case studies) per area

Trial site	Number of interviewees
Area 1	11
Area 2	26
Area 3	14
Area 4	14
Area 5	20
Area 6	25
Area 7	28
Area 8	12
Area 9	15
Area 10	12
Total	177

Potential respondents were selected by the evaluation team from lists of key stakeholders locally, mostly provided by project coordinators, or other staff involved in the L&D service. All respondents were contacted by email and provided with a participant information sheet, including a summary of the project and details about confidentiality and consent. Interviews were conducted in person or by telephone, using a semi-structured interview guide. Consent to take part in the interview was sought at the start of the interview orally and recorded on tape. The interview guide was tailored for the particular background and role of each interviewee, but generally covered the following topics:

- Current implementation status of the L&D trial (e.g. anything left to be implemented and challenges).
- Staff and training (e.g. numbers and grades and training for members of L&D staff).
- Partnership working (e.g. challenges and strengths in working with partner agencies).
- Service users (e.g. service user engagement and service user feedback).
- Young people (e.g. coverage of young people and challenges in providing services to young people).
- Impacts (e.g. on court and custody suite processes, on health and on the criminal justice system).
- Cost-benefit impacts (e.g. current and future savings or costs).
- Key lessons from implementation.

The interviews were audio recorded and most were fully transcribed. Notes (where there was no transcript) and transcripts were imported into a software package (Nvivo) for coding and analysis. The approach to analysis was first to code content using a framework linked to the key topic areas in the topic guide. Content coded within this framework was then examined in more detail to identify themes, assess levels of consensus or disparity in relation to key issues and to assess the extent to which sites varied in terms of their experiences.

Limitations

The qualitative data collected through interviews provide a detailed picture of how the National Model operated, capture a wide range of perspectives and offer indications of potential impacts and benefits from the National Model. Some of the most useful contributions of this evaluation stem from these qualitative data.

While it was not possible to speak directly to all those involved in the sites, the evaluation team have confidence that all key perspectives were covered (for example, no new themes appeared to be emerging from additional interviews). There was also a great deal of variation between trial sites and for this reason interview findings are considered indicative of a particular site, not necessarily generalisable to other areas.

2.4.3. Web survey for stakeholders

The evaluation included a web survey of the range of local stakeholders involved in the L&D services. In total there were 77 responses to the web survey. This number was lower than the evaluation team had expected.

Distribution of the survey

The distribution of the stakeholder survey was through a combination of:

- The research team sending a link to the survey directly to potential respondents in five trial sites.
- Circulation of the link to the survey by members of L&D staff in five of the trial sites.

The evaluation team requested L&D services provide contact details for individuals who were involved with or had some knowledge of local L&D work – including members of the core L&D team, middle and senior managers, members of the L&D governance boards and in the extended team of professionals in partner agencies.¹⁶

Five of the trial areas indicated that they would prefer to cascade the survey link to potential respondents themselves, using their existing contact lists, rather than sending the latter to the evaluation team.

Links to the web survey were distributed in early June 2015 and the survey closed in late July 2015. A series of reminders were sent to boost response rates.¹⁷

Survey content

The survey included both closed and open questions on the following topics:

- Details on respondents' organisation and role in current L&D work
- Implementation of the new national L&D model
- Referring L&D service users to services
- Receiving referrals from L&D services
- L&D work in police custody suites
- L&D work in courts
- Emerging impacts
- Key lessons.

Respondents could skip sections if they did not feel able to answer the questions, could select a 'don't know' option for all questions and were invited to make further comments at the end of the survey. The survey instrument is included in Appendix F.

Response rate

Since five trial sites distributed the survey themselves, it was not possible to calculate the response rate. The total number of responses included in the analysis was 77. However, the number of respondents providing a response for each question differed. Responses were received from all areas, but the numbers varied between areas (Table 2.2). The evaluation team took steps to boost response rates by sending reminders and leaving the survey open for an extended period.

¹⁶ Five of the trial areas provided the team with contact details or mailing lists, which the team then checked to ensure that respondents who had already been interviewed would not also be sent a survey link. Some potential respondents who did not appear to be appropriate were also removed from these lists. Contact details for 248 individuals were eventually used to disseminate the survey link with accompanying documentation.

¹⁷ A reminder was sent two weeks later both to everyone on the initial lists and to those areas that had decided to cascade the survey internally. When there were still no returns from some areas that had agreed to cascade, a further three reminders (including one from the central team at NHS England) were sent to those areas in the period following the first reminder. The survey was extended on two occasions after that and communications on those occasions were sent to all trial areas (whether they had cascaded or not).

Table 2.2: Number of responses to stakeholder web survey, by area

Area	Count
Area 1	3
Area 2	5
Area 3	6
Area 4	8
Area 5	9
Area 6	5
Area 7	13
Area 8	3
Area 9	4
Area 10	7
No Response	14
Total	77

Analysis

Answers from respondents that partially or fully completed the survey were included for analysis but it was decided to exclude data from those respondents that only opened the survey but did not respond to any of the questions. Some respondents partially filled in one survey and then completed a new survey so only their completed survey was included for analysis.

Survey data were imported into Excel and subsequently analysed (descriptive analysis and cross-tabulations) using data analysis software R.¹⁸ For each question, the analysis looked at the total number of responses as well as the responses provided by each area. The free text responses were subject to thematic analysis, similar to that conducted on interview data.

Limitations

While a precise response rate cannot be calculated, the number of responses was low compared to the number of agencies and professionals known to be working on or with L&D services. With small numbers of responses per area, and the fact that experiences varied between areas, findings from the survey are treated cautiously and might not be generalisable. However, they do provide data against which to validate interview findings.

2.4.4. Web survey for judges and magistrates

A second web survey was used, aimed at only magistrates and judges working in courts in the trial sites. The link to the web survey for judges and magistrates was distributed in mid-June and closed in late July. In total there were 227 respondents. Approval to conduct the survey was given by the Senior Presiding Judge.

Distribution of the survey

The link to the survey was sent to judges and magistrates by representatives in magistrates' and crown courts in each of the ten sites.

¹⁸ R Development Core Team (2008).

Survey content

The survey contained questions on the following topics:

- Awareness of the L&D service in the area.
- Nature, relevance, timeliness, usefulness and accuracy of the L&D data received.
- Impacts of L&D information on court decision-making and processes.
- Strengths and limitations of the L&D service in the area.

The survey instrument is provided in Appendix F. The majority of questions were multiple choice, with some opportunity for free text response.

Responses

As with the stakeholder survey, it was not possible to calculate a response rate. Responses were received from all areas, from both crown court judges and magistrates. The total number of responses was 227. However, the number of people that provided a response for each question differed.

Table 2.3: Number of responses to the judges and magistrates' web survey, by area

Area	Count
Area 1	18
Area 2	17
Area 3	15
Area 4	35
Area 5	18
Area 6	7
Area 7	24
Area 8	39
Area 9	23
Area 10	27
Total	227

Limitations

Fifty-four per cent of respondents had not heard of the L&D service. This meant that the number of respondents who provided answers to questions about experience with the L&D service was 93. Due to limitations of the survey design, it is not possible to distinguish responses from magistrates, crown court judges and district judges. These groups would be expected to have differing levels of contact and knowledge of L&D services.

2.4.5. Service user feedback

To arrange service user interviews, discussions were held with L&D members of staff in each site to determine what the scope might be for service user interviews and the best approach to this. Although this study originally aimed to capture views from both young people and adults involved in the L&D service, L&D members of staff advised against interviewing young people, given difficulties with obtaining their consent and that of their parents'. As such, it was decided to only interview those L&D service users who were over 18 years of age.

L&D professionals tend to engage with service users at crisis points, when individuals with mental health issues become involved in the criminal or youth justice system, and those times are not ideal for research data collection (both for quality and ethical reasons). In some sites L&D professionals had developed mechanisms to seek feedback

from service users and the evaluation team made use of these in some circumstances in order to identify potential respondents. Feedback was gathered in three ways:

- One-to-one interviews with service users, arranged individually between team members and local L&D workers, and taking place at neutral locations in the community, not including the service users' own home (examples are a community centre, offices of a local project or organisation or an eating facility).
- One-to-one interviews with service users, scheduled as part of 'drop-in' days or sessions at local venues known to service users (such as the offices of a local project or organisation).
- Small group discussions with service users, again at local venues.

The evaluation gathered feedback from eighteen service users across six areas: four of these participated in a larger discussion group in one of the areas and fourteen were interviewed one-to-one.

Table 2.4: Number of service user interviews, by area

Area	Count
Area 1	0
Area 2	5
Area 3	0
Area 4	2
Area 5	1
Area 6	4
Area 7	3
Area 8	0
Area 9	3
Area 10	0
Total	18

The total number of respondents was a lower number than hoped. It proved extremely difficult to schedule appointments or sessions with service users and to secure attendance at scheduled meetings. Service users were, perhaps not surprisingly, wary about speaking with the research team, even in areas where engagement with service users was well-developed by L&D services.

Details concerning the research were provided to service users at two stages: local contacts who discussed the research with potential respondents provided details both verbally and in writing (in the form of a participant information sheet) to them; at the point of interview (individual or group), researchers again provided details to participants and gave them the opportunity to ask questions. Details concerning confidentiality and anonymity were described to service users (and clear references made to the limits to this confidentiality).¹⁹ Respondents were required to give clear agreement to have conversations audio recorded and were advised that they could end the discussion at any time and could decline to comment on any issues that they would prefer not to discuss with the interviewer.

Once all of these issues had been covered appropriately and the service user had had an opportunity to raise questions or concerns, they were invited to sign a consent form that had been agreed previously with the National Research Ethics Service Committee. Researchers with experience in interviewing vulnerable respondents conducted the interviews and used their own expertise to assess the service user's consent. An additional mechanism to assess

¹⁹ It was explained that confidentiality was ensured except if the service user talked about causing harm to himself/herself or another person or about illegal activity that they have not told anyone about before. If such matters were raised the research team would inform a representative of the National Offender Management Service (NOMS).

consent was that local members of staff were involved in identifying potential respondents and exercised professional judgement as to whether they considered a service user was able to consent to an interview.

The conversations with service users covered their involvement with and experience of the local L&D service. The main questionnaire/topic guide was semi-structured, which enabled a flexible interview approach, and had been agreed with the National Research Ethics Service Committee. All interviews were audio-recorded, transcribed verbatim and analysed in the same way as the stakeholder interviews.

Limitations

The main limitation concerns the small number of service user interviews conducted and as such, the findings may not reflect the views of all L&D service users. Furthermore, it is likely that service users who were willing and able to provide feedback to the evaluation team were not typical of other service users. It was not possible to speak to service users who chose not to engage in the L&D service. It is also worth noting that the team's access to service user respondents was often secured via L&D workers themselves and those workers will have made their own judgments about which service users were appropriate for the team to interview.

On reflection, the research team believe that an approach based on greater involvement from public and patient representatives in the recruitment of service users might have yielded more interviews and would have overcome the selection effects of relying on members of L&D staff to select interviews. While the research team attempted to identify participants through established groups representing service users, an alternative approach could have been to ask such groups to themselves lead recruitment (of course, this would require appropriate ethical and research governance review and protocols).

2.4.6. Case studies

The purpose of the case studies was to focus in more detail on five issues that emerged as particularly challenging or important during the scoping and feasibility phase, and/ or to focus on an outcome that (due to lack of available quantitative data) could not be investigated across all ten trial sites.

The case studies were conducted through interviews with key practitioners in selected sites. Interviews were guided by short protocols setting out number of questions about each case study topic. The topics for the five case studies, the data collection for each and the areas in which data were collected are summarised in Table 2.5.

Some of the case study interviewees were also stakeholder interviewees (see Section 2.4.2). For these interviews, questions from the relevant case study interview protocol were asked after questions from the stakeholder interview protocol. Some individuals who had not been involved in the stakeholder interviews were contacted specifically for the case study interviews. Apart from interviews with judges and magistrates, the number of interviews conducted for the case studies is reported in Table 2.1.

Table 2.5: Topics and data collection for case studies

Case study topic	Description and data collection	Areas in which data were collected
1. Impact of L&D services on courts	This case study collected further information about whether and how magistrates and judges used information provided by L&D schemes in their decision-making. The case study involved interviews with magistrates and judges (described below).	Areas 6, 8 and 10
2. The role of support (outreach) workers	The focus of this case study was on the activities of support workers. Data collection was through interviews with support workers.	Areas 2, 5 and 9
3. Referred-to agencies	The case study involved interviews with a manager and a practitioner from selected agencies to which L&D service users were referred, to explore (among other things) whether staff in these agencies had heard of L&D, whether they were receiving more referrals, issues around their capacity to see L&D clients, and issues around whether L&D service users met the threshold for services.	Areas 1, 4 and 5
4. Impact on police custody	Through interviews with police officers, this case study explored: overlaps and coordination with, and impacts on, existing services in police custody suites (including health care, drugs and alcohol services, etc.); the requirements that L&D services placed on those managing the custody environment and staff administering the detention process; the impact of L&D, if any, on the time that detainees and arresting officers spent in police custody.	Areas 3, 4 and 6
5. L&D pathways for young people	The case study involved interviews with representatives from local Youth Offending Teams and other partners involved in work with young people.	Areas 7 and 9

Interviews with judges and magistrates

Interviews were conducted with seven magistrates across two sites (areas 8 and 10) and two crown court judges in site 6.²⁰ Approval for these interviews (as for the web survey of judges) was obtained from the Senior Presiding Judge. Once permission was granted, court managers in the three areas contacted the Chair of the Bench or the senior judge, giving them an information sheet about the study and the interview and asking if they agreed to being contacted by the research team. The interviews were conducted by telephone. Consent to participate was recorded on tape.

The objective was to collect more detailed insights to complement information collected in all areas through a web survey of judges and magistrates (see Section 2.4.4) regarding what impact, if any, the L&D service had had on decision-making at court. The interview was guided by a protocol that covered:

- Whether judges were aware of the L&D service.
- How often they were made aware that a defendant had been seen by the L&D team.
- How the court was provided with information by the L&D service.
- The extent to which interviewees found the information to be relevant, timely, useful and accurate.
- What impact (if any) the information provided had upon the number of adjournments, decisions to use special measures, case management decisions, sentencing decisions.
- The strengths and limitations of the L&D service.

Limitations

Case studies prioritise the collection of detailed information about individual views and practices over generating generalisable findings. Accordingly, caution should be taken in generalising findings to other areas, although the web survey of judges and magistrates provided an opportunity to triangulate interview data.

²⁰ The number of interviews was small in accordance with a case study methodology which does not aim to necessarily generate generalisable conclusions, but aims for depth of understanding.

2.4.7. Descriptive analysis of the L&D population and L&D service processes using the trial minimum data set

Each of the ten trial sites collected a minimum data set that consisted of information on each L&D case, including individual demographic data, accommodation and employment data, offence, referral to L&D, needs identified through L&D assessment, previous contact with services, referrals made, outcomes of referrals, information communicated to different organisations, remand status and criminal justice outcome. A list of fields contained in the data set is provided in Appendix C.

The research team performed a descriptive analysis of the data available in the minimum data set. This analysis looked at:

- Identified needs among L&D cases.
- Interventions offered.
- Outcomes of interventions.
- Information provided to criminal justice services.
- Criminal justice outcomes (whether the case was remanded to custody and whether the case ended with a custodial or community sentence).

Additional analyses were performed into the links between needs identified and appointments offered and criminal justice outcomes. Limitations of this strand of the evaluation are described in Section 2.4.8.

2.4.8. Before and after comparison in four trial sites

Information in the minimum data set during the operation of the L&D scheme trial period (April 2014 to March 2015) was compared to data relating to the operation of the L&D scheme during a previous period (August 2012 to July 2013) before the trial started – referred to as the ‘pathfinder’ period. During the pathfinder period (the period in which the National Model specification was being designed), existing L&D services in a number of areas were asked to collect data on L&D activities and outcomes. This pathfinder minimum data set is similar to the trial minimum data set. This enabled the evaluation team to undertake a comparison of activities and outcomes before and after the implementation of the trial. In particular, this analysis looked at changes in:

- The number of L&D cases.
- The needs identified.
- Appointments offered for L&D service users.
- Criminal justice outcomes (whether the case was remanded to custody and whether the case ended with a custodial or community sentence).

This analysis was conducted for four of the ten sites (4, 7b,²¹ 8 and 10).²² As explained in Section 2.3, this was due to changes in the geographic area covered by the L&D schemes before and after the implementation of the National Model and limited data availability. Only four of the National Model trial sites had collected data during both the pathfinder period and trial period covering the same geographical area. The before and after analysis only looked at adult cases, not cases of young people because services for young people prior to April 2014 had a very different scope and coverage.

This research used fixed effects multilevel regression models to analyse changes in the proportion of cases with identified needs and appointments offered across sites between the two time periods. These models account for clustering of observations by site and control for time-constant differences between sites and for the number of L&D cases seen per month.

²¹ Area 7 included two sub-areas that completed their minimum data set separately. The before and after analysis looked at only one sub-area.

²² See Appendix E for an overview of the data collected and analysis conducted in each site.

Limitations to the descriptive analysis and the before and after analysis

Missing data in the trial minimum data set. Including data that were not present and data that were recorded as ‘unknown’ across all trial sites, there was 34-36 per cent missing data on needs identified, 30-35 per cent missing data on interventions, 37-39 per cent missing data on outcomes and 21-28 per cent missing data on information passed to criminal justice services. Missing data were higher for criminal justice outcomes: 40 per cent missing data on whether the case was remanded to custody and 74 per cent missing data on the final criminal justice outcome of the case. Part of the reason for the high level of missing data in relation to outcomes is that L&D services have to collect this information ‘manually’ from third parties (such as courts, health and other services). This was time consuming, data were not easily available, and often outcomes were not yet known if the case was ongoing.

Before and after comparison in only four sites and for adults only: These four sites are unlikely to be representative of the other wave one trial sites.

Lack of a control group: The before and after comparison cannot adequately control for other factors that have changed over the period of time of interest, which are not a result of the L&D trial, and may confound our comparison. This means we cannot draw causal conclusions about the implementation of the National Model of L&D.²³

2.4.9. Economic evaluation

Aim and objectives of the economic evaluation

The primary aim of the economic evaluation was to undertake a cost-benefit analysis of the National Model L&D service provided for adults,²⁴ compared with the local L&D service for adults in place in the previous year, in four sites. Therefore, the economic evaluation seeks to consider whether investing in further roll-out of the National Model of L&D would produce a positive monetary pay-back to society.

Achieving this aim required the following objectives to be met:

1. Estimate the incremental cost, per 1,000 arrests, of the National Model for L&D compared with the local L&D service.
2. Estimate the incremental effect of moving from the local to National L&D Model on the costs/savings and economic consequences (productivity/state benefits and value of community payback activities) of service users’ criminal justice service outcomes per 1,000 arrests.
3. Use data on the incremental number of initial health care appointments attended, per 1,000 arrests, to estimate the incremental cost of providing health care (to the NHS) and the incremental health gains, measured in Quality Adjusted Life Years (QALYs).
4. To integrate the incremental L&D service, criminal justice system and health service costs/savings with health gains valued in money terms and estimate the total incremental net monetary benefit of the National Model for L&D compared to the local service.

As with the rest of this study, the economic evaluation does not compare the National Model of L&D with no L&D service provision, nor is it possible to include contemporaneous controls (sites with local service provision in both time periods). This is because of a lack of data from ‘control’ sites.

Sites included

The economic evaluation included four of the ten trial sites in which the National Model for L&D was rolled-out (areas 2, 4, 8 and 10). As explained above, it was not possible to include all ten wave one national sites in the

²³ The research team undertook extensive scoping work to compare the wave one sites with areas that had no L&D services – see Box 2.1 and Appendix D.

²⁴ A number of sites did not include comparable services for young people prior to April 2014. This created a lack of comparability between time periods. Therefore, the economic evaluation only included adults and adult L&D services.

pre-post analysis because of concerns regarding comparability in service provision between the pre and post periods.²⁵ A summary of the characteristics of the four sites included is shown in Table 2.6. Data on arrests and L&D referrals relate to adults only.

Table 2.6: Summary of areas included in economic evaluation

Area	Population	Local/pre period		National/post period	
		Arrests	L&D referrals	Arrests	L&D referrals
2	750,300	13,167	515	11,486	2,935
4	800,000	30,374	729	36,147	1,742
8	1,645,022	34,368	3,264	31,367	3,830
10	1,555,816	29,408	673	34,856	1,554

Time frame and price year

The 'pathfinder period' (when local L&D services were in operation) was between August 2012 and July 2013 (although some sites submitted comparable costs data for the financial year April 2013 to March 2014). The time in which the National Model was implemented was April 2014 to March 2015.

The evaluation considers costs and benefits accruing in a one-year period (following the point of initiation of treatment for health effects and final criminal justice outcome date for criminal justice outcomes).²⁶

All costs and benefits have been valued in 2014/15 prices. Non-health care costs from the pre (local) period have been inflated using the Consumer Price Index (CPI) (Office for National Statistics 2015a) to September 2014 prices, as recommended for inflating future costs in economic evaluation by the Treasury Green Book (HM Treasury 2014). Health care costs have been inflated using the Hospital and Community Health Services (HCHS) index or Personal and Social Services pay and prices index, as appropriate (PSSRU 2014). At the time of analysis, the 2014/15 indices for health care were not available and we have used an estimate of a 1 per cent increase from 2013/14 based on previous values (PSSRU 2014).

Population

The economic analysis was conducted for all adults (those aged 18 or over at the time of arrest) entering the L&D service in the four areas listed above.

Criminal justice outcomes included in the economic evaluation

Using data recorded in the trial minimum data set and the pathfinder data set, the outcomes of interest for all L&D service users are:

- Whether the case is recorded as being remanded to custody.
- Final criminal justice outcome: custodial sentence, community sentence or other disposal.²⁷

²⁵ The before and after analysis evaluation, described in Section 2.4.8 did not include area 2 because dates were not available in the data set from that area, meaning it could not be used for an analysis by month. Area 7b was included in the before and after analysis but not included in the economic analysis because arrest data were not available from that site.

²⁶ This time frame precludes the inclusion of the effect of the intervention on reoffending behaviour, either in terms of potential savings to the criminal justice system or the value of any such crime averted to society. This is primarily because no reoffending data for those entering the L&D service have been collected and also because of the short time-gap between the end of the evaluation period (March 2015) and analysis (July 2015). There is mixed evidence from elsewhere that L&D schemes can reduce reoffending rates (Parsonage 2009; James et al. 2002; Haines et al. 2012).

²⁷ See Appendix C for a list of fields included in the trial minimum data set.

One of the intended aims of L&D is to divert service users away from remand, or from custodial to community sentences (or to another type of disposal from the criminal justice system e.g. a caution). If this occurs, then there is a cost saving to the criminal justice system since a prison place is no longer required. This saving may be reduced by the cost of a community sentence. If a service user is diverted from prison, then there are further economic consequences which are included in this evaluation:

- The service user might have a job and by working productively, contribute to national income (Gross Domestic product, GDP), increasing the saving from diversion from prison.
- The service user might be in receipt of state benefits (e.g. Job Seeker's Allowance), which imposes a further cost on the taxpayer, reducing the saving from diversion from prison.
- The service user may be required to undertake unpaid Community payback activities (e.g. clearing up graffiti), which has value to society.

Health outcomes included in the economic evaluation

The economic evaluation focuses on L&D cases recorded as having one of three kinds of need:²⁸ mental health, alcohol misuse and substance misuse.²⁹ These health needs were selected because they were the most common (together accounting for around 90 per cent of referrals in the data sets) and can be addressed or treated by health and social care services.

Perspective and costs and benefits included in the evaluation

Table 2.7 summarises who pays for/benefits from the provision of the National Model of L&D, for each of the costs and benefits included in the evaluation. The table also shows which costs and benefits are included in the analysis for each of the four aims of the economic evaluation listed above.

²⁸ The case management database records if cases are referred for one or more of the eleven different needs that can be recorded in the minimum data set: physical health, mental health (which is subcategorised into 11 specific conditions), learning disability, social and communication, alcohol misuse, substance misuse, accommodation, financial, gang involvement, abuse victim. See Appendix C for the fields available in the minimum data set.

²⁹ It was not possible within the resources available for the evaluation to include the other needs.

Table 2.7: Cost and benefit perspectives

Cost/Benefit	Who pays/benefits (perspective)	Economic analysis aim			
		L&D service costs	Impact on criminal justice outcomes	Impact on health outcomes	Overall impact
L&D service costs	Spending by the L&D service provider, paid via NHS England and ultimately the taxpayer . Opportunity costs, such as unpaid overtime, are excluded.	✓	✓	✓	✓
Criminal Justice System costs	Criminal justice system costs relating to remand, custodial and community sentences and probation are paid by Ministry of Justice and ultimately the taxpayer .		✓		✓
Criminal Justice System consequences: Production of goods and services while not in prison, proxied by wages²⁹	Production affords a contribution to the national economy as GDP.		✓		✓
State benefits received while not in prison	Paid by the Department of Work and Pensions and ultimately the taxpayer .				
Community payback activities as part of Community sentences	The monetary value of activities undertaken accrue to the taxpayer .				
Health service costs	Costs of initial appointments and full treatments, paid via the NHS and ultimately the taxpayer .			✓	✓
Health benefits from treatment	The benefit of QALYs gained from initial appointment attendance and treatment completion accrue to the L&D service user .			✓	✓

Unit of analysis

The unit of analysis for the evaluation is per 1,000 arrests.³¹ The denominator cannot just be those service users who enter the L&D service, because an intended outcome of the National Model compared with the local model is to increase the number of people who enter the L&D service. This means the service users who are incrementally referred (i.e. those who are referred in the National Model but who would not have been in the local model) will be systematically different.

To preserve site anonymity, we combined data across the four sites prior to undertaking our analyses.

³⁰ We do not consider the psychological value of not being incarcerated to the L&D service user who is diverted from a custodial sentence to an alternative (but appropriate) criminal justice pathway, nor any societal 'atonement' value attached to custodial sentences. The lack of data on the value of freedom has been noted by Landsburg, who suggests the best available proxy is the wages that could have been earned (Landsburg, 2012). However, this is not a suitable proxy in this evaluation, since wages are used as a measure of productivity.

³¹ We acknowledge that while being arrested and brought into police custody is the primary entry point to L&D services, there are some other entry points – for example, through courts or voluntary attendance at the police station.

Data

L&D Service costs

Costs for the pre and post periods in various categories (e.g. staffing, overheads, travel and training) were obtained from each site's application to take part in the trial and clarified by requesting confirmation of actual spending.³² Where a breakdown by type of provision (adult/youth) was not provided, non-staff costs were apportioned to only include the provision of adult services.³³

Criminal Justice System costs/savings and economic consequences

The data required to estimate criminal justice system costs/savings for each outcome were obtained from Ministry of Justice or other relevant publications and integrated as detailed in Table 2.8 below. Costs from previous years were inflated to 2014/15 prices using the CPI as noted above.

Remand and final criminal justice outcomes were recorded for L&D service users in the minimum data set. In terms of final criminal justice outcomes, we consider (1) custodial sentences and (2) community sentences and their consequences for wages/state benefits and community payback activities. Outcomes were not known for all service users, due to both missing data and timing issues (not all cases had a known outcome at the time data were provided to the research team for analysis). Therefore, outcomes for any service users with unknown criminal justice outcomes were extrapolated using the outcome rates for service users with known outcomes.

Although Table 2.8 considers all outcomes in terms of costs, we would expect the costs associated with changes in remand and custodial sentences and the consequences relating to wages and the value of Community payback activities to be realised as savings from L&D. For example, we expect the National Model of L&D to reduce a service user's risk of being held on remand. For every service user diverted from remand, there is a net total saving of £3,700 (the cost of one spell of remand of £4,897 less the net effect of wages and state benefits of £1,197).

³² Costs were also requested from the trial sites not included in the economic evaluation, although they were only obtained from three sites.

³³ In three sites this was done using the proportion of total expenditure on staffing allocated to adult. In the fourth site, where staffing allocation to adults/youth was not known, the research team estimated this using the proportion of all L&D assessments that were for adult cases.

Table 2.8: Criminal justice system costs and economic consequences

Cost element and unit	Cost, £ 2014/15 or value	Source(s)	Rationale/comments (all costs quoted here are inflated to 2014/15 prices)
Average cost of one spell on remand (should be realised as a saving)			
Average cost of a day in prison ³⁴	£69	Ministry of Justice 2013c	Cost per prisoner averaged across all types of custodial institution, based on direct resource expenditure (£25,250 per year).
Average length of time spent on remand	10 weeks	Ministry of Justice 2013f	
Average cost of provision of health care in prison per day ³⁵	£0.96	Brooker et al. 2008	Average expenditure per prisoner on mental health in-reach (£349 per year). ³⁶
	$(69 \times 10 \times 7) + (0.96 \times 10 \times 7)$ = £4,897		
Average cost of a custodial sentence (should be realised as a saving)			
Average cost of a day in prison	£69	Ministry of Justice 2013c	Cost per prisoner averaged across all types of custodial institution, based on direct resource expenditure (£25,250 per year)
Average length of a custodial sentence served	283 days	Ministry of Justice 2014; Pathfinder data Pathfinder data First Time In Prison 2015	Average sentence length of 615 days of L&D service users in pathfinder period estimated using crime type data and national average sentence lengths for those crimes (see Appendix B). 70% of L&D service users given a custodial sentence were held on remand (average remaining sentence = $615 - (0.7 \times 10 \times 7) = 566$ days.) Prisoners released half-way through their remaining sentence.
Supervision on licence post-custody per prisoner	£2,724	Ministry of Justice 2013a	
Average cost of provision of health care in prison per day	£0.96	Brooker et al. 2008	Average expenditure per prisoner on mental health in-reach (£349 per year).
	$(69 \times 283) + 2724 + (0.96 \times 283)$ = £22,523		

³⁴ We were unable to incorporate differences in the duration of remand or sentences, or cost variations related to the types of sentencing institution between arrestees with and without L&D needs identified, since no data on these variables have been collected.

³⁵ While health care costs for those in custody are met by the NHS, they are included within criminal justice system costs given the focus of the analysis in this section is on the effect of the intervention on time spent in prison. The effect on the results is minimal since health care costs represent around 1% of the daily prison costs.

³⁶ Because almost all prisoners have mental health needs (prevalence >90%, Brooker et al. 2008), using the per-prisoner average is a sufficient approximation for spending on those who do have such needs. The L&D service does include other health needs and thus we assume the same level of spending on these alternative health needs.

Cost element and unit	Cost, £ 2014/15 or value	Source(s)	Rationale/comments (all costs quoted here are inflated to 2014/15 prices)
Average cost of a community sentence (should remain a cost due to diversion from custodial sentences)			
Average cost per person	£4,476	Ministry of Justice, 2013a; Ministry of Justice 2013b	Mean sentence length 12 months.
Average value of Community payback activities (reduces the cost of a community sentence)			
Average value per person	170x6.5 = £1,105	Gov.uk, 2014 HM Government, 2014b	Midpoint of range of length of Payback period (40 to 300 hours) used (170 hours). Each hour valued at the 2014 national minimum wage for adults aged 21 and over (£6.50 per hour).
Wages earned following diversion from remand or a custodial sentence (increases the savings associated with diversion from remand or custodial sentences)			
Average wage per person per day	0.13x6.5x8 = £6.76	Pathfinder data HM Government, 2014b	13% of L&D Service users with a known status were recorded as being employed or self-employed. Wages are paid at the national minimum wage (£6.50 per hour), assuming an 8 hour day.
State benefits received following diversion from remand or a custodial sentence (reduces the savings associated with diversion from remand or custodial sentences)			
Average benefit per person per day	0.82x29.10 = £23.86	Pathfinder data HM Government, 2014a	82% of L&D Service users with a known status were recorded as unemployed or having long-term sickness/disability. Benefits are paid at the midpoint of £8.20 per day for a single, childless person on income support, to £50 per day at the Benefits cap (£29.10 per day).
Net effects of wages and state benefits per period of custody (reduces the savings associated with diversion from remand or custodial sentences)			
Remand	(23.86-6.76)x10x7 = £1,197		
Custodial sentence	(23.86-6.76)x283 = £4,839		

The main criminal justice system costs not included in this evaluation are:

- The (anticipated) reduction in the number of, or length of court hearings (either because a case is concluded by the police, or because information provided by the L&D service should reduce the need to order and wait for psychiatric and psychologist reports)
- The (anticipated) reduction in the number of psychiatric and psychologist reports required (because the required information is provided by members of L&D staff).

These costs are excluded because we do not have information on whether or not a case goes to court (and thus the number of hearings) or whether a report was required. Police costs incurred as a result of arrest are not included, since such costs are incurred by all arrestees, regardless of whether they enter the L&D service.

Health service costs

Service users identified through the L&D screening process (costed as part of the L&D service) are offered an initial appointment with an appropriate health or social care provider. Where required, service users are subsequently offered a course of treatment.³⁷

For initial appointments, we use (inflated) Department of Health Reference Costs for 2013/14 to obtain the national average unit cost of an adult outpatient appointment that is most appropriate for each L&D need included in the evaluation, as shown in Table 2.9 (Department of Health 2014). For substance and alcohol misuse, initial appointment costs depend on whether the service user continues to full treatment. Such interventions are often classified as ‘brief interventions’ in the literature. These costs accrue for all service users attending a first appointment. We did not include a cost for any service users who did not attend (even though there is an opportunity cost associated with non-attendance).

Table 2.9: Details and costs of initial appointments

L&D Need	Initial appointment cost
Substance misuse	£105 (Currency code DRUAOP – Drug services) (Department of Health, 2014), plus, for those not continuing in treatment (whose drug costs are included in that treatment), Methadone for 16 days @ £13 total (BMJ Group and Royal Pharmaceutical Society of Great Britain, 2014) under supervised consumption by a community pharmacist @ £4.25/day (5 minutes) (Department of Health, 2014). Total: £105 (continuing)/£186 (not continuing)
Alcohol misuse	£61 (Currency code ALCAOP – Alcohol Services) (Department of Health, 2014), plus, for those not continuing in treatment (whose drug costs are included in that treatment), Acamprostate 1,998mg/day for 16 days @£15 total (BMJ Group and Royal Pharmaceutical Society of Great Britain, 2014). Total: £61 (continuing)/£76 (not continuing)
Mental health (based on moderate to severe depression)	£98 (Currency code MHSTIAPTA – Mental Health IAPT - Adults) (Department of Health, 2014). Total: £98

In terms of subsequent courses of treatment, we identified a typical treatment package using a combination of best practice recommendations in the relevant NICE Guidelines and expert opinion. While not all service users will follow the same care pathway in practice, it is not practically possible to separate out individual pathways. The typical treatment packages used and their costs are summarised in Table 2.10. These costs were accrued for all service users achieving ‘satisfactory discharge’ from their course of treatment.

³⁷ The costs and benefits for all appointments/courses of treatment attended (for the three needs included) are included using an additive approach. In practice, it is possible that multiple needs could be addressed in a single appointment/course of treatment.

Table 2.10: Details and costs of subsequent treatment and costs

L&D Need	Subsequent treatment and cost
Substance misuse	Monthly outpatient appointment @ £105 each (Currency code DRUAOP – Drug services) [23]. Methadone for 6 months @ £200 total [24] under supervised consumption by a community pharmacist @ £4.25/day (5 minutes) [23]. Total: £1,606
Alcohol misuse	Monthly community contact appointment @ £222 each (Currency code ALCACC – Alcohol Services, Community Contact) [23]. Acamprosate 1,998mg/day for 6 months @ £173 total (based on mild to moderate dependence) [29]. Total: £1,505
Mental health (based on moderate to severe depression)	IAPT therapy, based on average cost per completed treatment of £958 [25]. Citalopram 20mg daily for 6 months @ £12 total. 7 GP visits @ £38 each for monitoring [30]. Total: £1,236

The case management database recorded whether or not each case attended their first appointment for each type of L&D need. First appointment outcomes were not available for all cases, however, we do know if an appointment was offered. We therefore assumed that the attendance rate (by need) amongst cases with a known outcome can be extrapolated to cases offered an appointment but without a known outcome.

We do not know what proportion of cases achieved satisfactory discharge, although we assumed that:

- Only those service users attending their first appointment could go on to further treatment.
- Attendance was dichotomised into achieved satisfactory discharge/did not attend any subsequent appointments.

In order to estimate the proportion of cases who achieved satisfactory discharge, we undertook a Bayesian elicitation exercise. A workshop with six experts from relevant fields (e.g. substance misuse, mental health and criminology) was convened in June 2015. During the workshop, experts were asked to combine what primary data (both quantitative and qualitative) were available from the evaluation with a summary of the existing evidence base (provided in advance) and their own knowledge to produce their ‘posterior’ belief. For the satisfactory discharge rate, the experts were asked to consider ‘*The proportion of L&D service users who, having attended an initial appointment with a relevant care provider, subsequently reach satisfactory discharge from a 6 month course of treatment*’. Following a training exercise and discussion amongst the experts, each worked individually to allocate 20 counters across eleven pre-specified values for this proportion (0%, 10%, ..., 100%), with the number of counters allocated to each option reflecting their belief that each value is the true proportion. This method is known as the *allocation of points* technique. The beliefs of the individual panel members were then pooled additively and fed back on the day, with experts invited to revise their beliefs. Experts’ final pooled beliefs are shown graphically in Appendix B; the mean (SD) satisfactory discharge rate was 34.8% (13.8%).

Health benefits from treatment

To value health benefits from attendance at a first appointment and satisfactory discharge in money terms, it is necessary to show the gain in a service user’s health in Quality Adjusted Life Years (QALYs). QALYs have two components: the increase in health-related quality of life (HRQOL) resulting from treatment and the duration of this increase.

Given a lack of evidence about health gains in the L&D population, estimates were obtained from the expert panel as part of the Bayesian elicitation exercise. Here, the experts were asked to consider:

- ‘*The anticipated health benefit (health related quality of life, HRQOL) of attending an initial appointment, and of completing their course of treatment (lasting six months in total), for service users with the following types of need: mental health (at a severity level similar to moderate depression), substance misuse and alcohol misuse.*’
- ‘*The anticipated duration of each of these health benefits (the point following end of treatment at which the benefits will have worn-off completely for half of the service users attending/reaching satisfactory discharge), for each type of need.*’

Again, experts were asked to allocate 20 counters across pre-specified values for each outcome. Pooled beliefs for each individual outcome were fed back to experts via email following the workshop and experts were invited to revise their beliefs. Not all experts responded for every health need, omitting needs outside their own area of expertise. To estimate QALY gains it was necessary to combine the elicited data on HRQOL gains with that on their duration for each expert, before pooling the results across experts. Our method for doing this is shown in Appendix B, with means and standard deviations of QALY gains shown in Table 2.11. L&D cases achieving satisfactory discharge are assumed to get both QALY gains (initial appointment + subsequent treatment package), since they incur costs for both types of care.

Table 2.11: QALY gains from treatment from the Bayesian elicitation exercise

	Initial appointment Mean (SD)	Subsequent treatment package Mean (SD)
Substance misuse	0.0034 (0.0055)	0.0521 (0.0478)
Alcohol misuse	0.0019 (0.0028)	0.0558 (0.0353)
Mental Health	0.0095 (0.0103)	0.1015 (0.0814)

Analysis

L&D service costs

We calculated the cost of providing L&D services per 1,000 arrests for trial sites and the cost per head of general population covered. These analyses enabled us to consider the potential effects of economies of scale. We calculated a national incremental cost per 1,000 arrests of moving from the local to the National Model. We did not do this by site due to differences in the intensity of provision in the 'pre' (local model) period. We also analysed the proportion of total expenditure spent on staff between sites and time-periods.

Criminal justice system costs and benefits

The objective of this analysis is to estimate changes in the criminal justice outcomes outlined above using data collected for L&D service users in the case management database, so that these changes can be valued in money terms using the costs identified in Table 2.8. However, analysis of the incremental effect of the National L&D Model compared to the local model on criminal justice outcomes is particularly challenging given the uncontrolled before and after study design that had to be employed due to a lack of data from control sites.

The main difficulty arises because not only should the National L&D Model increase the L&D referral rate (resulting in 'incremental' referrals), it should also improve the criminal justice outcomes of all those referred (including anyone who would have been referred had the local service continued). While we know the criminal justice outcomes of those referred to L&D in both service models, we do not know what the criminal justice outcomes of cases incrementally referred to L&D following enhanced provision in the National Model would have been had the local L&D service continued. For example, it is plausible that the proportion of L&D cases held on remand could increase, say from ten per cent using the local model data to 15 per cent using the National Model data. Initially, it would appear that the National Model had been ineffective. Yet had the proportion of L&D cases increased (from say five per cent to ten per cent of arrests) and the probability of any non-L&D case being held on remand been 30 per cent, then the National Model would have been effective: all other things being equal, five fewer arrestees users per 1,000 would have been remanded in custody.³⁸

³⁸ Calculated as follows: local period: 5% of 1,000 arrests are L&D cases (N=50), of whom 10% (N=5) are held on remand. Of the remaining 950 arrests, 30% (N=285) are held on remand, giving a total of 290 arrestees held on remand; National period: 10% of 1,000 arrests are L&D cases (N=100), of whom 15% (N=15) are held on remand. Of the remaining 900 arrests, 30% (N=270) are held on remand, giving a total of 285 arrestees held on remand. 290-285=5.

The example above assumes that the 50 cases incrementally referred to L&D per 1,000 arrests would have had a 30 per cent probability of being held on remand had they not been referred, i.e. all non L&D cases have the same probability of being held on remand. This is clearly not the case in practice. For this evaluation the critical concern is that the probability of being held on remand is correlated with the probability of being referred to L&D. Incremental L&D cases could be considered ‘marginal’ cases – those that did not meet the referral criteria in the local service but who were sufficiently close that they did in the National Model and, as a result, their probability of being held on remand had they not been referred could have been closer to those who were referred.³⁹ However, as noted above, we have no data on criminal justice outcomes for arrestees who do not enter the L&D service and must therefore rely on national averages.

Because of the uncertainty relating to criminal justice outcomes across the non-L&D arrestee population, we considered three possible scenarios in our analysis of criminal justice outcomes. The probability of each outcome in the local model of L&D amongst those referred to L&D in the National Model but who would not have been in the local model is:

1. The same as the national average probability.
2. The same as the probability amongst L&D cases referred in the local model.
3. Half-way between the national average probability and the probability amongst L&D cases referred in the local model.

National average probabilities were obtained from Ministry of Justice data for the year ending September 2014 (Ministry of Justice 2014) as follows: being held on remand, either awaiting trial or sentencing (4.1%); being given a custodial or community sentence out of all those who were either not tried, or tried and sentenced in magistrates’ courts (custodial 2.7%, community 6.1%).

The mathematical approach shown in the above example is applied to the data from the minimum data sets for the local and National Model periods for each of the three possible scenarios. This results in estimates of the change in the number of service users, per 1,000, for the three criminal justice outcomes of being held on remand, given a custodial sentence and given a community sentence. The criminal justice system cost or saving associated with moving from the local to the National L&D Model per 1,000 arrests, together with their wider economic consequences, was subsequently calculated by applying the value of each criminal justice outcome as detailed in Table 2.8.

Health service costs and benefits

We assumed that all health care received in terms of both initial appointments and subsequent treatment was only received as a result of intervention by the L&D service. Thus all additional appointments and treatment provided as a result of the switch from the local to the National Model L&D service can be attributed to the switch.

We estimated the number of L&D cases given an initial appointment for each of the three L&D needs who would have attended it, based on the initial appointment attendance rate for those cases with a known attendance outcome. We then applied the mean satisfactory discharge rate from the Bayesian expert elicitation to estimate the number of those attending an initial appointment who would have gone on to reach satisfactory discharge. We applied the health service costs and health benefits (in QALYs) outlined above, to each initial appointment attendance and satisfactory discharge in each time period, to estimate totals for each period and denominated these per 1,000 arrests so the incremental effects (additional initial appointments attended, subsequent treatment received, health service costs and QALYs gained) of moving to the National L&D Model could be estimated.

We estimated the cost per additional initial appointment attended using health service costs for initial appointments and L&D service costs and the cost per QALY gained using health service and L&D service costs, both in terms of the effect of moving from the local to National L&D service Model.

³⁹ It is plausible that the probability of being held on remand could have been the same as that for those who were referred, but this is unlikely since we would expect the local L&D service to have had some effect in reducing the probability of being held on remand.

Cost-benefit analysis

In order to estimate the incremental net monetary impact of the National versus the local L&D model, results for L&D service costs, the criminal justice system (including outcome consequences) and the health service (including the value of the health benefits to L&D service users, valuing each QALY at £20,000 and £30,000) were combined to produce an incremental net monetary benefit per 1,000 arrests. This was repeated for each of the three scenarios describing criminal justice outcomes for those incrementally referred under the National Model of L&D.

A summary of the assumptions required for the analysis and exclusions from the evaluation together with their probable impact on the results of the economic evaluation is shown in Appendix B.

Limitations

- No data were available on how many service users who attended a first appointment went on to continue to engage in services and on the outcomes of that treatment (and how long those outcomes lasted). To estimate these effects, the research team employed a Bayesian elicitation approach. While it is beyond the scope of L&D services to maintain contact with service users beyond an initial appointment with a service to which a person is referred, it would be useful to track cases over time to determine long-term criminal justice and health effects of the L&D service.
- Employing a 'before and after' approach requires the assumption that there are no confounding temporal trends which might impact the outcomes of interest, for example, in terms of local or national imperatives to change the proportion of offenders given custodial sentences. The original protocol for the economic evaluation planned for contemporaneous controls but no data from control sites were available (see Appendix D).
- As with the before and after analysis of information in the trial minimum data set, it was not possible to compare the National Model service to areas in which there is no dedicated L&D service.
- The economic analysis combines data from the four sites. Although these sites are delivering L&D services according to the National Model, there are local variations in implementation and operation which could result in differences in (cost) effectiveness between sites thus reducing the scope for generalisability between sites.
- Only three health care needs are included in the economic evaluation, although these include around 90 per cent of all L&D referrals, so any underestimation of benefits should be minimised. The use of QALYs to quantify the benefits of health care received is a standard metric in health economic analysis, but it is acknowledged that QALYs may not be sufficiently comprehensive to incorporate all of the benefits accruing to the L&D population.
- The case management database did not include specific detail on the crime committed by each case, only crime type. Full details of criminal justice outcomes, e.g. sentence length, were also not provided, making the outcome measures relating to criminal justice fairly 'blunt'.
- Apart from the use of three potential scenarios to describe the probability of each criminal justice outcome amongst those incrementally referred to L&D in the National Model and two different values for a QALY, no sensitivity analysis was possible within the time and resources available for the economic evaluation.

2.5. Public and patient involvement in the evaluation

The evaluation benefited from the participation of two patient representatives. These representatives were members of an expert group convened to steer the research. Both patient representatives were involved in the first meeting of the expert group, held in August 2014 at the outset of the project. At this meeting, patient representatives were involved in discussions about the research approach generally and particularly in relation to the topics that should be covered during interviews with service users. Comments and input from patient representatives were taken into account in finalising the interview guide used for service user interviews.

Both representatives were sent earlier drafts of this report. One representative provided comments - on several aspects of the report - and these were taken into account in preparing the final version. In particular, comments from the patient representative prompted the research team to think critically about the approach used to gathering feedback from service users, and how this could be improved in future studies (see Section 2.4.5).

Chapter 3 Findings regarding the implementation of the National Model for liaison and diversion

This chapter describes findings about the extent to which the national L&D model was implemented as planned. It describes what the L&D service meant in practice – how it worked and the role and activities of staff – and includes a focus on the newly created role of the support worker. It includes findings on stakeholders’ perceived strengths and weaknesses of the L&D service as implemented, and a subsection on the particular issues related to implementing the National Model for young people.

3.1. Implementation of the National Model

There were some initial delays to implementation

The ten sites operated under the National Model from April 2014. These sites had a relatively short period of time in which to implement the scheme (only a few months). Each site was supported by the Offender Health Collaborative, a National Programme Team within NHS England and local NHS England commissioners in implementing the service and ensuring it met the national specification.

Evidence collected during the evaluation indicates that there was variation between areas in the pace of implementation, and for at least the first six months, none of the sites were operating at full specification. Many were still recruiting staff, increasing coverage at police stations and courts and so on. This was in part due to the short lead-in time before implementation, but issues related to staffing were mentioned by interviewees in several sites when asked to provide key lessons for future roll-out of L&D services. The need to have all staff vetted and approved to work in police custody and courts caused delays. Some areas could only offer temporary contracts, which was said to have reduced the number of applicants.

The National Model was more fully implemented by the second year of operation

At the time of the web survey (May and June 2015) respondents to the stakeholder survey indicated that, on the whole, the National Model for L&D had been implemented across the ten wave one sites (Figure 3.1). Elements that were reported to be not so well implemented by survey respondents included coverage of crown courts, service user involvement in setting the direction of the L&D scheme and round-the-clock coverage in police custody.

The introduction of the National Model involved significant changes to L&D services

While all of the wave one sites had a pre-existing L&D service, stakeholder interviews confirmed that the National Model had led to increased staff numbers (including the creation of the support worker role, described further below), better coverage of courts and police custody and screening for a wider range of needs.

There was a strong consensus among interviewees from different areas that the L&D service now provided services during extended hours, covering all ages and vulnerabilities. This meant that more people with vulnerabilities were being identified, when previously they might not have been and were being identified earlier. The following quotations are illustrative of the many comments along these lines:

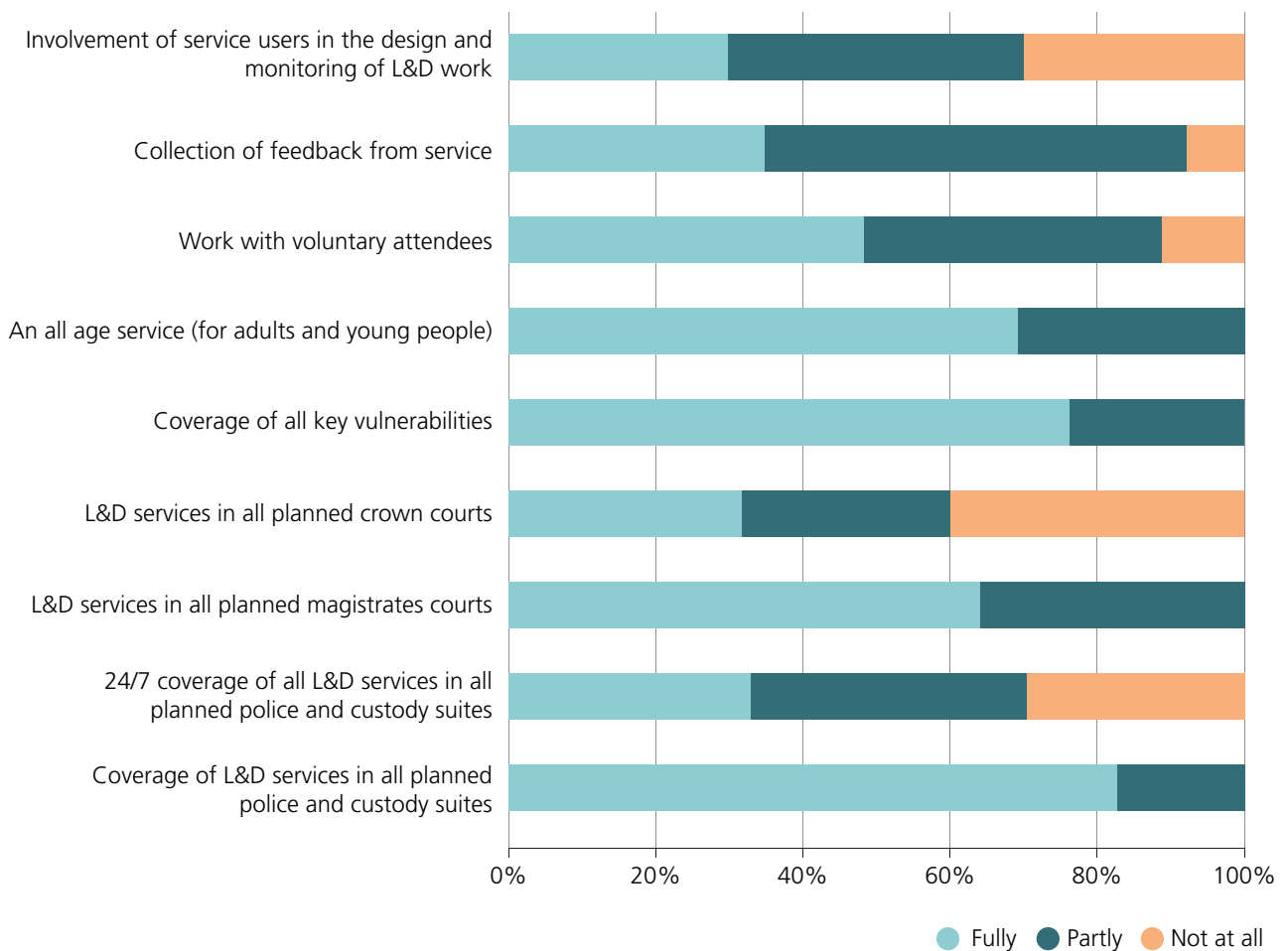
We are available seven days a week now rather than five days a week, [providing] access to timely information, for those that need it, [to] custody staff who are managing high risk individuals in custody, who need to implement procedures to keep people safe, information sharing with courts [...]

Local manager of L&D trial, area 4

The strength is that we're looking at all ages, so like children and younger people, and even if [there are] small numbers [...] they are properly identified and supported. I think the massive strength is the all-vulnerability aspect of the model, so [not just] mental illness, but that kind of broader assessment of needs

Local manager of L&D trial, area 5

Figure 3.1: Responses to stakeholder survey - 'To what extent are the following features of the new national L&D model implemented in the L&D scheme in your area?'



Source: stakeholders web survey⁴⁰

⁴⁰ Respondent number as follows: '24/7 coverage of L&D services in all planned police and custody suites': 27 responses, 8 responded 'not at all', 10 'partly', 9 'fully'. An additional 4 responded 'don't know'. 'An all age service (for adults and young people)': 26 responses, 0 responded 'not at all', 8 'partly', 18 'fully', an additional 4 responded 'don't know'. 'Collection of feedback from service users': 26 responses, 2 responded 'not at all', 15 'partly', 9 'fully', an additional 4 responded 'don't know'. 'Coverage of all key vulnerabilities': 25 responses, 0 responded 'not at all', 6 'partly', 19 'fully', an additional 5 responded 'don't know'. 'Coverage of L&D services in all planned police and custody suites': 29 responses, 0 responded 'not at all', 5 'partly', 24 'fully', an additional 5 responded 'don't know'. 'Involvement of service users in the design and monitoring of L&D work': 20 responses, 6 responded 'not at all', 8 'partly', 6 'fully', an additional 10 responded 'don't know'. 'L&D services in all planned crown courts': 25 responses, 10 responded 'not at all', 7 'partly', 8 'fully', an additional 5 responded 'don't know'. 'L&D services in all planned magistrates' courts': 25 responses, 0 responded 'not at all', 10 'partly', 18 'fully', an additional 2 responded 'don't know'. 'Work with voluntary attendees': 27 responses, 3 responded 'not at all', 11 'partly', 13 'fully', an additional 3 responded 'don't know.'

The new model for L&D services had increased coverage of custody suites and courts and L&D schemes were reported to be embedded within police custody in many areas

Several interviewees from different areas commented positively on the L&D service covering custody as well as courts and indicated that the service was now embedded in day-to-day working practices in these locations:

I think it works quite well and by the time people come up to court, if they've been seen by mental health, it gives us another dimension when they come into court for us to see whether we need to put reports off or whether it's something we can do today. [...] It makes it handy having someone [in court] all the time because you can just pop down and speak. [...] We can see that here and that's the main part that we see and just being able to ask if the mental health team are able to see somebody for us if we think there are some concerns

Probation staff, area 6

[I]t's certainly seen by the police as a strength as well, in that we have that dedicated presence in the custody suites so we're screening people as they come through for vulnerabilities.

Local NHS Trust manager, area 6

A custody sergeant indicated that the police had more knowledge of mental health issues:

It [...] opens out more avenues because [...] working alongside the mental health nurses we become more aware of certain terms, certain medications. That maybe gives us limited, layman's knowledge of what certain indications are that we might need to deal with an individual in a certain way.

Custody sergeant, area 7

Interviewees' comments gave the sense that in most areas members of L&D staff were embedded and part of the normal custody working environment:

[T]he nurses are known to the custody staff now. Before people would turn up and we weren't always sure who they were and now they've embedded themselves in there.

Police custody staff member, area 6

There was evidence of good levels of operation and awareness in magistrates' courts, but more mixed findings regarding crown courts

Interviews with judges and magistrates indicated that awareness of the L&D service was fairly widespread among magistrates in the three areas in which interviews were conducted. Only two crown court judges were interviewed and neither of them was aware of the L&D service. However, stakeholder interviewees from other areas indicated that the service was operational in their crown court.

[T]he [national L&D model] wasn't prescriptive at all about what to do in the crown court, and it was going to be up to local need. But what we found is that there has been quite a demand - and an appropriate demand - on the practitioners, so they are actually in the crown courts more than we anticipated.

Local manager of L&D trial, area 5

All but one respondent to the stakeholders' web survey indicated that the court (the survey did not specify crown or magistrates') was provided information by the L&D service (16 respondents), and that the amount of information had increased since the implementation of the National Model (12 respondents).

Interviewees highlighted challenges in securing meaningful service user feedback

The national Liaison and Diversion Service Specification requires that:

The [L&D] service should have a reference group which has representatives from key relevant stakeholders, including service users, who will support the service manager and the programme board in setting the direction of the programme

NHS England Liaison and Diversion Programme 2014, 30.

In the evaluation, interviewees were asked to what extent their L&D service had involved service user groups or representatives in the scheme and whether they gathered feedback from service users. Some, but not all sites were collecting service user feedback at the time the interviews took place. Some were still developing ways to collect feedback, or did not gather it in a formal way.

Interviewees from sites that were gathering feedback from service users reported a number of different ways in which this was undertaken. The most commonly used tools included feedback surveys, service user fora or focus groups and service user representatives attending L&D project board meetings or advisory groups. Some sites collected service user feedback through a combination of methods.

Many interviewees highlighted challenges in securing meaningful service user feedback. Several interviewees experienced difficulties in or expressed concerns about collecting feedback from service users and involving them in the L&D service. Common challenges included:

- Difficulty in retaining service user representatives attending L&D project board meetings.
- With regard to the use of feedback surveys, low return rates of completed surveys.
- Practical challenges in gathering feedback from service users: they tend to move quickly through the L&D service; the custody suite was not a good place to collect feedback; it was difficult to find the right timing for collecting feedback post-release.
- There was no funding to pay for incentives.
- Ethical concerns about having a service user on the board, especially young people, and about trying to seek feedback at times when service users would be at crisis points or in distress.

In line with findings from interviews, the majority of stakeholders responding to the web survey indicated that service user feedback was 'partially implemented'. Stakeholders responding to the web survey were asked about implementation of service user feedback mechanisms. Of the 26 respondents who answered, only two indicated that this element was 'not at all' implemented. Nine indicated they were 'fully implemented'. Fifteen indicated it was 'partially implemented'. However, involvement of service users in the design and monitoring of L&D work was less commonly implemented. Of the 20 responses, six responded 'not at all', eight 'partly', and six 'fully'.

3.2. What the National Model liaison and diversion service meant in practice

Based on interviewees' accounts, a brief description of how the L&D schemes operated in practice has been compiled. Variation between areas means that the following is an indicative description only and cannot capture the many ways in which the L&D interacted with local services and partner agencies. However, it gives a sense of the role the L&D service played and the way in which the service worked with service users.

Initial entry into the service was primarily through police custody, but a range of other referral routes had also been established. Referral routes from voluntary attendance were still in development

As required in the National Model specification, interviewees gave accounts of service users entering the L&D service via different routes. The main routes were through police custody or court, but referrals from appropriate adult services, social services and schools were also mentioned.

L&D services co-located in police custody (or close by in the police station) were said to receive a list of those arrested and to be made aware by custody staff of particular detainees who might benefit from the service. L&D

practitioners also described identifying potential service users by walking round the cells and talking to detainees. L&D practitioners based in courts reviewed the court list to screen for service users that might fall within the scope of the service.

Assessment was conducted using a range of standardised tools and was described as being holistic

When identified, service users were assessed by a L&D practitioner for the range of vulnerabilities included in the National Model. Different tools were used in different sites, including the Asset tool⁴¹ for young people (to identify risks and protective factors in their offending behaviour) or the Learning Disability Screening Questionnaire.⁴² In some instances the members of L&D staff would seek to arrange assessment by a specialist practitioner – either someone within the L&D team, or a practitioner from another agency.

Comments from L&D practitioners highlighted the holistic nature of the assessment made by members of L&D staff in some instances:

The L&D worker has to see the overall picture, and have the service user at the heart.

Outreach worker, area 5

L&D services undertook advocacy on behalf of service users and coordinated input

When issues were identified through the assessment, members of L&D staff described referring service users to a range of relevant agencies to address their needs (referral is further described in Chapter 6). In some cases, interviewees described acting as advocates for service users, to secure support from other agencies. This interviewee explained that acting as an advocate could require L&D practitioners to challenge colleagues in partner agencies:

I was under incredible pressure... if you organise a mental health act assessment in the more extreme cases, then it's likely that... staff [contractors working in the court cells] could be waiting until eight o'clock that night... it just takes an incredibly long period of time... I've had staff look at me... ten of them, and go, 'I think he's fine, isn't he? He's fine' and I'm like, 'No, I don't think he is'. But it's a scary thing to have to do, to stand up to people and say, 'No, I'm going to say no'.

Outreach worker, area 5

Interviewees also described instances where the L&D service became involved in coordinating support for a service user between a number of agencies – playing a case-coordination role – and even arranging multi-agency meetings to discuss a particular service user.

Referral routes from voluntary attendance were still in development

Individuals who are interviewed on a voluntary basis forego being booked into police custody and may be interviewed in any police or community location outside the custody suite. This poses some challenges for L&D services that use police custody as a key referral route. Stakeholder interviewees commented that while voluntary attendance tended to be used for less serious offences, those individuals may still have support needs.

Analysis of stakeholder interviews indicates that, in the majority of trial sites, referral routes from voluntary attendance were still in development. The research team note that this is in part because the police forces across the ten trial sites were at different stages of implementing voluntary attendance procedures and in these cases L&D services could not establish agreed referral pathways.

Members of L&D staff mentioned that they saw few referrals from voluntary attendees and that more needed to be done to establish this pathway into the service. Generally, where referrals were made of voluntary attenders, this

⁴¹ Asset is a structured assessment tool used by Youth Offending Teams in England and Wales on all young offenders who come into contact with the criminal justice system.

⁴² For information about the Learning Disability Screening Questionnaire, see, for example: McKenzie et al. 2012.

was because the police officer involved was aware of the L&D service. Concerns were expressed in a number of sites that voluntary attendees with vulnerabilities were not likely to be picked-up by the L&D service. The challenges faced by each site in taking referrals from voluntary attendance varied according to the number and geographical spread of locations for voluntary attendance, as this interviewee commented:

Dealing with VA [voluntary attendance] as part of the L&D scheme is not really practical at the moment. I think the forces need to have a clear process in place. I mean, for example in [a police force] ... there was a potential 29 police stations that could accommodate voluntary attendees. Well it's just not practical for the L&D scheme to be able to go to anyone of those 29 on the odd chance that the VA will need some kind of health screen, so there just needs to be some streamlining.

NHS England representative, area 4

In one site an interviewee noted that, while a referral process was needed for voluntary attenders, there were concerns about the capacity of the L&D service to deal with these cases as the team was already working at full capacity. It was also mentioned that work with voluntary attenders at the police station was also more difficult because IT systems were not in place to support L&D screening outside the custody environment.

Interviewees indicated that dealing with young people who were voluntary attenders was easier in some instances because the Youth Offending Service provided a routine location for such interviews. In some areas, the service was said to be developing on a partial basis – with pockets of good practice where the L&D team were screening young voluntary attenders to see if they were already known to Child and Adolescent Mental Health Services (CAMHS) or other services.

At court, L&D services provided short, written reports or contributions to probation pre-sentence reports.

On rare occasions the L&D practitioners presented their views and assessments verbally to the court, but mostly they submitted a written report. L&D information also was used in pre-sentence reports written by the probation service.

Box 3.1: Standardised template for L&D reports to the court

In March 2015, NHS England with HMCTS and the judiciary developed a two-page standardised L&D report template to be used in courts to provide consistency in the way in which information is presented. Although not compulsory for L&D practitioners to use, the template includes:

- Who made the referral to L&D.
- The reason for referral (e.g. mental state, learning disability, substance misuse).
- The defendant's ability to engage in court proceedings.
- Whether a full psychiatric report is required.
- Whether the defendant is currently or was previously engaged with services.
- A summary of mental health or physical health issues.
- Sentencing recommendations.

The role of the support workers appeared to have been implemented as planned across the sites and was thought to be a key strength of the National Model service.

The National Model of L&D specifies that each L&D service has support workers (Liaison and Diversion Programme 2014). Also referred to as outreach workers or community support workers, their role was to support service users in accessing services to which they are referred – to ensure they attend at least the first appointment – after which time the support worker's involvement in a case should end. There was a strong view across interviewees

and across sites that outreach workers were able to fill a possible service gap between contact with members of L&D staff in custody and the first appointment with a service in the community.

Based on the interviews, the support and advocacy role that outreach workers fulfilled (sometimes referred to by respondents as ‘hand-holding’) was seen as a strength of the service and it was noted that these workers provided the service with extra capacity:

The feedback that we got [from service users...] was [that] the best thing that changed their lives was the hand-holding. [...], the support worker input - the after-work that's done. They said that was the one that really clinched it for them and helped them along their way. Because it's all very well doing an assessment or doing a screening and identify these needs [...] but often they [service users] [...] they go to these places but they wouldn't get very far. We will give them the support worker or [a] letter from a health authority that says, "This is [...] this person's need, can you help them please, this is the situation," and they are more likely to get a house, more likely to get the assistance that they need.

Local manager of L&D trial, area 6

Obviously within the core team having the new community support worker role has been fantastic. [...] That role has been able to do that kind of handholding [...] that was always a limitation for liaison and diversion practitioners who were very police or court-bound.

Local manager of L&D trial, area 5

Having people that [...] can offer support [...] outside of them [service users] being in court or the police station is one of the major issues because, you know, Community Mental Health teams [are] busy enough anyway. With us then saying, "Well, I think you have to make sure that they're attending their appointment with Probation, and you have to make this..." you haven't got time to do that. So we can offer that support now.

Referred to agency, area 4

Interviewees accounts indicate that the typical pattern of engagement with the support worker was similar to that outlined in the National Model specification

The role of the outreach worker typically started with a referral from an L&D worker, followed by one or more appointments with the service user over the course of about one month (although this varied) and ended when the service user was engaged with relevant outside services. This support worker described their role:

[...] I try and kind of just do everything that they were referred for, and also when you first meet with them, you kind of ask if there's anything else that they might not have mentioned that they might like help with, and if there are, I try and address those as well. And then when the person becomes successfully engaged with the services they need [...] or we've completed the tasks we needed to, that's when I'll just naturally kind of draw it to an end.

Outreach worker, area 5

The role also involved building on the activities undertaken by L&D workers. Interviewees described being able to spend more time with service users immediately after assessment while they were still in police custody, as well as in the community:

[The L&D practitioners] don't get very long to see people, depending on how many people need to be seen. But he sometimes may only spend 10 minutes with somebody and he kind of gauges what he thinks they might need, in which case if I'm there, I'll just go down and then just have a fuller chat with that person.

Outreach worker, area 5

The role played by the outreach worker could be very ‘hands on’: Interviewees described physically accompanying service users to appointment and providing practical help:

I’m basically sort of supporting him getting to his appointments and reminding him ... you know, ringing up maybe that morning and say ‘You’ve got an appointment at two o’clock this afternoon at such and such a place’.

Frontline L&D member of staff, area 1

We’re lucky to have two support workers and they’re able to take on quite a lot of that type of role, getting to outpatient appointments, getting to GP appointments, getting to recovery partnership appointments, [...] sorting out accommodation [...] issues [...] yeah and that extra ability is, I think one of the real core important parts of our service.

Frontline L&D member of staff, area 1

Challenges of the role were mentioned by one outreach worker, for example around the short-term nature of outreach support and external factors influencing the work such as services being closed down, benefits being cut and a shortage in housing.

Engagement and motivation of service users was seen as an essential function of the L&D service. This is supported by feedback from service users.

A number of interviewees described that, even during the brief meeting with a service user to conduct an assessment, members of L&D staff would try to provide some support and advice to service users, as well as referring them onto other services, or to the support worker. A number of L&D staff members saw an important part of the service as trying to engage service users and motivate them to seek support from other services:

You know, we haven’t got an engagement strategy. It’s about using our skills as mental health professionals. We engage with people, that’s what we do for our job, and we tell them about what our role is and what it is that we can offer.

Referred-to-agency, area 4

I’ve had multiple feedback forms from clients that show how much of an impact I’ve had on their lives, especially because the reassurance part... most people think about oh, you know, the referral is the most important part, but I think the reassurance part and the kind of engagement that you provided them, the one-to-one physical engagement, the fact that you talk to them, that you make sure they are alright, that you call them, gives them a sense of, “Oh, somebody’s here to help me, or maybe I need to change something in my lifestyle so I can get better.” So some of them wrote on the feedback form, “Thank you for listening to me. Thank you for just being there.

Outreach worker, area 5

The importance of providing reassurance, engagement and motivation is strongly supported in comments made by services users, described in Chapter 9.

L&D schemes could benefit from more resources.

Interviewees from different areas commented on the workload of members of L&D staff and the need for more staffing and resources for the scheme more generally. Based on the information collected, the evaluation is not able to draw conclusions about whether there was underfunding or whether resources were not being deployed in the most efficient way. Some interviewees from L&D core teams noted they regularly worked beyond their contracted hours and felt under pressure to deliver the service within constrained budgets (which were noted to be a feature across NHS Trusts’ activities):

[The L&D service is] over-subscribed [...] there's just enough of us to do it to our best ability, and to be able to give a more personal service. [...] We're absolutely inundated.

Outreach worker, area 9

I would say no fault of anybody's [...] but I just wish sometimes that there could be a bit more funding and possibly one or two more staff to assist with the amount of work that we all do. But that's... unfortunately that's everywhere.

Outreach worker, area 2

The security and availability of funding in the future was reported to be of concern. Interviewees also commented that they lacked time and resources to respond to requests for data from NHS England and the evaluation team, which they were required to do as part of the trial. Based on the information collected, the evaluation is not able to draw conclusions about whether there was underfunding.

3.3. The implementation and operation of the National Model liaison and diversion service for young people

The National Model for L&D includes services for adults and young people. Several trial sites had a previous service for adults only, with limited existing services for young people. Services for young people had to be developed from scratch in some areas and significantly expanded in others to comply with the National Model. The challenge sites faced in doing this was identifying the pathways through which young people could come into contact with L&D services, which could be very different from adults. For example, young people might be more likely to be dealt with in the community rather than in police custody compared to adults. Areas with no previous youth L&D scheme at all initially found it challenging to identify the pathways that young people take through the system.

Against this backdrop, interviewees and survey respondents were asked about the extent to which the National Model in their area included an 'all age service' and the key issues and challenges in relation to providing L&D services to young people in the area. They were also asked what was working well in relation to L&D services for young people and what could be improved.

While these questions were asked about the service for young people in all sites, additional interviews were conducted as part of a case study in areas 7 and 9 to explore the provision of L&D services to young people in more depth.

A reduction in the numbers of young people in police custody has led to a widening of routes into L&D services.

The number of arrests of young people has fallen by 24 per cent between 2011/12 and 2012/13. This continues the downward trend seen since the peak in arrests in 2006/07 (Ministry of Justice 2015). Interviewees from several sites noted that fewer young people were being arrested and brought into police custody; the police were using arrest more selectively and there was a greater use of diversion, for example, street bail. Those young people who were brought into the custody suite were said by interviewees in area 9 and area 2 to be processed by the police more rapidly than beforehand. In area 2, L&D staff members and the police had agreed that any young person in custody should 'trigger' the police to notify the L&D team, so that quick processing would not mean a young person was missed.

Because young people involved in the criminal justice system tend not to be brought into police custody, sites had developed alternative routes through which young people could access L&D services other than via police custody and courts. This meant that L&D services were being provided to young people experiencing a range of types of involvement in the criminal justice process. As well as covering young people who were under arrest, L&D teams also described having contact with young people who have no further action taken against them, who are cautioned, who undergo community resolutions or those asked to voluntarily attend for police interview. These routes included:

- Members of L&D staff attending a 'caution clinic' for young people and their parents
- Offering home visits to young people

- Using the Appropriate Adult Service as a source of referrals
- Referrals from schools and social services.

Offering home visits to young people was described by interviewees as, 'a better environment for young people to speak in', and in which they feel more comfortable and might be more willing to talk. As this practitioner commented:

It doesn't really work, I would say, [to] see a young person in the cells... I think it works better when they're in their home with their parents... they might not be as open with us in the cells either, as they would be if they were in their own surroundings.

Youth Offending Team worker, area 7

Most sites had specialist young peoples' practitioners on the L&D team.

Several teams reported that young people are initially screened and seen by any member of the L&D team and then assigned a specialist young person's worker:

There is a specific worker who is specialised in sort of youth offending end of things but the reality is she's got constraints on her time and if they're in custody, I will see them and then, if need be I'll ask her to follow that up, to carry on the assessment process or what have you.

Frontline L&D member of staff, area 1

The nurse [practitioner] would do an assessment as they would an adult, and then depending on the urgency... it could be that it's given to me as a referral, so I would then make contact with the family, with the young person, with the YOT team, and get everybody involved and get them that support that they need.

Outreach worker, area 2

We've got two young person practitioners and they can't cover all of the operating hours, even if we spread them out as thinly as possible. ... So if this evening at seven o'clock there wasn't any under-18s practitioners available, and a 15-year-old found themselves in police custody, we wouldn't ignore them. So the adult practitioners would do a triage assessment.

Local manager of L&D trial, area 10

L&D staff members worked with young people and adults in similar ways.

Descriptions of L&D staff members' work with young people mirrored comments about work with adults:

- **Holistic assessments:** It was mentioned in Section 3.2 that practitioners thought the assessment of adult service users was comprehensive. Similar comments were made in relation to young people. Interviewees were of the opinion that the L&D assessment tool provided a wide-ranging and detailed assessment. The assessment in that area identified whether the young person is out of education, whether they have missed any health appointments (for example, whether recommended inoculations are up-to-date), if they have any history of injury, learning disability, mental health difficulty or illness that may not have been picked up on previously:

It's definitely good that we're looking at every aspect [...] we're looking at physical health, we're looking at, you know, learning disabilities, we're looking at head injuries [...] it's not just the normal route that we're taking with offending behaviour, we're looking at everything now, so I think that's a really good strength.

Youth Offending Team worker, area 7

- **Importance of engaging young people in the assessment process:** As with adults, whilst aware of the fact that their role was largely to refer into other services, interviewed practitioners recognised the importance of their role in engaging young people (increasing the chances they would work with other agencies) and in providing some short-term interventions and support. Examples of strategies:

Box 3.2: Practitioners' strategies for engaging young people

A practitioner described how asking young people simply to attend the next appointment – rather than consider long-term involvement with agencies – had been a more effective strategy, in their experience, to engaging young people.

Workers highlighted how the structured assessment – with lots of personal questions – could be off-putting. One described how it could be difficult to start a first appointment with the assessment and preferred to do this towards the end of the meeting, or arrange a second meeting to complete the assessment.

Interviewees noted the need to recognise that a young person might not want to immediately address certain aspects of their life, but getting them to engage successfully with an agency they are happy to work with, may be an important stepping stone.

- **Providing support and casework for below-threshold cases:** L&D practitioners described providing young people with some support, even though their current level of need does not meet the threshold for existing services:

I'll be delivering something along the lines of better behaviour... Just so that they've something in the short term before they see whoever I'm referring to. But equally, they may not meet the threshold, if you like, for the CYPS [Children and Young People's Services – mental health service] ... so it might be just a case of a brief intervention that we may carry out, to get some work done really.

Youth Offending Team worker, area 7

Young people were often well-connected to services.

There was a consensus among interviewees that generally, young people in contact with the L&D service were already accessing support from a range of different agencies. Practitioners were in some instances however wary of adding another agency to those already working with young people:

Young people are usually very connected, so when something happens there is a lot of services that get involved, and I think the real reason why we don't get many young people is because you don't want to overwhelm the child... two healthcare assistants, one drug worker and one alcohol worker... Social Services involved, there is counselling services involved...

Outreach worker, area 5

They might already be under the YOT team, they might be under social services, they might have the... full works, and they don't really need anything apart from there'll be a phone call to the relevant services to let them know that they're in custody, just to be helpful.

Outreach worker, area 2

In some areas there had been concerns about potential duplication of Youth Offending Team services in the initial stages of L&D development. As mentioned in the quote above, in some instances L&D services did not need to undertake further work with young people, aside from reporting to the Youth Offending Team that a young person had been arrested.

Overall, members of L&D staff were able to refer young people to relevant services.

A number of trial sites expressly mentioned good links to local services for young people, as this quote illustrates:

We've got referral pathways to a paediatrician, to CYPs, a young people's drug and alcohol project, advocacy services with the Youth Offending Team. We've got quite a big, like, spirogram of referral pathways which we can dip into.

Youth Offending Team worker, area 7

Links with Child and Adolescent Mental Health Service were well developed in a number of areas

The links with CAMHS were mentioned as working particularly well in both area 7 and area 5 and respondents from area 4 and area 8 also described how roles and boundaries had been developed between local L&D services and CAMHS. Often, L&D services linked with CAHMS through the youth offending service. Some L&D services had worked with CAHMS to clarify the boundary and role of the two services:

CAMHS are helpful in working with the system - like, multi-agency working - and activating the system around the young person to help rather than specific therapy.

Referred-to-agency, area 4

In area 4, young people identified through the L&D pathway were able to access the CAMHS service much quicker than other young people, through the youth offending team, which was considered likely to improve engagement rates. In one area, the CAMHS service had been brought under the L&D team's management structure to ensure a more cohesive service:

L&D services were able to benefit from the multi-agency pathways and professional networks already developed by Youth Offending Teams.

A final theme that emerged in several interviews with regard to the implementation and operation of the L&D service for young people was that, as well as linking with CAHMS through the Youth Offending Teams, L&D services accessed other agencies through their existing links with Youth Offending Teams, as these comments illustrate:

We're very, very lucky that we have all these facilities and all these partners working within the Youth Offending Team, as part of the Youth Offending Team, which we have access to.

Outreach worker, area 9

We have practitioners within the Youth Offending Team itself who are qualified in certain avenues... [so] I have easy access to education or health or parenting skills or relationship skills - we have that in-house.

Outreach worker, area 8

This chapter has described the extent to which the National Model for L&D was implemented for adults and young people. The following chapter provides information about the characteristics of adult L&D service users. Chapter 5 sets out characteristics of young people involved in the L&D service.

Chapter 4 A description of adult cases in the first year of the trial

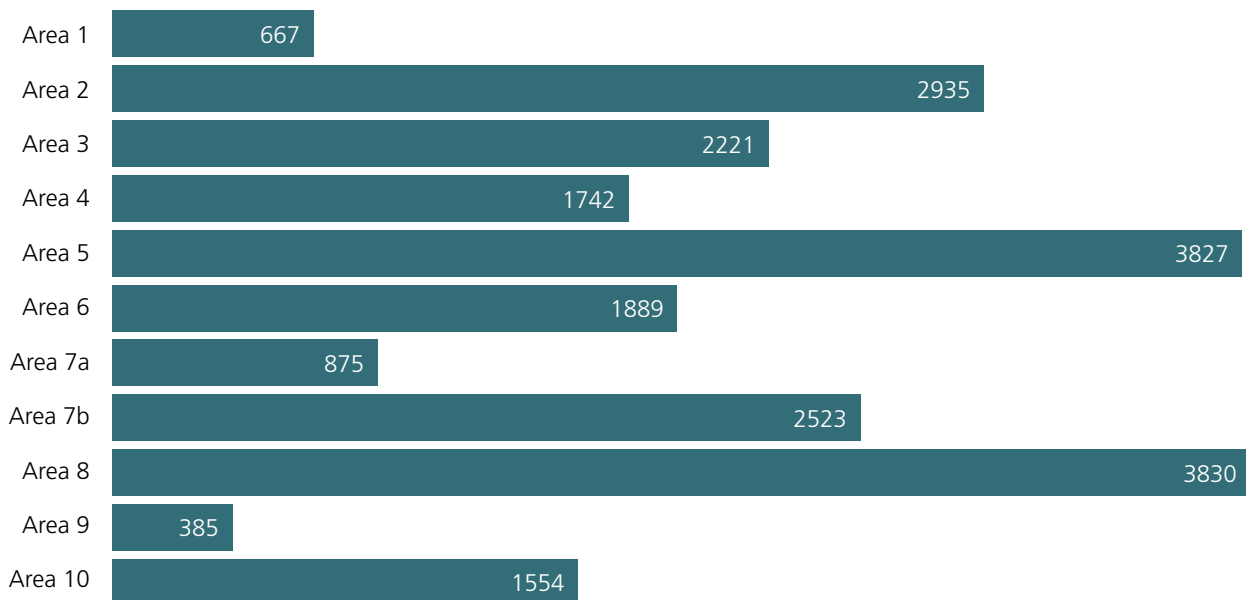
This chapter presents data from the trial minimum data set on adult cases. Information about children and young people is presented in Chapter 5.

4.1. Numbers of referrals and attrition of cases

There was variation in the number of referrals per site.

A total of 22,502 adult cases were recorded in the trial minimum data set from 1 April 2014 to 31 March 2015 across the ten sites. Figure 4.1 shows the number of referrals at each site. There was wide variation in absolute number of referrals per site, which is partly expected as there were differences between sites in the extent of geographical coverage as well as the population covered (see Table 1.1). Area 5 and 8 had the most cases referred to L&D services (3,827 and 3,830) while areas 9 and 1 referred the fewest cases (385 and 667).

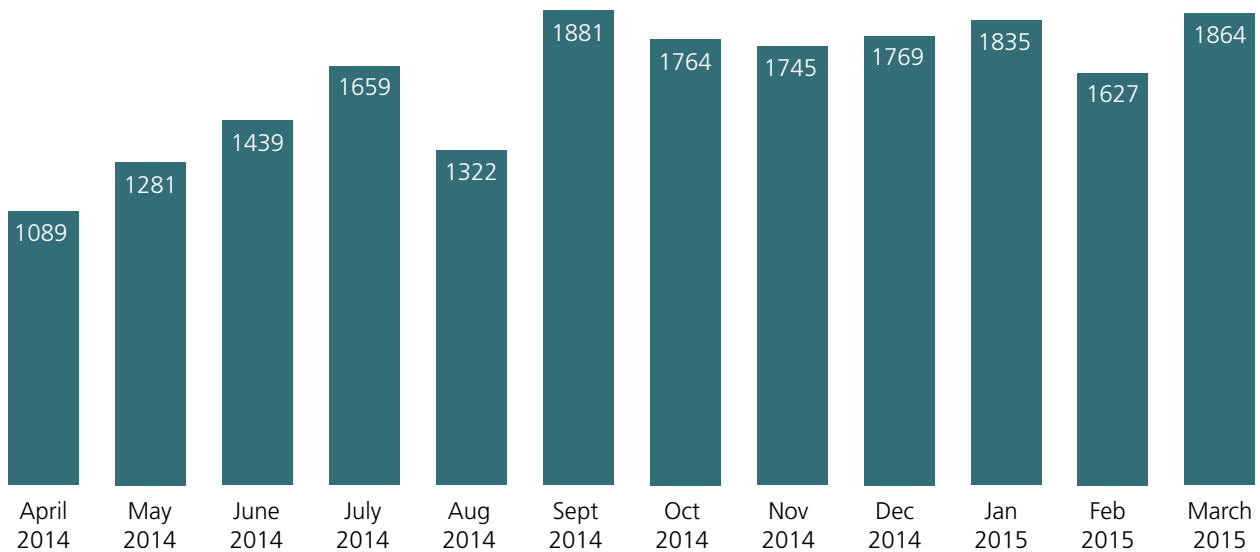
Figure 4.1: Number of referrals of adult cases into the L&D service in each area



Number of referrals increased steadily then stabilised after implementation of the National Model.

Figure 4.2 shows the number of referrals in each month across all sites. The number of cases referred increased between April and August 2014, was lower in August, and from September 2014 until March 2015 was fairly consistent.

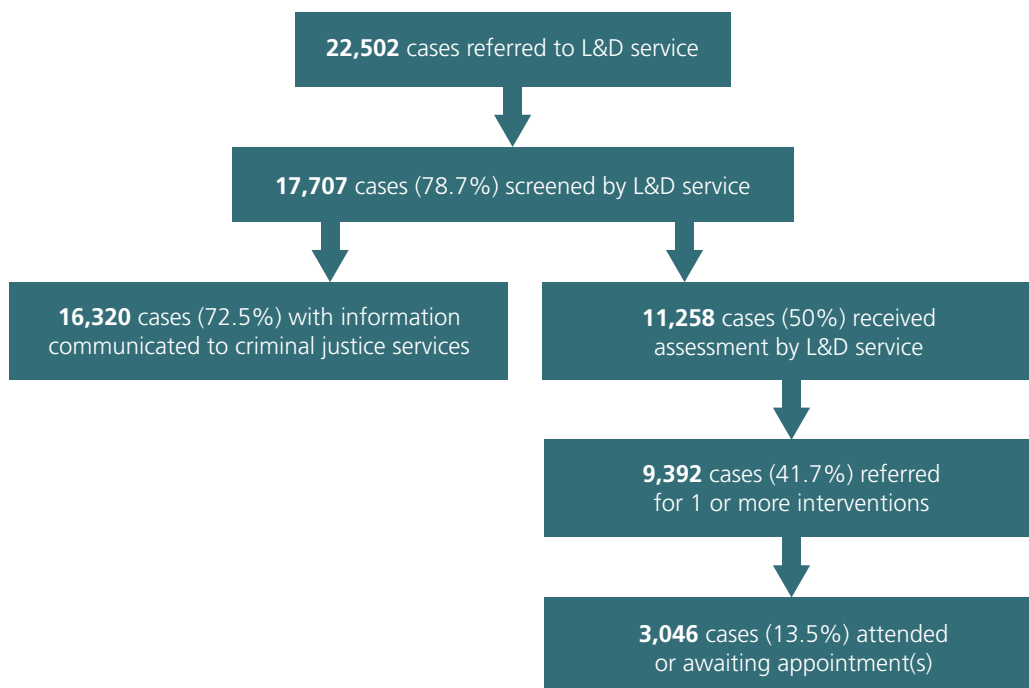
Figure 4.2: Number of referrals of adult cases into the L&D service in each month (all areas)



Of all cases referred to L&D about 40 per cent were referred for one or more interventions and 70 per cent had information about the case communicated to the criminal justice services.

Figure 4.3 shows the number of cases at each stage of the L&D service. Bearing in mind that some L&D service users may have not progressed all the way through the system by the end of the data collection period, it can be seen that almost all of those screened by the L&D service had some information communicated on their behalf to criminal justice services (92% of those screened and 72% of all cases referred). Forty-two per cent of those referred to the L&D service, or 53 per cent of those receiving the initial screening, received one or more interventions.

Figure 4.3: Flow of adult cases through the L&D services (all areas)



4.2. Declining contact

Twenty-nine per cent of all cases referred to L&D declined the services, but only ten per cent of cases in which needs were identified declined contact.

Table 4.1 shows whether L&D contact was declined, across the different needs. The trial minimum data set does not indicate at what stage in the L&D process contact was declined. The proportion declining L&D contact is lower in those with needs identified, ranging from seven per cent to ten per cent of cases across the different needs.

Table 4.1: Adult cases declining contact with L&D services, by identified need (all areas)

Need identified	L&D Contact Declined			
	No	Yes	Total with need	Per cent declining
Overall cases declining contact (including those with no need identified)	14,914	6,175	21,089	29%
Accommodation need	2,319	185	2,504	7%
Alcohol misuse	4,817	459	5,276	9%
Financial need	1,302	98	1,400	7%
Learning disability	699	81	780	10%
Mental Health	9,584	1,052	10,636	10%
Physical disability/need	1,644	176	1,820	10%
Social and communication difficulty	662	58	720	8%
Substance misuse	4,226	449	4,675	10%
Gang involvement	155	18	173	10%
Abuse victim	1,600	120	1,720	7%
Suicide / self-harm	2,505	197	2,702	7%
With any need identified (excluding cases with no need identified)	12,128	1,413	13,541	10%

4.3. Demographic characteristics and offence type

Demographic characteristics of the L&D adult population were as follows:

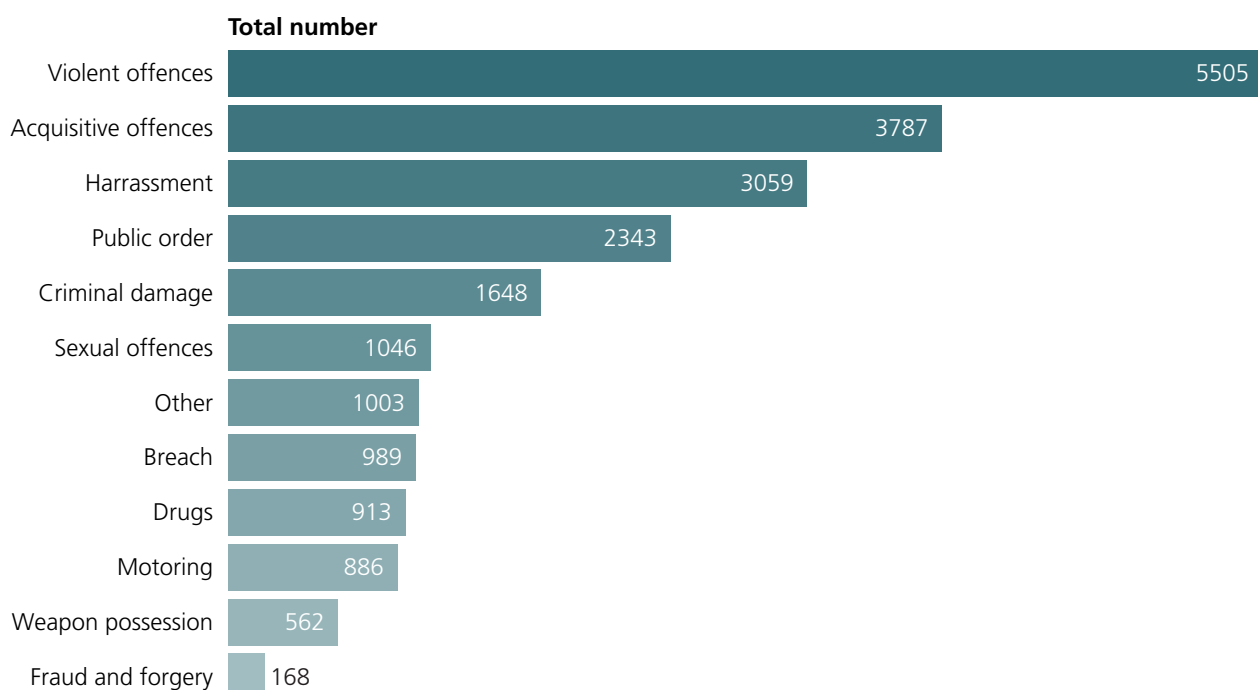
- The average (median) age of L&D cases was 34 years old (see Figure A1, Appendix A). There were a higher proportion of younger than older adults.
- The majority of cases were male (76%) (23% female; 1% other) (Table A1). This was a higher proportion of females than seen in the general arrestee population which was 15 per cent in 2012/13 (but one should be mindful that the trial minimum data set represents cases rather than individuals).
- L&D cases were also predominantly white (74% white British and 5% white other). This is comparable to the national population of arrestees where 79 per cent self-identified as of white ethnicity (2012/13 data). There was variation in the extent of ethnic diversity by site. Area 5 was the most diverse, with the lowest proportion of white British identified (37%), while area 7 had the highest proportion (94%).
- A significant number of L&D cases (43%) lived in rented accommodation (Appendix A, Table A2); which varied across the sites reaching maximum of 88 per cent in area 7 and a minimum of 21 per cent in area 2. Many cases were homeless (7%) or living in temporary accommodation. Altogether only 13 per cent of L&D cases were in any form of paid employment. The majority were unemployed (53%) with 8 per cent on long term sickness or disability.

- A very low proportion of L&D cases were members or previous members of the armed services (Appendix A, Table A3). This varied by site however, with up to 4 per cent of cases current or previous members of the armed services in area 9.
- Of the L&D cases on which data was available, 95 per cent were recorded as registered with their GP. Data was not available on 21 per cent of cases.

The most common offence for which adult L&D cases were charged was violence, followed by acquisitive crimes.

As shown in Figure 4.4, the highest proportion of offences charged for adults was for violence, followed by acquisitive crimes.⁴³ This mirrors patterns among the national population of arrestees, where violence and theft and handling of stolen goods were the two most common offences in 2012/13 (Office for National Statistics 2015b).

Figure 4.4: Main offence at charge for adult cases (all areas)



4.4. Needs identified

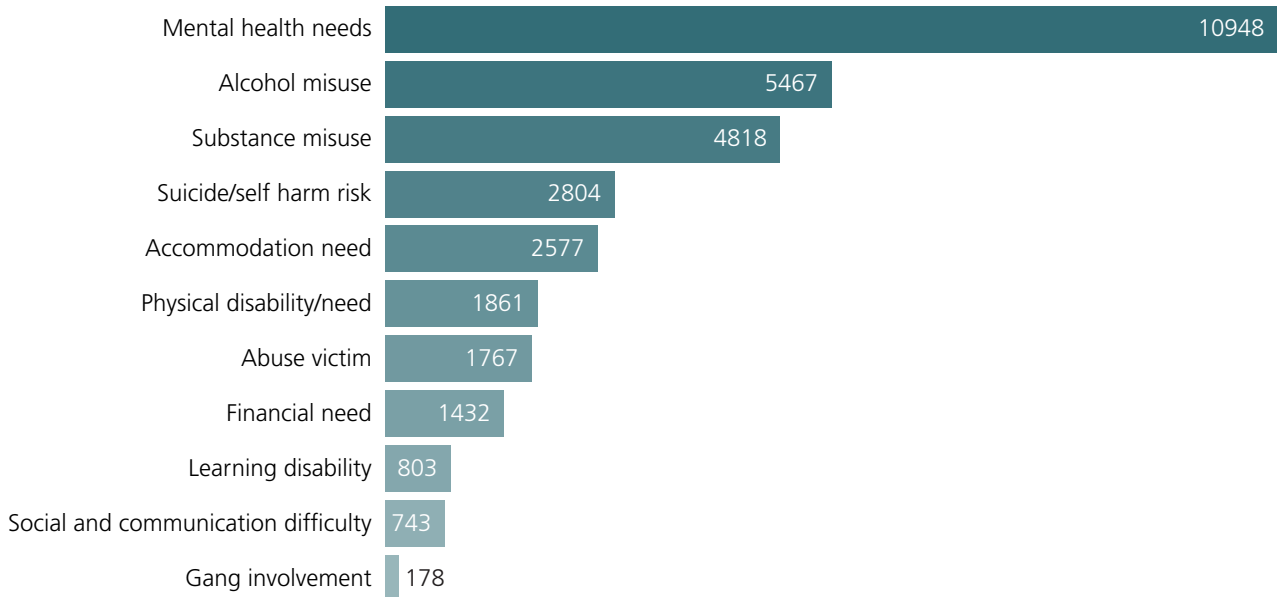
Mental health needs were the most frequent need identified, followed by alcohol and substance misuse.

The minimum data set allowed 11 different needs to be recorded: physical health, mental health (which is sub-categorised into 11 specific conditions), learning disability, social and communication, alcohol misuse, substance misuse, accommodation, financial, gang involvement, and whether the service user was an abuse victim.

A large number of cases (8,593) were reported to have no needs identified (Figure A2, Appendix A). Data available to the research team does not provide insight into why this is. It may reflect a lack of willingness to engage with the service, or a genuine absence of needs. On average (median), cases reported one need. However, many cases had multiple needs, with up to nine listed for any one case. Figure 4.5 shows how frequently different needs were identified, showing that mental health needs were by far the most commonly identified issues.⁴⁴

⁴³ The offence categories were created by the research team. The minimum data set records 19 possible offence types. The research team combined some offence types for analysis. Acquisitive crimes include theft and burglary.

⁴⁴ Mental health needs were by far the most commonly identified issues of those eleven vulnerabilities that could be recorded in the minimum data set. See Appendix C for the fields available in the minimum data set.

Figure 4.5: Number of adult cases with each need identified (all areas)

Among those with a mental health need the most prevalent problem was depressive illness followed by schizophrenia.

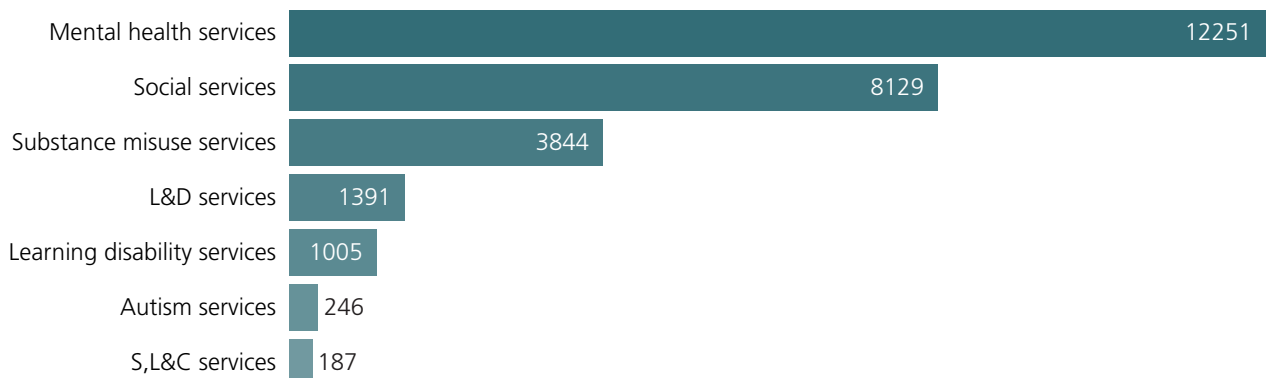
Among those with a mental health need identified the most prevalent mental health category was depressive illness (34%), with schizophrenia or other delusional disorder being the second most prevalent (22%).

Around a fifth of cases had two or more mental health needs.

There was the option of identifying and recording more than one mental health need. The majority of cases (77%) were identified as having only one mental health need, 20 per cent were identified as having two different needs, while three per cent were identified with three.

Over half of L&D cases had previously been in contact with mental health services.

Of the 22,502 adult L&D cases, over half had previously been in contact with mental health services, with lower, but still substantial numbers, accessing substance misuse or social services previously (Figure 4.6).

Figure 4.6: Number of adult cases with previous contact with services (all areas)

S, L & C service = Speech, Language & Communication services

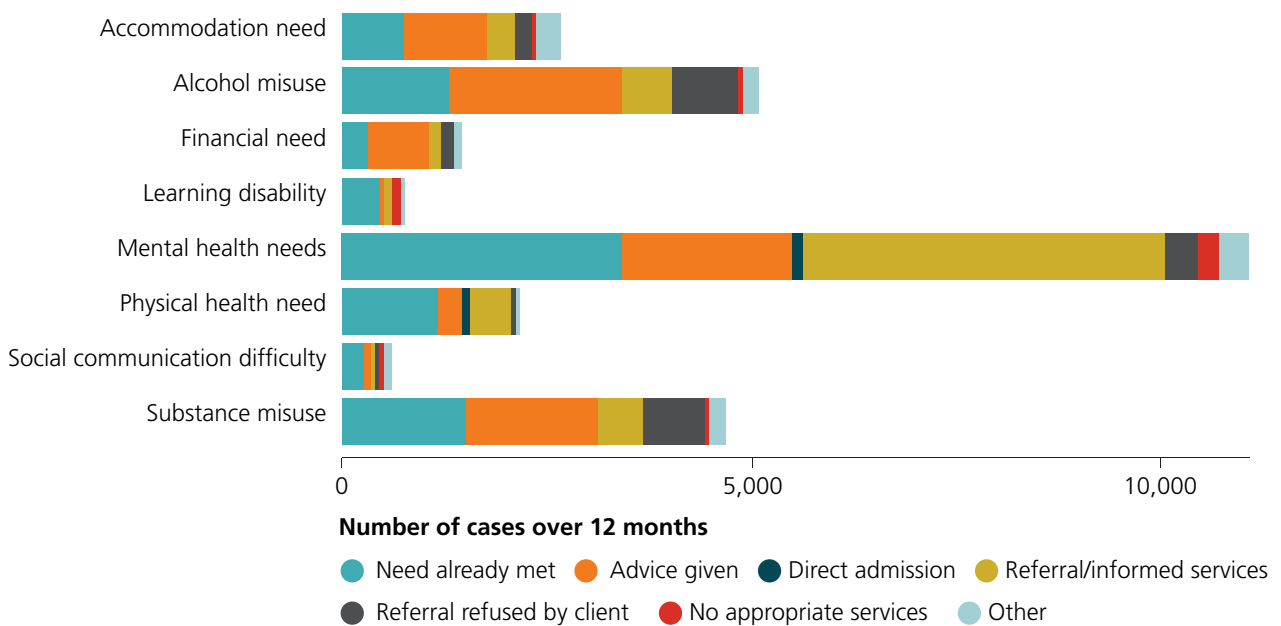
4.5. Interventions and activities following identification of needs

Where needs were not already met, referral to or informing other services or giving advice were the most common activities or interventions.

Figure 4.7 shows the actions taken by the L&D service following the identification of a need. The highest number of interventions offered (or actions taken) were for mental health needs, followed by alcohol, substance abuse and accommodation needs. The highest proportion of referrals to services was also for mental health needs, reflecting that this was the most prevalent area of need identified. We have provided more detail for one type of need, mental health (the most prevalent need) regarding the activities/ referrals. This is shown in Figure 4.8 and summarised below:

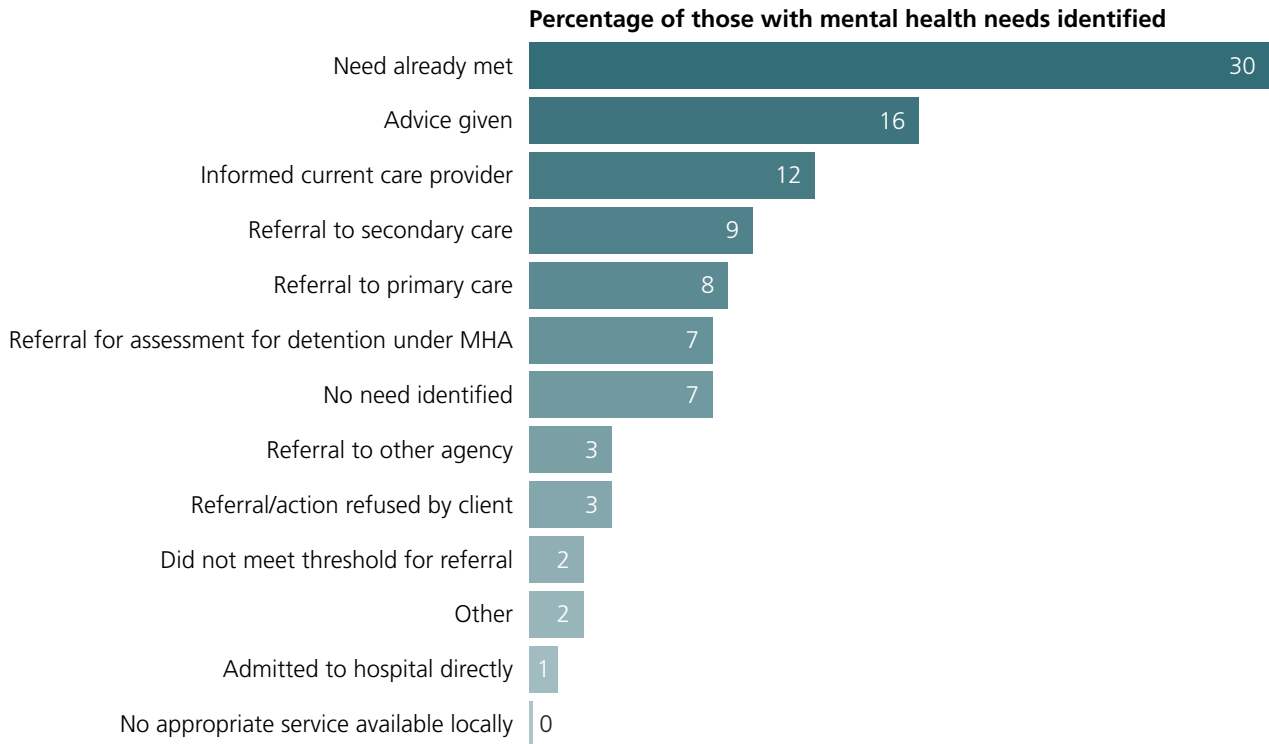
- The need was recorded as already met in almost a third of cases.⁴⁵
- Referrals were made to primary care, secondary care, or other agencies, or the current care provider was informed in just over 30 per cent of cases.
- In one per cent of cases the case was admitted directly to hospital.
- Seven per cent of cases were referred for assessment for detention under the Mental Health Act.

Figure 4.7: Activities and follow up for adult cases across each category of need (all areas)



⁴⁵ The research team note that this does not mean that no action was taken. Information might still be passed to existing care providers from the L&D service.

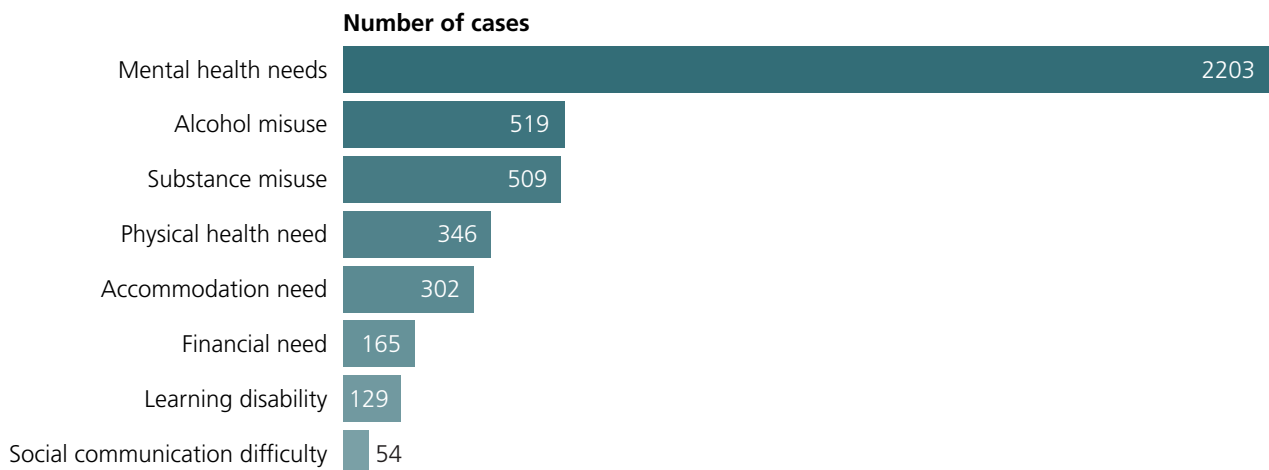
Figure 4.8: Activities and follow-up for adult cases identified as having mental health needs (all areas)



Appointments were most commonly offered for mental health needs.

Data were recorded on the number of cases in which L&D service users were offered appointments with services to address identified needs. As shown in Figure 4.9, there were many more appointments offered for mental health needs than for the other need categories.

Figure 4.9: Number of adult cases in which appointments were offered for each type of need (all areas)



Apart from appointments related to physical health, the majority of cases were recorded as ‘awaiting appointment’.

For those cases where an appointment was made, the minimum data set also includes information on attendance at this first appointment (Table 4.2). Many cases were recorded as ‘still awaiting appointments’ at the time of data collection. The highest rate of non-attendance was for financial and accommodation appointments. The needs

most commonly awaiting appointments were learning disability and social and communication issues. Although we do not have data on this, it is possible that the high proportions of those awaiting appointments may indicate a shortage of available appointments.

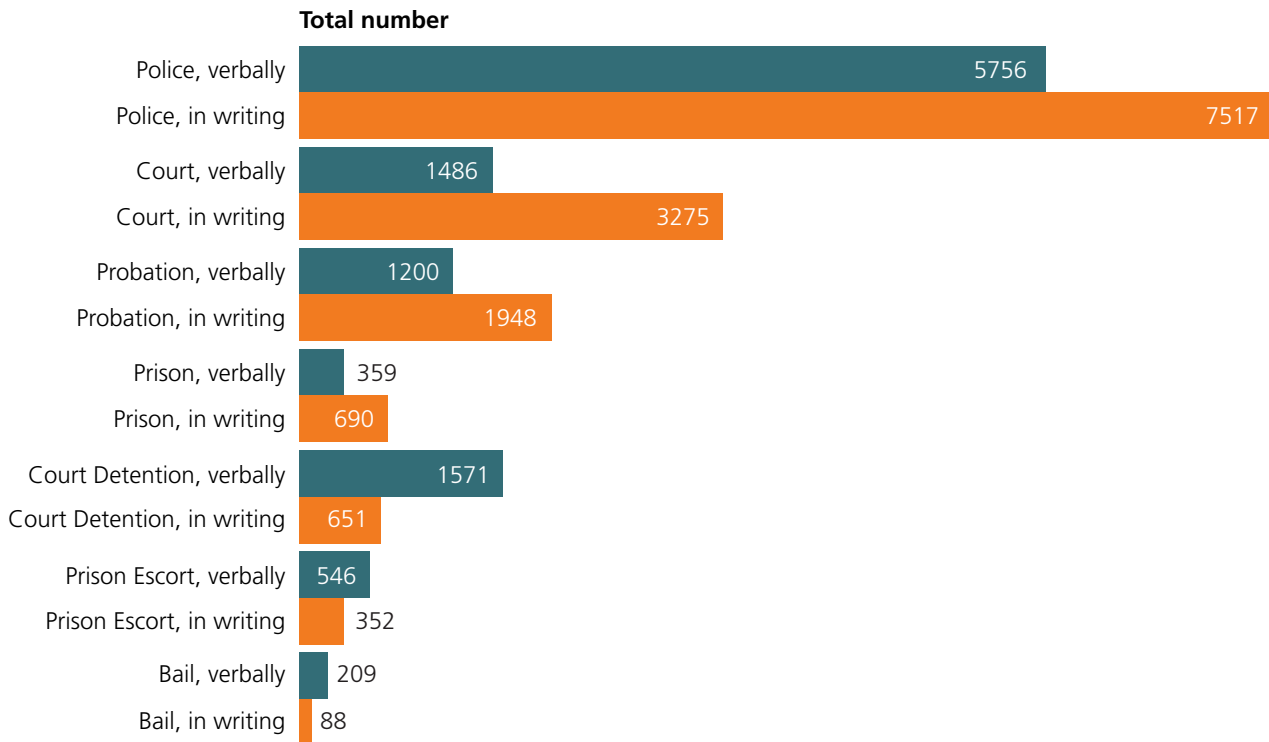
Table 4.2: Adult cases attending appointments, awaiting appointments and not attending appointments for each type of need (all areas)

Need	Appointment attended		Appointment awaiting		Appointment not attended		Appointments offered (total)
	#	%	#	%	#	%	
Accommodation	108	36	161	53	33	11	302
Alcohol	123	24	360	69	36	7	519
Financial	37	22	104	63	24	15	165
Learning disability	26	20	96	74	7	5	129
Mental Health	575	26	1509	68	119	5	2203
Physical	250	72	89	26	7	2	346
Social Communication	10	19	42	78	2	4	54
Substance Misuse	145	28	326	64	38	7	509
Any appointment	1274	30	2687	64	266	6	4227

4.6. Communication with the criminal justice system

The police were the criminal justice agency recorded as most commonly receiving information from the L&D service.

In nearly three-quarters of the 22,502 cases referred to L&D service, information was communicated to criminal justice services (16,320 cases; 72.5%). As shown in Figure 4.10, there were a variety of services to which information was communicated, with the largest number of cases having information communicated to the police, followed by court.

Figure 4.10: Number of adult cases in which information was communicated to other services (all areas)

4.7. Criminal justice outcomes – remand and sentencing

There was a high level of missing data regarding the criminal justice outcomes of L&D cases.

This means that these findings should be treated cautiously:

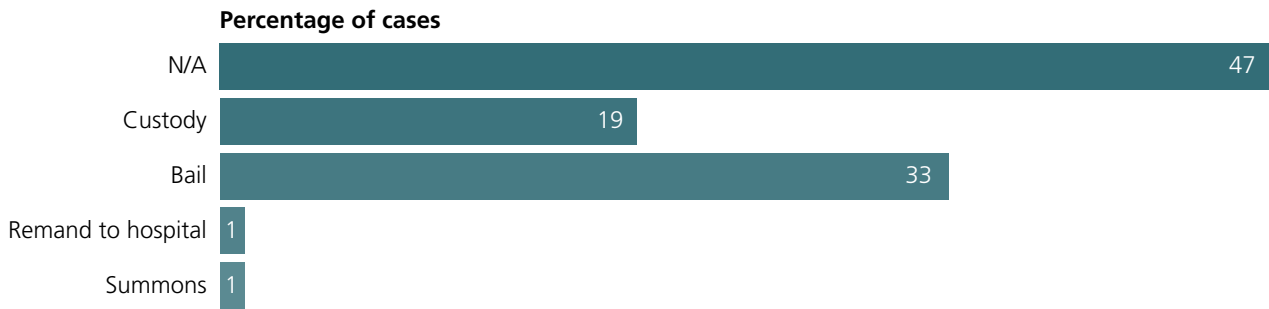
- Across all sites data on remand status were unknown or missing for 40 per cent of cases. This varied between sites, ranging from eight per cent missing to 85 per cent missing.
- Data on final criminal justice outcome were missing for 39 per cent of cases.
- In addition, 35 per cent of cases were coded as ‘no final outcome yet’.

Analysis suggests that unknown outcome and missing data was higher for cases where no health needs were identified compared to cases where a need was identified. For example, data on remand status were unknown or missing for 69 per cent of those with no needs identified, compared to 23 per cent of cases with identified needs.

Excluding missing data, around a fifth of L&D cases were remanded to custody and a third were bailed.

Figure 4.11 shows that, excluding missing data:

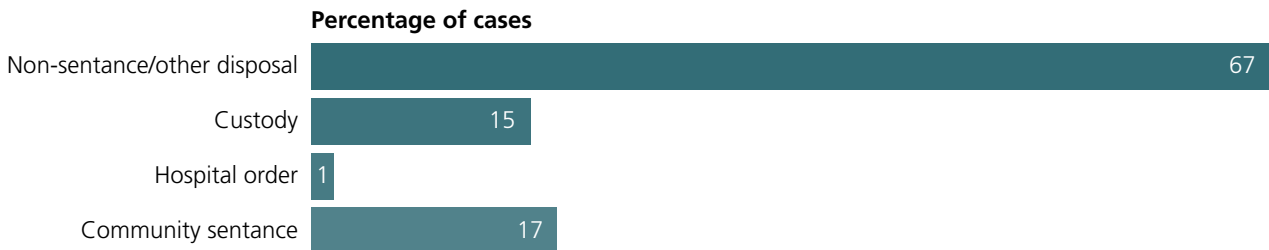
- 19 per cent of cases were remanded to custody
- 33 per cent were given bail
- In almost half of cases remand or bail were not applicable.

Figure 4.11: Remand status of adult cases excluding unknown or missing data (all areas)

Two-thirds of L&D cases were not sentenced or received another disposal.

There were very limited data available on final criminal justice outcome. For cases for which this information was available (Figure 4.12):

- Around two thirds (67%) received a disposal other than custody or community sentences.
- 15 per cent received a custodial sentence.
- 17 per cent received a community sentence.

Figure 4.12: Percentage of adult cases resulting in each sentencing or criminal justice outcome excluding missing data (all areas)

This chapter has described the adult cases in the ten L&D services implementing the National Model. The following chapter describes the features of cases involving young people.

Chapter 5 A description of youth cases in the first year of the trial

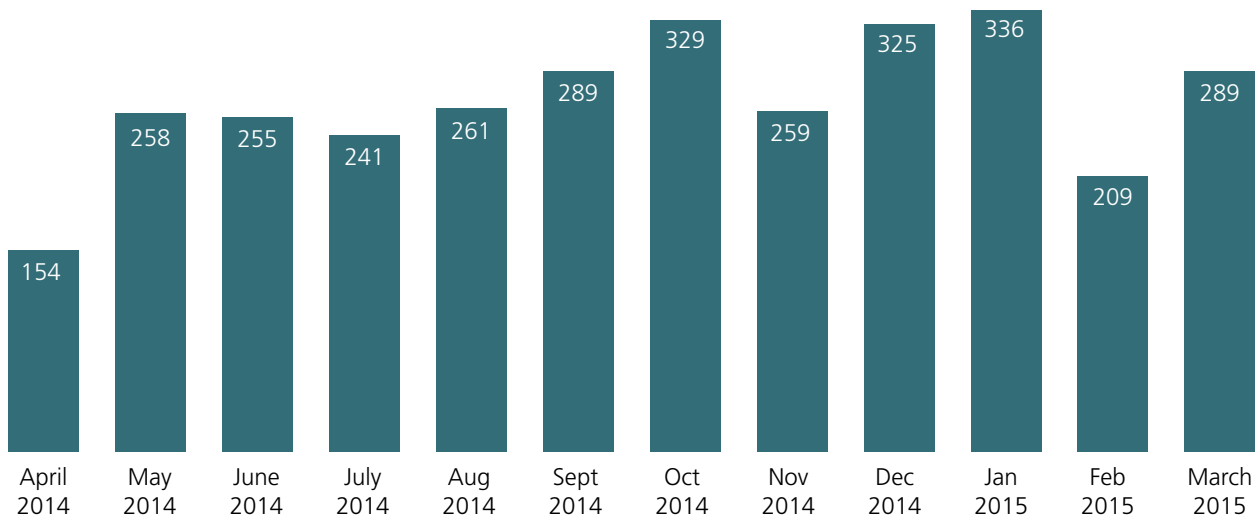
This chapter presents data from the trial minimum data set on cases of young people in the National Model L&D services in the ten trial sites.

5.1. Numbers of referrals

As with adult cases, the numbers of young people referred to the L&D service varied between sites.

A total of 3,636 youth L&D cases were seen across the ten sites over the data collection period. Overall, there were considerably fewer referrals of young people to the service than adults. As shown in Figure 5.1, the number of referrals increased slowly between April 2014 and January 2015. As described in Section 3.3 young people are increasingly unlikely to pass through police custody suites and are initially being dealt with via voluntary attendance, which is an area that has proven to be challenging across all sites nationally

Figure 5.1: Number of referrals of youth cases into the L&D service in each month (all areas)



5.2. Declining contact

Thirty-six per cent of all young people's cases declined L&D services, but only six per cent of cases in which needs were identified declined contact.

Table 5.1 shows whether L&D contact was declined, across the different needs. The trial minimum data set does not indicate at what stage in the L&D process contact was declined. The proportion declining L&D contact is lower in those with needs identified.

Table 5.1: Youth cases declining contact with L&D services, by identified need (all areas)

Need identified	L & D Contact Declined		
	No	Yes	% Declining
Overall cases declining contact (including those with no need identified)	2098	1186	36
Identified accommodation need	190	14	7
Suspected alcohol misuse	258	13	5
Identified financial need	74	4	5
Suspected learning disability	285	20	7
Mental Health need	896	41	4
Physical disability/need	58	6	9
Suspected social and communication difficulty	196	15	7
Suspected substance misuse	473	34	7
Identified education, employment or training need	394	21	5
Suspected speech/language/communication need	88	5	5
Suspected victim of sexual exploitation	71	5	7
Identified current risk of suicide/self-harm	183	11	6
Suspected gang involvement	69	4	5
Suspected victim of abuse or bullying	170	6	3
Parental/Family conflict	523	45	8
Any need identified (excluding cases with no need identified)	3928	244	6

5.3. Characteristics and offence type

As shown in Table 5.2, the majority of young people involved in L&D services were aged between 16 and 17 years' old.

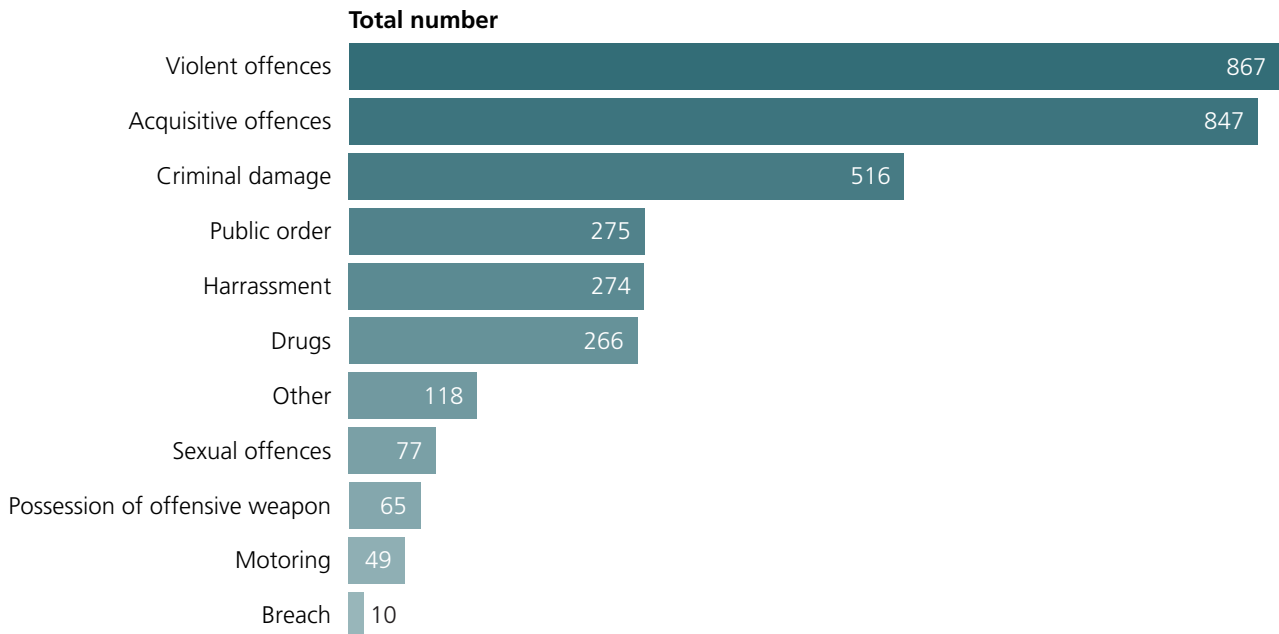
Table 5.2: Age of youth cases (all areas)

Age (years)	% of all youth cases
8 to 9	0%
10 - 11	1%
12 - 13	15%
14 - 15	18%
16 - 17	61%
18 - 19	5%
20 - 21	0%
22 +	0%

As with adult cases, the main charged offences for youth cases were violence and acquisitive crime.

As can be seen in Figure 5.2, violent offences and acquisitive offences were the two most common offences at charge among youth L&D cases.

Figure 5.2: Main offence at charge for youth cases (all areas)



5.4. Needs identified

As with adult cases, mental health needs were the most frequent type identified.

A large number of cases (2,143 cases) had no needs identified. However, among the minority who did have needs, multiple needs were frequently identified, with up to nine needs in a single case. Among those cases with one or more needs identified, a large proportion had mental health needs. This mirrored the situation with adults. However, the second most common need identified, as shown in Figure 5.3, was parental or family conflict. Among those with a mental health need identified, emotional and behavioural issues were the most common type of need identified, followed by attention deficit disorder, as shown in Figure 5.4.

Figure 5.3: Number of youth cases with each need identified (all areas)

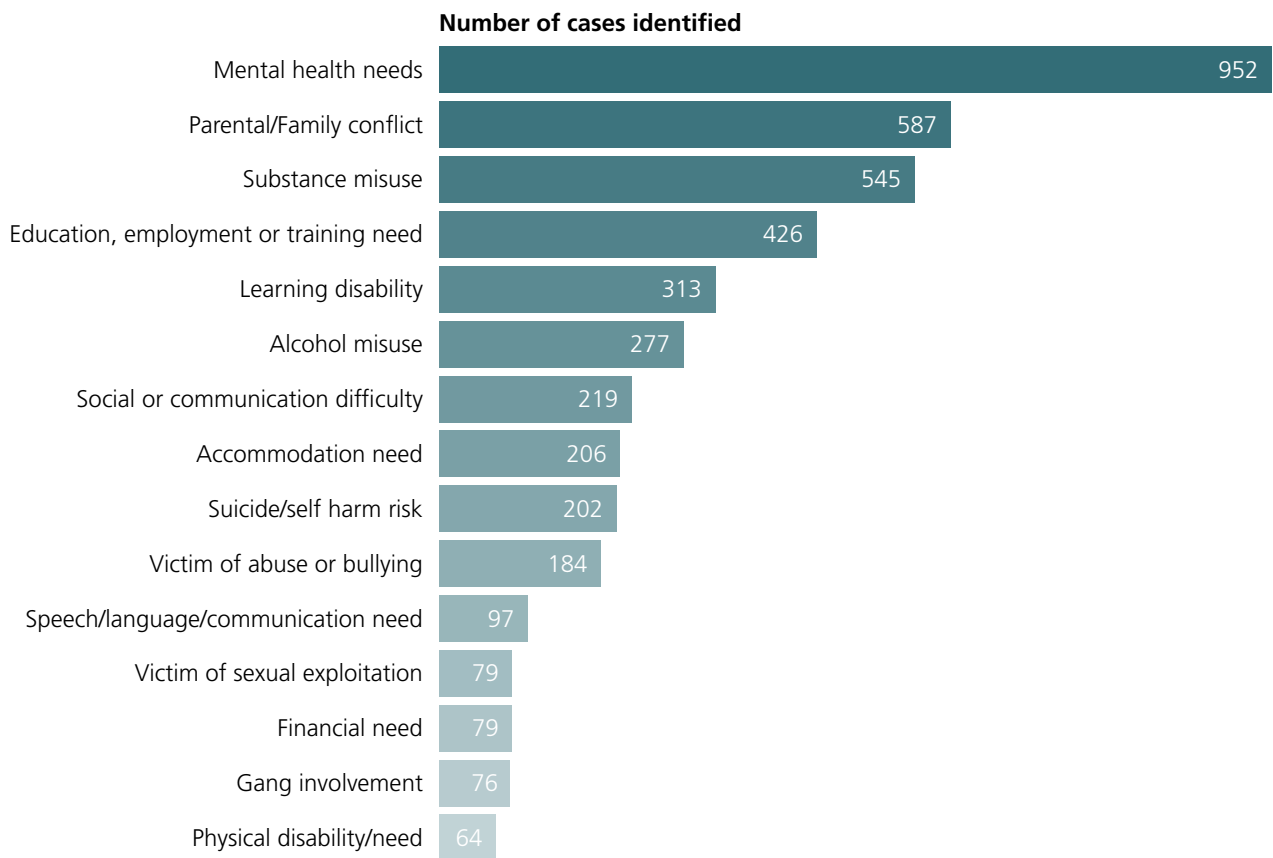
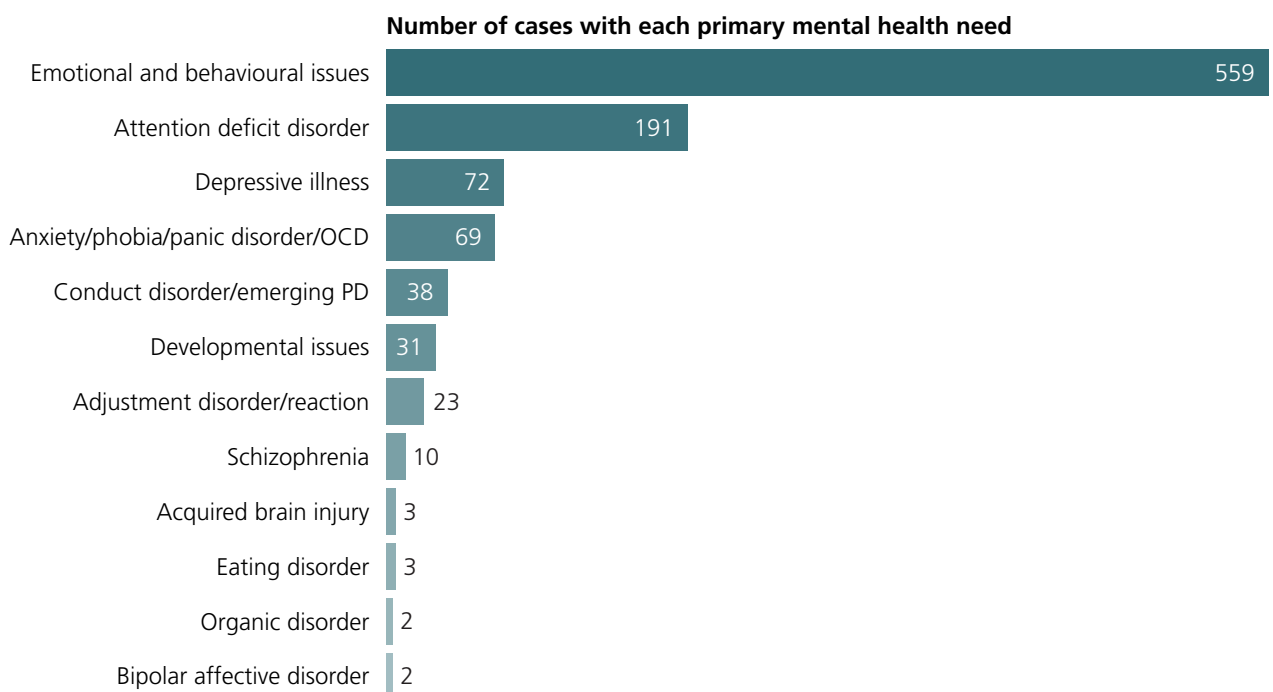


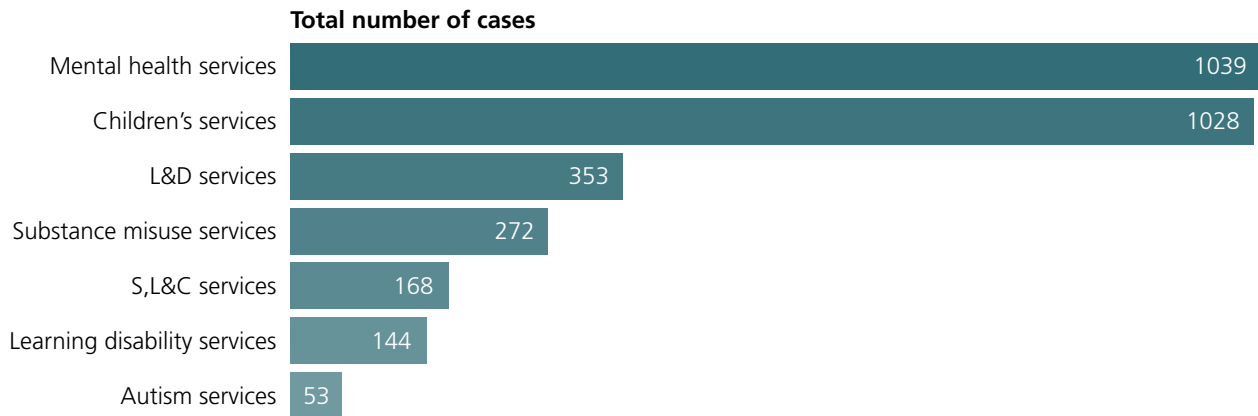
Figure 5.4: Number of youth cases with each mental health need identified (all areas)



A significant proportion of cases were known to mental health or children's services.

Of a total of 3,636 youth cases, over 1,000 were reported to already be known to mental health services and children's services. A much smaller number were known to other services, as shown in Figure 5.5.

Figure 5.5: Number of youth cases with previous contact with services (all areas)



5.5. Interventions and activities following identification of needs

Identified needs were already met in many cases.

Following identification of needs among youth cases, a number of interventions were initiated, which are shown in Figure 5.6. In many cases it was found that needs were already being met, but in cases where needs were not met, the most common response was a referral to appropriate services or provision of advice.

We have provided further detail for mental health needs, as this was the most common need among this population. As shown in Figure 5.7, the need was already met in almost one third of cases with a need identified. However, for others referrals were made to the appropriate tier within CAMHS or to other agencies. Six per cent of cases had a referral or other action indicated, but this was refused by service users.

Figure 5.6: Activities and follow up for youth cases across each category of need (all areas)

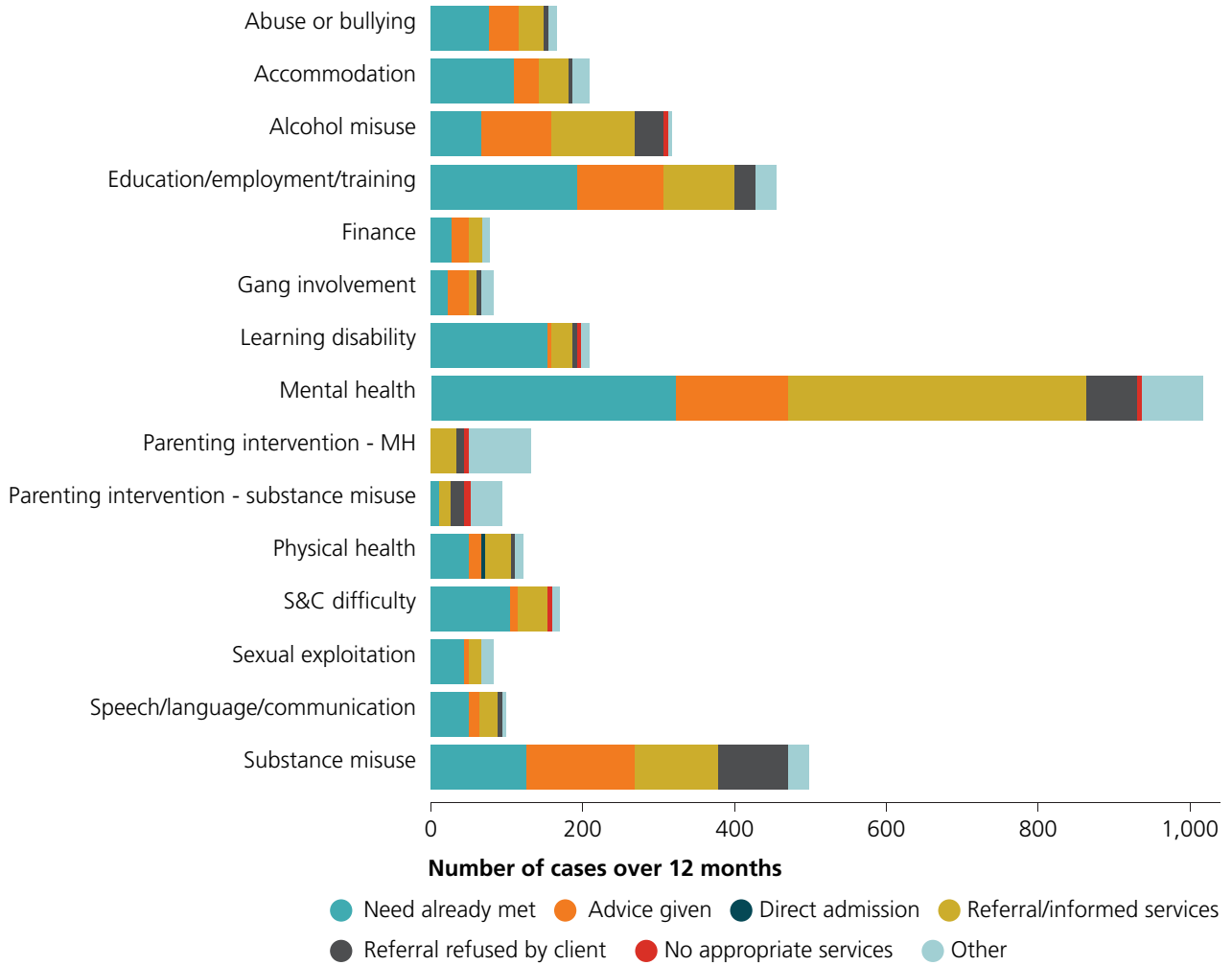
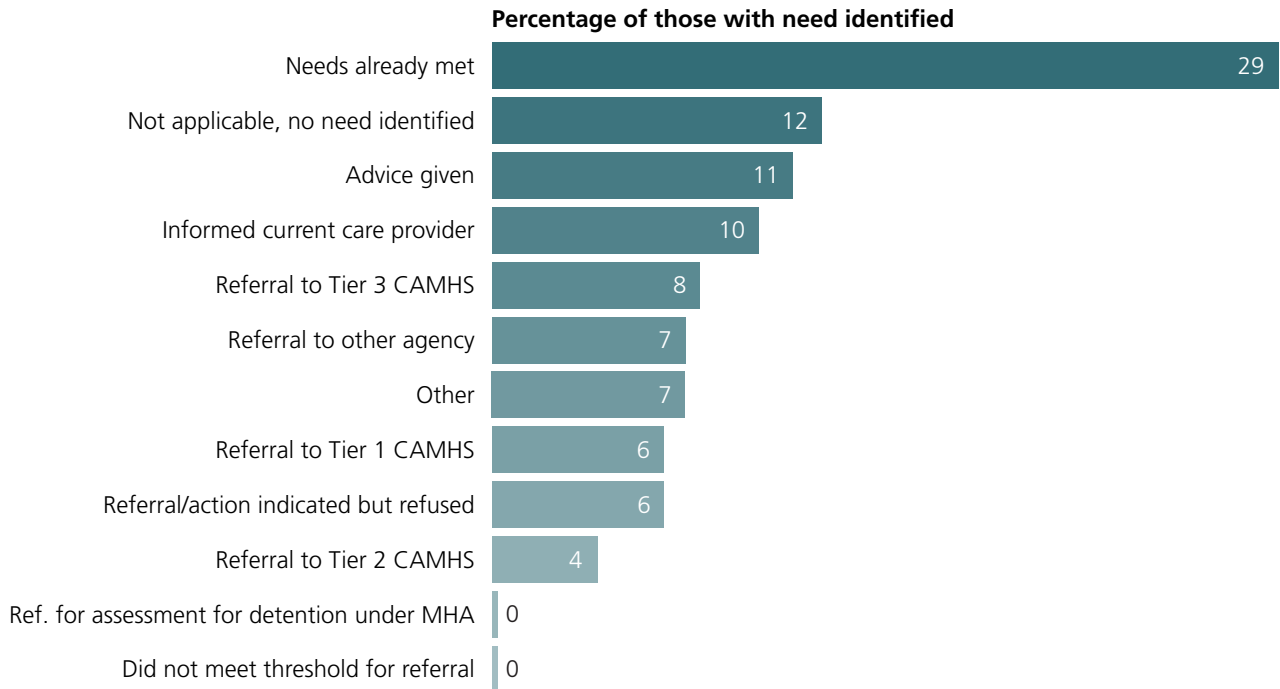


Figure 5.7: Activities and follow-up for youth cases identified as having mental health needs (all areas)

Appointments were most commonly offered for mental health services, followed by substance misuse services.

Data were recorded on the number of cases that had appointments offered across each of the need categories and whether those appointments had been attended, were not attended, or whether service users were still waiting for appointments. As shown in Table 5.3, the highest number of appointments was offered for mental health services. At the time of data collection, a high proportion of cases were listed as still awaiting appointments and across several of the categories, more than ten per cent of appointments were not attended.

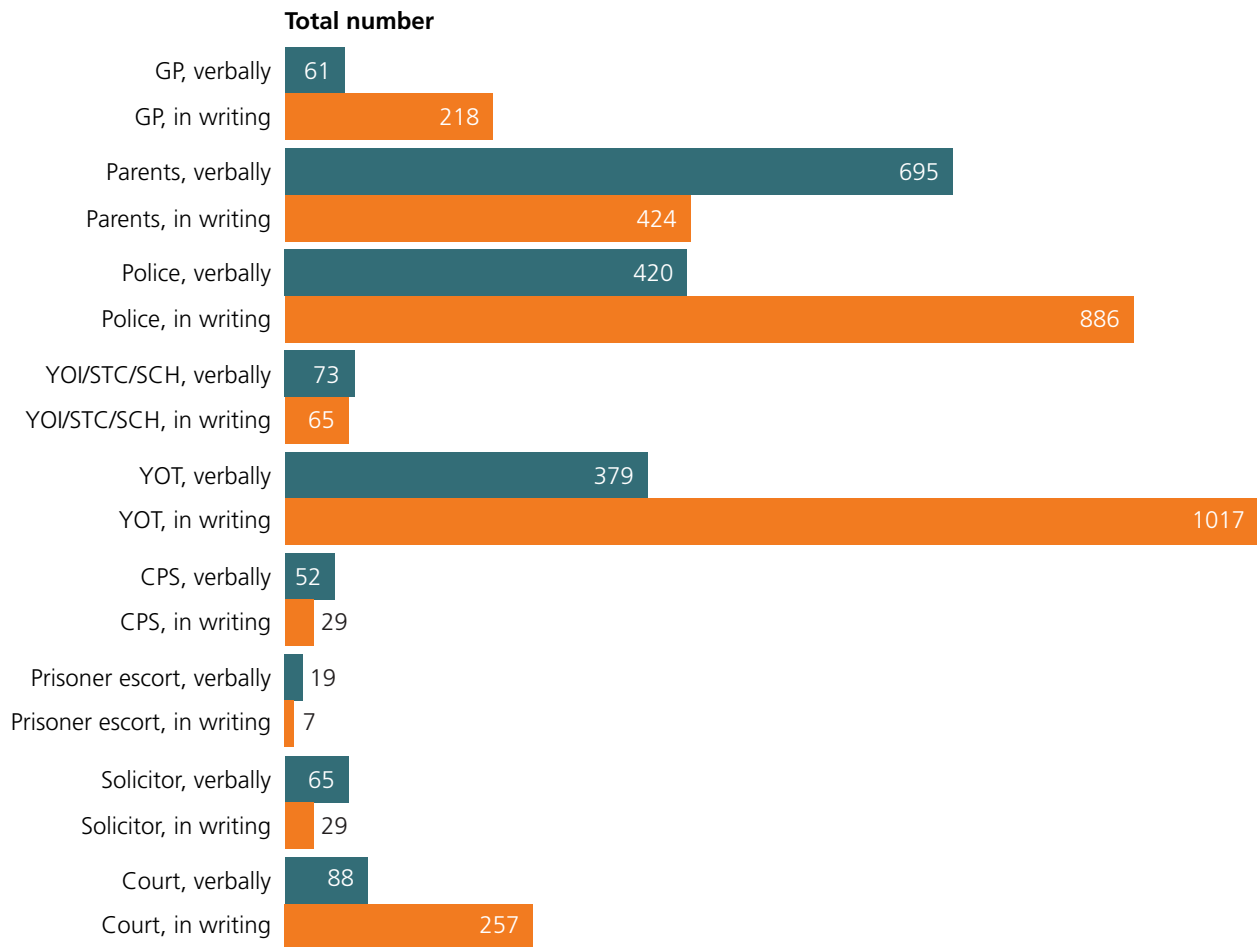
Table 5.3: Youth cases attending appointments, awaiting appointments and not attending appointments for each type of need (all areas)

Need	Appointment attended		Awaiting appointment		Appointment not attended		Appointments offered (total)
	#	%	#	%	#	%	
Physical health	7	44	6	38	3	19	16
Mental health	98	33	170	58	26	9	294
Parenting	16	37	23	53	4	9	43
Learning disability	5	17	24	80	1	3	30
Social & communication	5	23	14	64	3	14	22
Speech/language/communication	9	36	13	52	3	12	25
Alcohol misuse	27	47	24	41	7	12	58
Substance misuse	41	32	66	51	22	17	129
Accommodation	13	41	12	38	7	22	32
Financial	4	40	6	60	0	0	10
Education/employment/training	35	40	45	51	8	9	88
Gang involvement	1	17	4	67	1	17	6
Sexual exploitation	5	33	9	60	1	7	15
Bullying/abuse	8	38	11	52	2	10	21
Any appointment	274	35	427	54	88	11	789

5.6. Communication with the criminal justice system and other agencies

Information about youth L&D cases was most frequently communicated to Youth Offending Teams and to the police.

Information was also frequently communicated to parents, although in contrast to communication to the Youth Offending Team and police, communication to parents was more often verbal rather than in writing. There was a relatively low level of information communication to Courts.

Figure 5.8: Number of youth cases in which information was communicated to other services (all areas)

GP: General Practitioner YOI: Youth Offending Institution STC: Secure Training Facility YOT: Youth Offending Team CPS: Crown Prosecution Service SCH: Secure children's Home

5.7. Criminal justice outcomes

Very little information was available on criminal justice outcomes.

Final criminal justice outcome was only recorded for 137 cases. Among these cases, 42 per cent received a Youth Rehabilitation Order and 39 per cent a Referral Order. All other criminal justice outcomes were seen for less than four per cent of cases where criminal justice outcome was recorded. As noted in Section 2.4.7, a reason why there are missing data is that the data needed to be collected 'manually' by L&D staff by contacting the CPS and courts. This was time consuming, data were not easily available and often outcomes were not yet known if the case was ongoing.

Having described the characteristics of the young people and adults involved in the National Model L&D scheme in the ten sites, the following chapter focuses on findings about how L&D services worked with partner agencies and their experiences of making referrals.

Chapter 6 Working with partners and making referrals

The operation of L&D services rests on cooperation and partnership with other agencies. L&D services operate in police custody suites and courts, as well as in Youth Offending Services. Cooperation with the probation service⁴⁶ is also important to ensure that information from L&D services reaches the courts.

Wider partnerships, outside the criminal justice system, are also essential. The main way in which L&D services can improve health and other outcomes for service users is by referring them to appropriate support services. The wide range of vulnerabilities covered by the National Model of L&D means that L&D services needed to work with a considerable number of agencies.

This chapter presents findings related to how L&D services worked with partner agencies and experiences of making referrals to other agencies. It also presents the views of other agencies.

6.1. Partnerships developed by the L&D service

Partnerships between police and L&D services were generally strong and the L&D service was valued in the custody suite.

The pivotal relationship for most L&D services was with the police. Interview findings indicate that the expertise and knowledge of the L&D staff members was appreciated by a range of professionals who worked for other partner agencies, in particular, police in the custody suite. Prior to the introduction of the National Model for L&D, the police would call a crisis team or designated doctor to deal with difficult situations relating to mental health (impacts on police custody are further described in Section 7.2). Hence the relationship was reported by interviewees across areas to be productive and positive. A respondent described how the Police work with L&D:

[The] relationship with the police is fantastic – [they] have a nominated manager and they have embraced L&D fully.

Senior manager local NHS Trust, area

Co-location in the police station was central to the operation of the National Model, but there were challenges in some sites.

In area 9, communication between partners was said to be streamlined because of multi-agency working in the same building:

I mean, we can be based at a police station so we have the safeguarding office below us, we have the anti-social behaviour team in the same office, we've got some aspects of social care are right here as well, so they will come up to

⁴⁶ During the fieldwork the probation service was undergoing significant reform as part of the Transforming Rehabilitation Programme. The evaluation was not able to explore the impacts or potential impacts of these changes, but this could usefully be investigated in future evaluation. For more information about Transforming Rehabilitation see Ministry of Justice (2013d; 2013e; 2015).

us and we can have discussions [...] whereas before, if we were somewhere completely different, there might not be that freedom of, sort of, information flow or communication between services.

Frontline L&D member of staff, area 9

However, a small number of interviewees from the police and the L&D service commented on challenges that could arise from being based in the police custody suite. For the L&D team, it could compromise the extent to which they were perceived as independent from the police. For the police, the L&D service could take up limited space in the busy custody environment. These views were not widely expressed.

L&D services are just one of a number of agencies working in police custody. For example, in area 7, (physical) health providers and a drug agency also had a presence in the custody suite. Among the sites, integration of different systems and processes appeared to be at different levels.

Agencies considered not fully engaged with the L&D service differed considerably between and within areas.

When sites mentioned a lack of input from particular partner agencies, comments usually related to limited strategic-level engagement (for example, attending L&D board meetings) and mentioned the Crown Prosecution Service, probation, clinical commissioning groups, primary or secondary care or the courts and some respondents mentioned being frustrated by this lack of input.

However, in other areas these relationships were reported to be working very well – at least at the more operational, day-to-day level. Taking probation as an example, in area 5, the L&D service was based in the same office as the probation service and it was reported that the two services work well together. Interviewees in this area, and one other described that working relationship:

If they [probation] have concerns about someone's mental health, if they're not sure in terms of sentencing options, what might be appropriate in terms of their mental health, or they've got general concerns or they're not sure if they can supply them with an order [...] they'll come in and chat to us and see if we can do an assessment. And we'll work with Probation and we'll do a report alongside of Probation, and we will very closely liaise with them while we're doing our report, or if they need our recommendations to kind of go in line with each other or they, you know, keep each other posted on what each other's thinking and we kind of formulate something together for the court.

Manager Forensic Mental Health Practitioner Service, area 5

The L&D report is obviously more medical [than the pre-sentence report] [...] but there is some overlap in terms of risk assessment and the probation draw heavily on whatever the L&D recommend, particularly in relation to whether they're able to comply with an order. I wouldn't go as far as to say it's duplicating material but you can definitely see there's a correlation between the probation report and the L&D report and where they've drawn on it to make their recommendation which is good.

Court staff, area 6

Interviewees' reports of the partnership between L&D services and CAMHS also varied between sites. Analysis of the interviews suggests that in areas where the Youth Offending Teams had played a central role in the development of L&D, the relationship was usually more established and functioned well. CAMHS had developed a relationship with Youth Offending Teams over time and building up a similar kind of relationship with L&D services takes time.

Regarding within-site differences, in L&D trial sites that covered a large geographical area or more than one local authority, it was reported that there were differences in the level and quality of available services to which L&D was likely to make referrals.

Communication about the scheme with other agencies was identified as an area for improvement.

A lesson learned by interviewees from several areas was the need to increase awareness of the L&D scheme among partner agencies.

I think the biggest weakness still is communication, I am still not convinced that everybody knows about it.

Area team leader, area 6

I still don't think court officers that work within the youth offending teams, and court officers generally actually understand fully enough about the model. And unless someone is strikingly, obviously poorly or distressed, or requires medical support, they don't tend to get contacted. So I still think there's a little bit of work there to be done [...] familiarising court staff with what L&D is, and how they can benefit the court process.

Local manager of L&D trial, area 7

Several of the L&D staff members interviewed reported that they felt that raising awareness of the scheme was an important part of their role.

Some sites had built partnerships with voluntary organisations.

For example, in one area MIND were undertaking L&D outreach work, providing a group intervention to compliment one-to-one work with service users by the L&D team. In two areas interviewees described how women's centres were able to work with service users. Other voluntary organisations that received referrals from L&D services included projects for sex workers, veterans and young widows, the Samaritans, local counselling services, early intervention services, suicide and dementia support organisations.

Information sharing between partners was crucial to L&D services and was reported to be working well in most instances.

The importance of effective systems of information sharing cannot be understated. An important aspect of the L&D service is that the core team have access to information from mental health services, and other services, from their offices in the court or police custody suite. This allows prompt collection of information about a service users' previous contact with local agencies and their case history. Interviewees noted the importance of ensuring that access to these IT systems was in place from the outset.

Similarly, information sharing with partner agencies about service users is central to the National Model and this required information sharing protocols and agreements to be in place. Analysis of stakeholder interviews indicated that, on the whole, by the start of the second year of the operation of the National Model, relevant information sharing protocols had been drawn up and were being used in practice. Information sharing was mentioned as a strength of the service following the implementation of the National Model by some interviewees:

[T]here's some really good protocols in place, that people are signing up to the policies and procedures, and their practice is reflecting that. And that appropriate sharing of information means that it helps them to manage the risk in the community, and helps them to work really closely as a team

Local manager of L&D trial, area 7

I think now they've got a really robust view of what [our area is] all about and what the services are, because everything is so intertwined, you know with Mental Health, Housing, Substance Use, it's all so important, and we've not always been great at working together, but there is a good working relationship now in [this area] and we share information on a level that wouldn't have thought possible a few years ago

Provider of services in custody, area 7

However, it was noted that drawing up information sharing protocols could be time consuming, quite technical, and had in some instances involved time meeting with partner agencies to explain the service and why information sharing was needed. Some interviewees reported ongoing information sharing issues but these were less common than examples where information sharing was working well.

6.2. Experiences of making referrals

Housing and benefits were perceived to be the most difficult services to refer adult cases to.

Respondents to the stakeholders' web survey were asked about their experiences of referrals and how easy or difficult it was to refer to support services. Across all respondents the four types of service considered 'very difficult' or 'difficult' to refer to were:

- Services for adults with learning disabilities.
- Services for adults with mild/moderate mental health needs (this was also listed as among the easiest services to refer to, indicating significant inter-area differences).
- Benefits and employment support services for adults.
- Housing and accommodation support services for adults.

Substance misuse and services for mental health were perceived to be the easiest services to refer adult cases to.

Among web survey respondents, the following were most commonly reported to be 'easy' or 'very easy' to refer to:

- Services for adults with physical health needs
- Services for adults with mild/moderate mental health needs
- Services for adults with serious/severe mental health needs
- Substance misuse services for adults.

For young people, substance misuse services were perceived to be the easiest to refer to.

Findings about the most difficult services to refer to for young people varied between areas. In some areas, 'services for young people with learning disabilities' and 'services for young people with developmental or other emotional and behavioural issues' were considered the most difficult to refer to, but in others they were reported to be the easiest.

Interviewees reported that agencies, generally, had capacity to take L&D cases but there was a great deal of variability between sites and between services.

Findings presented in Section 4 showed that referrals from L&D services to other agencies had increased as a result of the trial. The potential knock-on effect of increased referrals, especially on secondary care, was noted, for example, by this interviewee:

I guess because we see an awful lot more people now, then there are those people who would otherwise have been missed who maybe [are] at the threshold of requiring admission to hospital and regrettably because of the demand on patient beds, and because we are seeing more people we are sign posting more people to inpatient areas.

Local manager of L&D trial, area 4

Among stakeholders interviewed there were examples given where L&D services were not able to secure services from other agencies and claims (both from L&D practitioners and representatives of the services they were referring to) that there were few capacity difficulties and that they managed to find a way of accessing services:

I haven't had any capacity issues at all, no. ... No, sometimes they might say, 'We're not actually appropriate, but then they'll flag us in the direction of another service that is more appropriate and more able to deal with certain people. So, if any of them can't help, then they are very helpful in pointing us in another direction. ... There are issues sometimes where there's not a bed at a specific on-call hospital, but then they'll always find a bed somewhere else for us. So, we're never left with a scenario that we can't do something.

Frontline L&D member of staff, area 6

We have never found an obstacle in engaging people in a timely manner to the community mental health team or to brain injury services or for disability services, or to, I don't know, psychological services. You know they are normally sort of engaged in a timely manner, despite the fact that there might be more of them now, you know that there is resilience. There is capacity in community provision.

Local manager of L&D trial, area 4

The picture here, therefore, is one of variability between sites and between services.

There were a low number of responses to questions in the web survey about capacity of partner agencies (14 responses). Two interviewees (one from a speech and language service and one from a local voluntary organisation) responded that their service did not have capacity to take on L&D cases. Five respondents from other agencies said that they had capacity to take on new cases, or that it created 'some challenges'.

Waiting lists for some services could increase the risk of non-attendance at referral appointments.

Several sites reported that there were waiting lists for CAMHS for young people (although survey respondents did not indicate the length of time). One interviewee commented that by the time the appointment was available, the young person may have disengaged from the L&D service.

There were some reported instances where L&D service users did not meet the threshold for services.

Analysis of stakeholder interviews indicates a number of examples where L&D service users did not meet the threshold for services. Some specific examples mentioned included:

- Housing support and services were often mentioned as being difficult to access, with a scoring system to allocate scarce accommodation among those in need.
- Secondary care services were mentioned several times. A shortage of beds and instances where service users had a number of lower-level needs, but not one single need that was above the threshold required to access the service.
- Services for those using cannabis and legal highs (services available were targeted at heroin and cocaine users).
- Service users with learning disabilities in particular, often did not meet the local threshold for Learning Disability services.

In some areas, interviewees commented that service users with low-level needs could often be found support in the community through self-help groups and local charities.

Based on the interview and web survey data, there is no indication that the L&D services were dramatically increasing demands on referred-to agencies.

Where capacity issues were mentioned, it appears these were related to wider, on-going issues for existing services. The evaluation team are not able to draw conclusions about the extent to which L&D services were consistently experiencing problems in getting other agencies to take on L&D service users, because reported capacity issues were specific to particular areas (and perhaps at particular times). It is also not easy to distinguish in the interview data between capacity issues and threshold issues.⁴⁷

There was a perception that L&D services might increase short-term and decrease longer-term demand.

Some stakeholders recognised that the L&D services were acting as an early intervention service by identifying people in need of support early on, which, although creating additional short-term demand, means that long-term consumption of services might be reduced. Longer-term study would be needed to explore this.

⁴⁷ Although we note that these two aspects can be related. Raising thresholds for services can be a response to limited capacity (or when they move in the other direction, to a lack of throughput). However, there are also examples where there is simply no provision at all for a particular issue and therefore it does not make sense to talk about thresholds.

Referrals were often secured as a result of advocacy by L&D staff members.

As mentioned in Chapter 3, L&D staff played a role in advocating for service users, to ensure support was received. One interviewee described the following case:

There was somebody who was known to services and it was late on [...] a Friday and I'd spoken to the intensive team who were responsible for that area and said [...] 'this gentleman has got an appointment early next week with his care team but, you know, he's wobbling a little bit. Is there any chance that you can kind of offer some sort of telephone support over the weekend? He's expressing, you know, suicidal, you know, thoughts and these are my concerns...'. [...] they felt that it didn't meet their threshold or their criteria and [...]they wouldn't accept the referral [...] wasn't happy with that decision, so I escalated that to my team ... my Team Leader also got involved [...]and it was escalated up [...] within the intensive team as well, and eventually they did agree to do it. But it was quite a battle [...] to actually get that service, and all this person needed was a bit of a point of contact all weekend, because he was having a wobble, do you know what I mean?

Local manager of L&D trial, area 10

The flexibility of L&D services to provide short-term support was thought to fill a gap between referral and access to services.

L&D support workers were reported to keep service users engaged long enough to access specialist services. In some cases, this meant that L&D practitioners were working with service users for longer periods than anticipated within the original service design – for example, where there were long waiting lists for CAMHS.

L&D services expressed an appetite for increased feedback about the outcomes of referrals.

Interviewees from L&D teams expressed a desire to receive more information about the progress of the referrals that they made and the ultimate outcomes for service users. This could be used to inform their future practice and was a matter of professional interest. They also wanted to understand whether service users had experienced further contact with the criminal justice system and to reflect on what that meant for the effectiveness of referrals.

Following from the descriptions of the nature of the service, service users and partnership working in this and the previous two chapters, the next chapter looks at the impacts of the L&D service.

Chapter 7 Impacts of the National Model for liaison and diversion

This chapter reports findings from the evaluation about the impact of L&D. It draws on data collected through stakeholder interviews and the web survey, interviews and web survey of judges and magistrates, and the quantitative analysis comparing outcomes in *four* sites before and after the implementation of the National Model of L&D. The chapter is divided into five sections, looking at the following impact areas:

- The number of cases and needs identified
- Police custody
- Courts
- Health impacts for service users
- Impacts on offending.

7.1. Impacts on the numbers of cases, needs identified and numbers of appointments and interventions offered

Chapters 4 and 5 presented information about adult and young service users (respectively) from all of the trial sites, relating to the period after the implementation of the National Model. This section looks at only the four trial areas included in the before and after analysis (areas 4, 7b, 8 and 10) and compares before and after the implementation of the National Model.

Analysis comparing adult cases in four sites before and after the trial shows an increase in the number of cases identified following the implementation of the National Model.

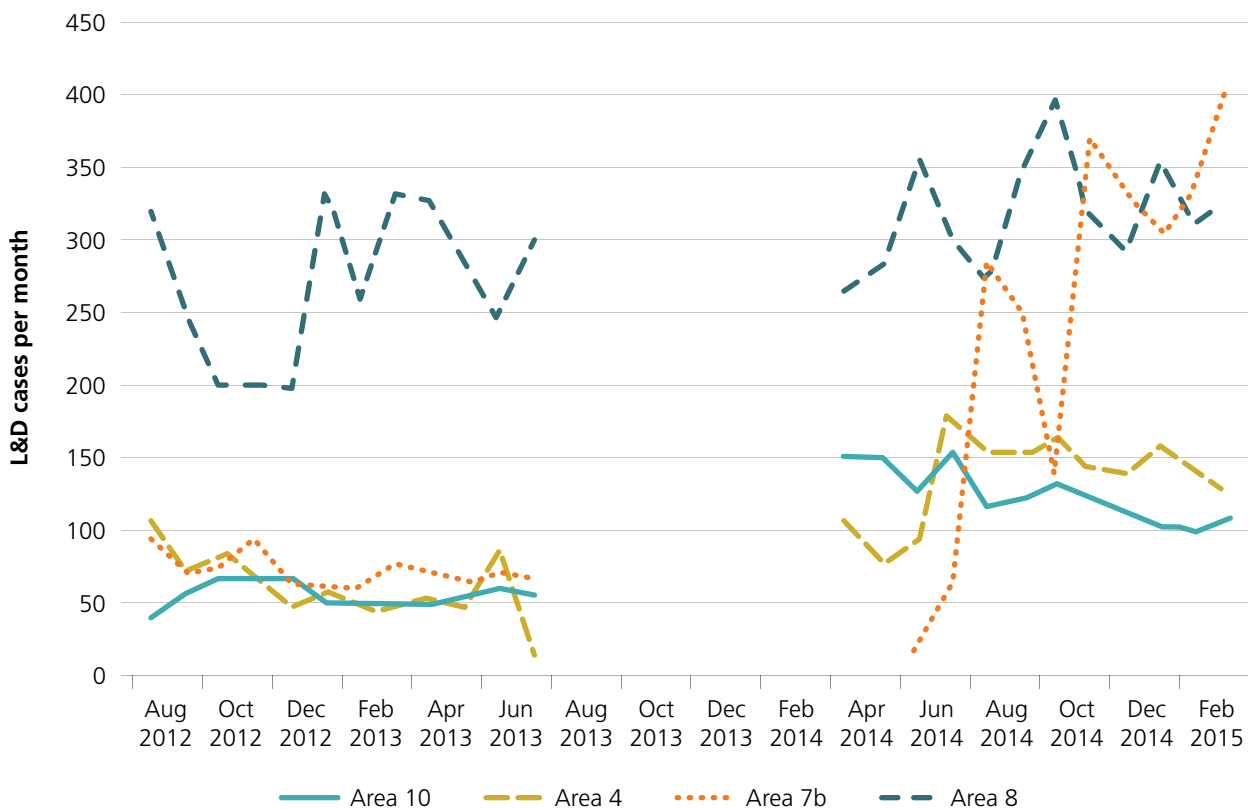
Figure 7.1 gives an overview of how the number of cases recorded in the trial minimum data set compared to those recorded before the implementation of the National Model in the pathfinder period:

- In areas 10 and 4 there was a consistently higher number of L&D cases per month in the trial period compared to the earlier pathfinder.
- In area 7b⁴⁸ there was a low number of cases in early months, which then rapidly increased.
- Area 8 had a slightly higher number of cases in the national trial than in the pathfinder site, but the change was not as dramatic as in area 7b.

These findings should be interpreted in light of findings presented in Chapter 3 about delays to implementation of the National Model, which could explain increases in referrals over time.

⁴⁸ Area 7 included two sub-areas that completed their minimum data set separately. The before and after analysis looked at only one sub-area, referred to as area 7b.

Figure 7.1: Number of adult cases after implementation of the National Model and during the pathfinder period (areas 4, 7b, 8 and 10)



Physical needs, learning disability needs, financial needs and accommodation needs remained low and fairly constant across the sites.

The most common needs identified, both before and after the implementation of the National Model, are mental health, alcohol and substance misuse (Table 7.1).

The proportion of L&D cases in which each need was identified decreased after the implementation of the National Model.

We used the information in the pathfinder and national trial minimum data sets to understand whether the needs (and support required) of L&D cases had changed between these two periods.⁴⁹ Table 7.1 shows that the *absolute number* of needs identified increased following implementation of the National Model. This shows, for example, an increase of over 33 per cent in the number of cases in which a mental health need was identified.

⁴⁹ In the L&D trial minimum data set it was unclear whether missing data is as a result of information not being known or whether this is because the question is not applicable. In the following data analysis, we have assumed that data that is missing suggests that a particular need was not present, or no intervention was given.

Table 7.1: Mean number (and standard deviation) of adult cases with each need identified per month (pathfinder and trial periods, areas 4, 7b, 8 and 10)

Need	Average number (and standard deviation) in pathfinder period	Average number (and standard deviation) in National trial period
Mental health needs	72.8 (67.8)	99.3 (59.2)
Alcohol misuse needs	45.2 (36.6)	51.2 (28.5)
Substance misuse needs	33.4 (27.0)	40.9 (22.6)
Physical health needs	19.1 (19.2)	14.3 (12.3)
Learning disability needs	6.63 (4.88)	6.32 (4.59)
Accommodation needs	18.6 (18.0)	21.5 (16.4)
Financial needs	6.47 (5.19)	10.1 (6.85)

Note: Some needs recorded in the minimum data set were not recorded in the pathfinder data set, so are not included here or in Table 7.2

Table 7.2 shows that the *proportion* of L&D cases in which needs were identified fell following the implementation of the National Model.

In order to ascertain whether the proportional decrease in needs identified between pathfinder and trial data remained significant after adjusting for other variables, we used fixed-effects multilevel linear regression models to analyse these data. Table 7.2 presents the mean difference in the proportion of cases with needs identified in pathfinder and trial sites after adjusting for site and for the frequency of L&D cases per month.⁵⁰ Each row is the result from a different model for a given need.

Although the mean number of L&D cases seen per month with each kind of need increased between pathfinder and trial (shown in Table 7.1), the proportion of L&D cases where each need was identified decreased, a difference which is significant across all needs assessed in both pathfinder and trial evaluations (Table 7.2).

⁵⁰ Sites are the unit of analysis, with the proportion of cases with an identified need on the left-hand of the equation and explanatory variables, specifically whether pathfinder/trial and number cases per month, on the right. We use multilevel models because we have observations across time periods nested within sites (that is, observations clustered by site). We used 'time-demeaned' multilevel models (Tarling 2009) that exclusively focus on within-unit variation. (This is sometimes referred to as a 'fixed effects' panel model (e.g. Allison 2009). The terminology of fixed and random effects can be confusing so we emphasise the source of variation.) The benefit of this approach is that any time-constant or slow-to-change factors relating to a specific site are accounted for in the model. But it is important to note that this approach does not account for time-varying factors.

Table 7.2: Mean percentage of adult cases with each need identified per month (pathfinder and trial periods, areas 4, 7b, 8 and 10)

	Average per cent L&D cases with needs identified (standard deviation)		Results from fixed-effects multilevel linear regression models comparing pathfinder and trial data	
	Pathfinder (n= 5570)	National Trial (n= 9646)	Adjusted mean difference (standard error)	P value
Mental health needs	65.8 (23.5)	56.7 (25.0)	-9.85 (2.85)	0.001
Alcohol misuse needs	42.4 (9.4)	29.7 (12.7)	-9.06 (2.48)	<0.001
Substance misuse needs	32.7 (9.7)	24.1 (10.7)	-8.09 (1.55)	<0.001
Physical health needs	16.4 (8.14)	7.92 (5.28)	-8.55 (1.29)	<0.001
Learning disability needs	7.2 (5.60)	3.67 (2.94)	-4.34 (0.772)	<0.001
Accommodation needs	17.0 (10.6)	11.7 (7.02)	-6.98 (1.11)	<0.001
Financial needs	7.55 (6.84)	5.74 (4.29)	-2.08 (0.915)	0.025

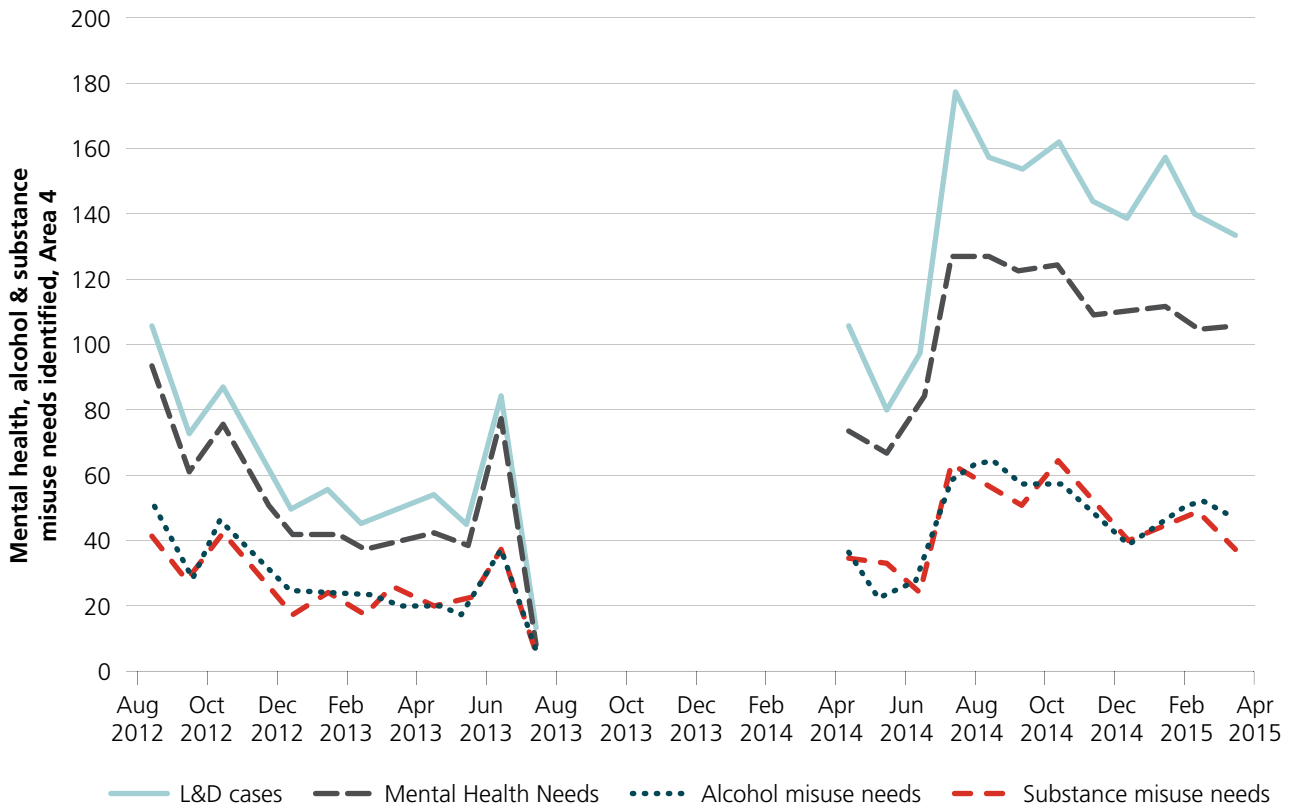
Note: regression coefficients for pathfinder/trial dummy variable. Each model accounts for clustering of observations by site and controls for time-constant differences between sites and the number of L&D cases per month.

Interpreting these findings, L&D services appeared to be screening more cases where no needs were identified. However, the increase in the absolute number of needs increased. In interpreting these results it is also important to bear in mind that the evaluation compared sites that previously had L&D services, and is not able to speak to the possible impact of the introduction of the National Model in areas that previously had no L&D services. Further, as this is a before/after comparison, the research team cannot be certain ‘what would have happened otherwise’ (see Section 2.4.9). Similarly, it was not possible to account for other changes that may have been happening at the same time in these areas, so causal attribution of these differences to the introduction of the National Model for L&D is not possible.

The change in the proportion of cases in which needs were identified varied between sites.

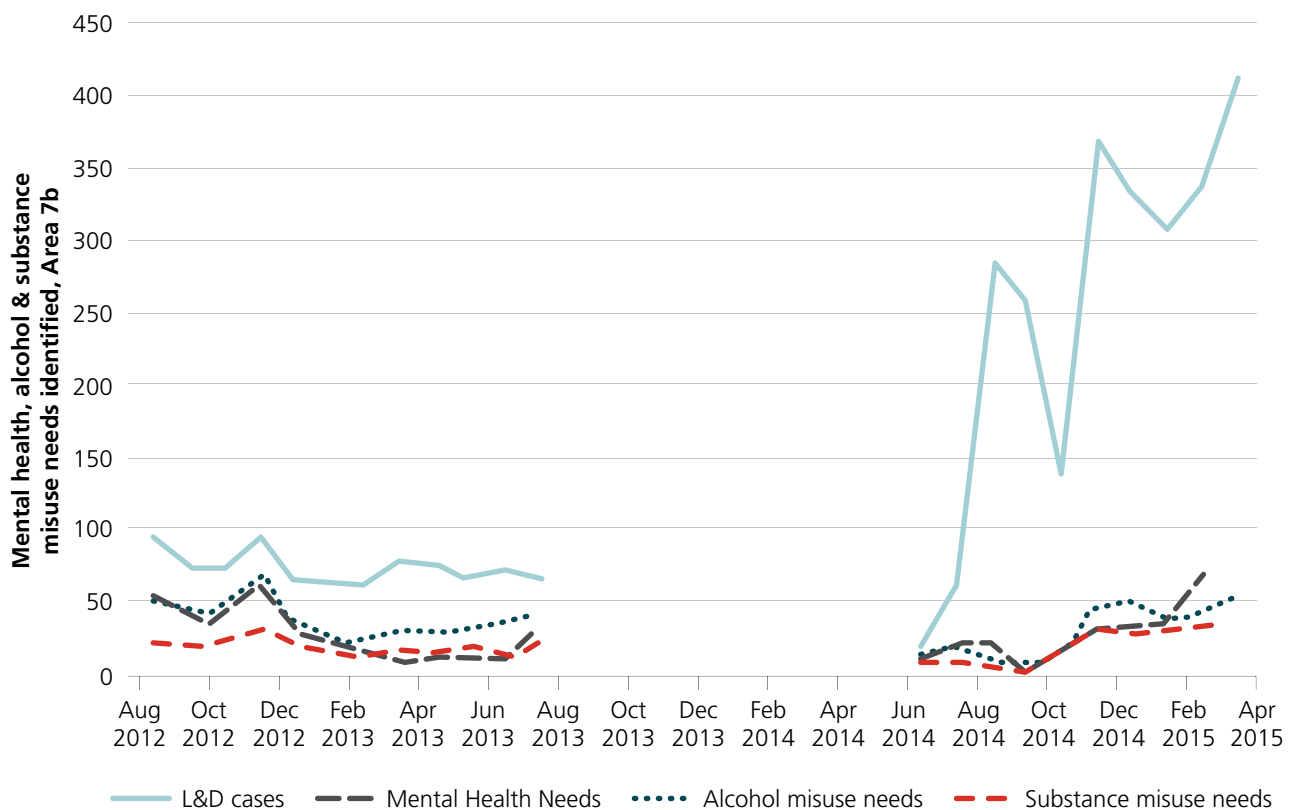
Figure 7.2 and Figure 7.3 compare two areas in terms of the proportion of all L&D cases in which a need was identified. It can be seen that in area 7b despite the steep increase in cases seen by the L&D service in 2014-2015 there was little increase in those identified with mental health, alcohol misuse or substance misuse needs. However, as outlined in Table 7.1, there was an increase in increase in the numbers of cases in which mental health, substance misuse and alcohol misuse was identified across the four sites.

Figure 7.2: Total number of adult cases and number of adult cases in which mental health, alcohol misuse and substance misuse needs were identified (pathfinder and trial periods, area 4)



Note: data were not available between August 2013 and March 2014

Figure 7.3: Total number of adult cases and number of adult cases in which mental health, alcohol misuse and substance misuse needs were identified (pathfinder and trial periods, area 7b)



Note: data were not available between August 2013 and March 2014

The number of mental health interventions offered tracked the total number of L&D cases in each month.

A number of different mental health interventions were offered, as described in Section 4.5. The number of mental health interventions offered remained broadly consistent in terms of a proportion of the total number of L&D cases in each month.

There was a small significant increase in absolute number of cases for which appointments were offered for learning disabilities and financial needs, but no increase in other kinds of appointments.

One of the key objectives of L&D services is to ensure that those in need of assistance are offered⁵¹ appropriate appointments. As shown in Table 7.3, analysis found increased numbers of appointments offered, but the proportion of appointments offered in pathfinder and trial L&D services declined. Further analysis found that in many cases any increases in appointments offered was not significant:

- A small significant increase in the *absolute number* of cases for which appointments were offered was seen for learning disability appointments ($b=0.85$, S.E. 0.237, $p=0.001$) and for financial appointments ($b=0.518$, S.E. 0.202, $p=0.012$).
- The only change in the *proportion* of L&D cases where an appointment was offered for any given need, compared to pathfinder services, was for the proportion of cases offered learning disability appointments, where there was a small but significant increase ($b=2.05$, S.E. 0.762, $p=0.008$)

⁵¹ 'Offered' includes appointments attended, appointments not attended and appointments awaited.

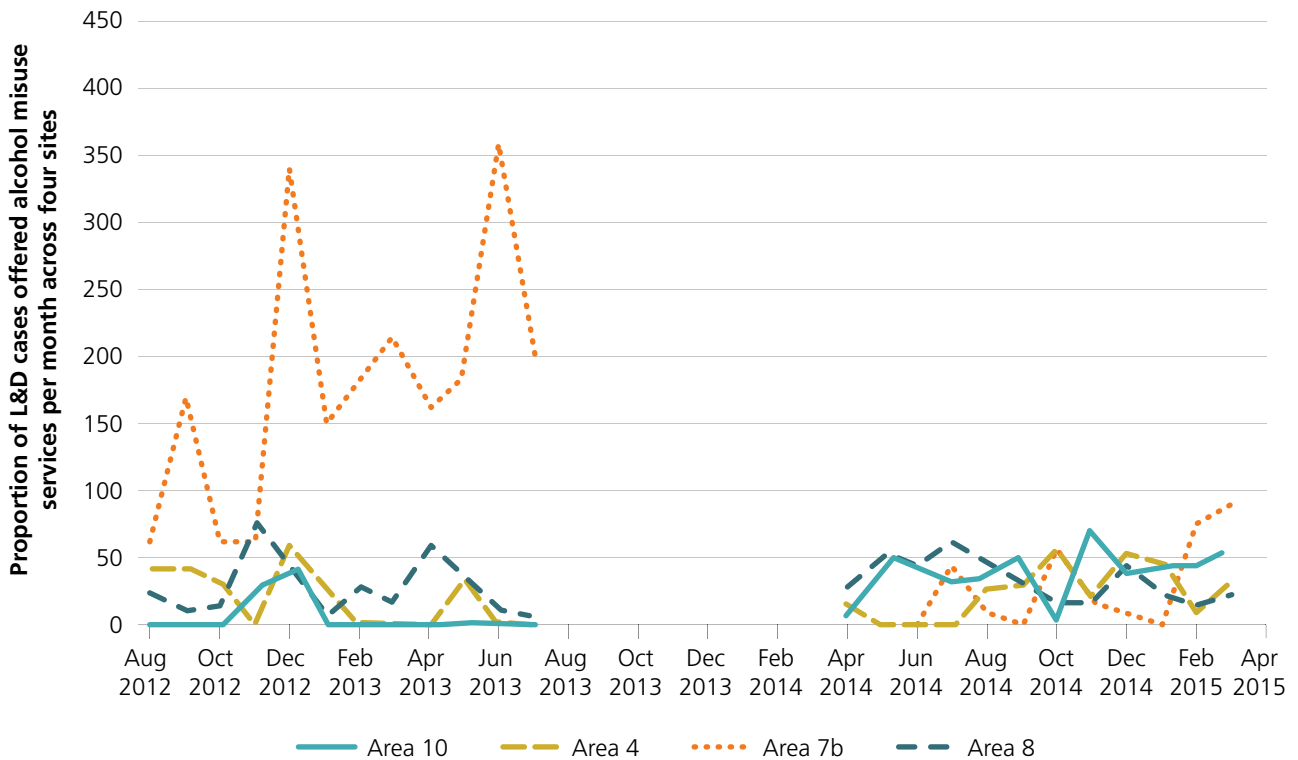
Table 7.3: Average percentage of adult cases receiving appointments (pathfinder and trial periods, areas 4, 7b, 8 and 10)

	Average number of L&D cases with appointments offered (standard deviation)		Average per cent L&D cases with appointments offered (standard deviation)	
	Pathfinder	National Trial	Pathfinder	National Trial
Mental health appointments	13.6 (14.2)	22 (15.6)	11.5 (6.50)	11.9 (5.61)
Alcohol misuse appointments	3.37 (4.23)	4.24 (4.64)	3.70 (5.64)	2.03 (1.55)
Substance misuse appointments	1.86 (2.55)	3.44 (3.72)	1.88 (2.63)	1.71 (1.51)
Physical health appointments	1.10 (1.59)	1.72 (2.29)	1.35 (2.00)	0.869 (0.943)
Learning disability appointments	0.392 (0.602)	1.22 (1.30)	0.503 (0.830)	1.40 (4.77)
Accommodation appointments	0.647 (0.913)	1.46 (1.85)	0.730 (1.06)	0.714 (0.807)
Financial appointments	0.118 (0.382)	0.92 (1.26)	0.210 (0.724)	0.425 (0.513)

In some cases, the number of appointments offered for particular needs became more consistent after the introduction of the National Model.

For example, appointments offered for alcohol and substance misuse became more consistent across the four sites in the L&D trial compared to pathfinder services, although it is difficult to know the reason for this change (Figure 7.4 and Figure 7.5).

Figure 7.4: Proportion of adult cases offered alcohol misuse services per month (pathfinder and trial periods, areas 4, 7b, 8 and 10)



Note: data were not available between August 2013 and March 2014

Figure 7.5: Proportion of adult cases referred to substance misuse services (pathfinder and trial periods, areas 4, 7b, 8 and 10)



Note: data were not available between August 2013 and March 2014

7.2. Impacts on police custody

Increased numbers of people with vulnerabilities were identified in custody.

Stakeholders responding to the survey were of the view that more individuals with vulnerabilities were now identified in police custody, following the introduction of the National Model.⁵² To some extent, this is supported by data presented above (Figure 7.1) showing an increase in L&D cases.

L&D practitioners were viewed as a valuable resource for information and expertise in police custody.

Through the provision of expertise and assessment, L&D staff members were described by interviewees as providing valuable advice to the police. The presence of L&D services meant that information was available more quickly, as this police interviewee explained:

I wouldn't say it has improved how we run [police custody] but it certainly improved how we access information quickly because if we didn't have a mental health nurse there, they have some system they have access to that gives them the medical records, the mental health records of people who are in custody which we would never be able to get.

Custody sergeant, area 7

Interviewees described L&D as providing, 'reassurance' to police custody staff, 'sharing responsibility' for assessment and decision-making about difficult cases and providing a, 'second opinion' on key decisions about the risk that a detainee posed to themselves (or others), as this interviewee from the police explained:

⁵² Thirty-five respondents answered, 2 said there had been no change, 33 said that vulnerabilities were more often identified.

I think it's probably taken a weight off custody staff's mind as well [...] We get a lot of people coming in saying, "Oh, if I get released from here, I'm going to go and jump off the bridge", and I think it's a lot of pressure to have if you don't have the level of training where you can ascertain how real that risk is.

Provider of services in custody, area 7

I think it's giving them [police custody officers] that kind of security in their decision-making as well. I think that someone else has had a look, somebody else in that field with that level of expertise has come to a similar decision as me. I think sometimes it's reassuring for them when they see somebody, you know, there's going to be times when somebody will suggest, they're presented with a mental illness and the police are not convinced. And I think it's - that's rewarding for them as well when a professional comes and says, 'I actually agree with you'.

Local manager of L&D trial, area 7

I think [the police] want us there and they're quite sort of reliant on our feedback before they're happy to release somebody. Yeah, so it's kind of sharing out the risk. I think from their point of view it's about letting go of some of the risk and reducing their anxiety about some of the people they've got in custody.

Frontline L&D member of staff, area 1

This L&D practitioner described being available to offer advice beyond L&D cases:

[W]e can give advice to the custody staff. Immediately, they come and ask us [...] "Is this person known to you?" [...] Or they can say, "This person's not known to Mental Health Services, but they're a bit odd [...], can you have a look at them for us?" So we can do that [...] in real time as it were, and that is working really, really well because it's moving the custody [process forward]. The custody staff really value that and appreciate it.

Referred to agency, area 4

There was evidence that information from the L&D service had informed police charging and remand decisions in some instances.

The vast majority of respondents to the web survey were of the opinion that information provided by the L&D service had affected decisions about whether to charge or issue a warning, caution or take no further action.⁵³ The interview data also include a few instances in which an interviewee said that a charging decision was directly affected by information from the L&D service.

The two persons I just mentioned that had been arrested for criminal offences, if the L&D service hadn't identified they had mental health issues we may have charged those people. [...] But they didn't go in the criminal justice system. They were sectioned.

Police custody staff member, area 7

Another interviewee commented that the availability of information about detainees' vulnerabilities could increase, as well as decrease, the likelihood that a case was prosecuted rather than diverted, where the police were able to assess whether a threat to commit self-harm was genuine:

On occasion we'd use more discretion if we realise that someone is genuinely mentally ill. For minor offences we can decide not to charge, take different routes, divert people out of custody, go for a non-court disposal of some sort [...] But actually more often than that it goes the other way, and because of the input of the L&D we are more likely to be robust with people who previously we might be concerned about sending to court. [...] We have an assumption that someone is mentally ill and therefore we treat them in a different way to someone who is just a criminal, for want of a better way of saying it [...] the L&D people are telling us often [that] there isn't a mental

⁵³ Twenty-two respondents answered this question. One said that information provided by L&D services had been used 'not at all' to inform decisions about charge; 11 said it was used 'to a great extent' and 10 'to some extent'.

illness here, it is just a behavioural pattern. The person needs to go to court to be dealt with. So that's what we do [...] I think probably in more cases we are likely to take more positive action than we are likely to pull back from prosecuting someone.

Police custody staff member, area 3

Respondents to the web survey also thought that information from the L&D service was used to inform decisions in the police station about whether to remand on bail or remand to custody.⁵⁴ Although a small number of interviewees noted that L&D may not have an impact on decisions to remand or bail or to charge:

[information about mental health] would influence [...] what court to send them to, as I said before, because we have a specialist Mental Health Court, but I wouldn't say [...] that would influence a decision to deny or remand, or you know, give somebody bail or not.

Referred-to-agency staff, area 4

We have our own disposal criteria and mental health status doesn't really impinge on that.

Police custody staff member, area 7

L&D was perceived to lead to more efficient processing of detainees in police custody in some cases.

Most of the interviewees who commented on this (from a number of areas) thought that having an L&D service in custody led to a speedier process in custody and could save time for the police:

[T]he L&D service and the healthcare provider, all it's doing is it's enhancing the police service that we're able to deliver, to reduce time, because people are being diagnosed and given medication much quicker than they used to be [...] a lot of the time we'd have people sitting waiting around for hours until we knew that they were fit for interview [...] waiting to see the FME [Forensic Medical Examiner] or the doctor. Now those people are being seen very much quicker ... [The L&D service has] speed things up, by just saying, 'this person needs an appropriate adult, this person doesn't', we can get on, where under the old system it was quite a lengthy process getting doctors out to examine them.

Police custody staff member, area 7

A minority of interviewees thought that L&D services had not saved time or were not sure if it saved time.

There were a small number of responses on these issues in the web survey, but the majority thought the introduction of the National Model had saved time. They were asked whether implementation of the National Model had made an impact on the amount of time arresting officers spend in police custody processing arrests of people with vulnerabilities. Five responded that it had decreased the amount of time, and three said it had no effect.

Respondents were also asked if the introduction of the National Model of L&D had made an impact on the amount of time that individuals with vulnerabilities were detained. Of the 11 respondents answering this question, seven said it had decreased the time spent, three said it had no effect and two said it had increased the time spent.

7.3. Impacts on courts

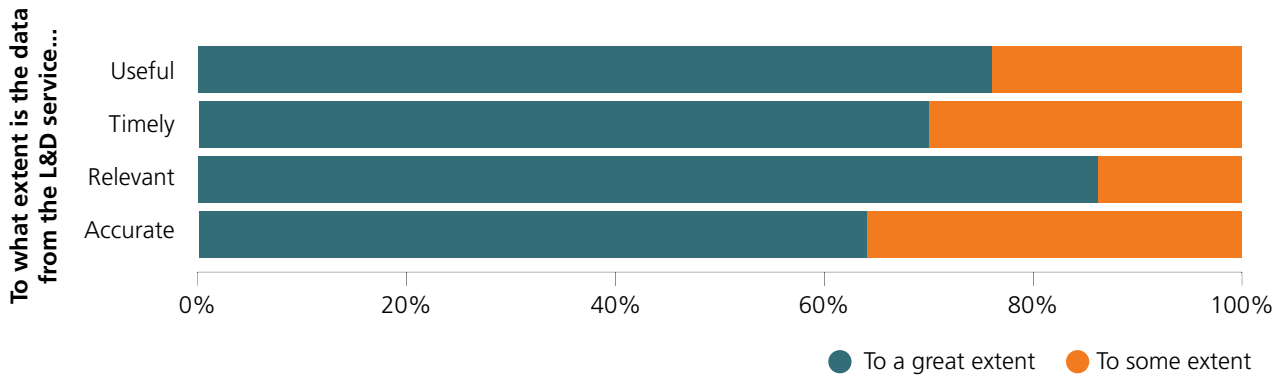
The L&D service provided relevant and timely information to the court.

Judges responding to the web survey said that information provided by the L&D service was relevant, timely, useful and accurate (see Figure 7.6). None of the judges responding to this question answered that the information was

⁵⁴ Twenty-six respondents answered this question (16 answered 'don't know'). One said that information provided by L&D services had been used 'not at all' to inform decisions about bail and remand, eight said it had been used 'to a great extent', 17 said it was used 'to some extent'.

'not at all' relevant etc., and the majority of respondents indicated that the information was relevant and accurate etc. 'to a great extent'.⁵⁵

Figure 7.6: Judges' responses to web survey – 'to what extent do you find information provided by the L&D service to be useful, timely, relevant and accurate?'



Source: Web survey of judges

The same question was asked in the stakeholders' web survey and the findings were the same. All respondents answering these questions indicated the information provided to the court by the L&D service was relevant, accurate, timely and useful.⁵⁶

These findings from the stakeholder and judges' surveys were echoed in findings from interviews with judges. Three magistrates commented on the perceived relevance of L&D reports provided to magistrates' courts. These quotations illustrate interviewees' views:

We find it very relevant. [...] the more information that we have in front of us is better and [...] yes we do take [...] a lot of notice of it.

Magistrate, area 6

I think what has happened as far as we're concerned is in our courts, is the days that the team are there it has provided very useful and valuable. I mean, one appreciates that that there are financial constraints and all other manner of constraints whereby it's probably not possible to have them available every day, but certainly on the days when they are there and available, they're a very useful and appreciated and valued tool to use.

Magistrate, area 6

One magistrate interviewed from area 8 commented that the information provided by the L&D services gives magistrates confidence in taking decisions. Similarly, a magistrate from area 10 noted that the L&D reports provided a lot of useful background information on defendants, and other interviewees thought the reports facilitated a more informed decision-making by magistrates. Similar to comments made by police officers working in police custody, a magistrate from area 6 indicated that the L&D assessment could act as verification for claims made by defendants:

Very often, you'll find the defendant [...] claims that they have mental health issues. What has happened in recent situations, it means that the [L&D] team have been able to interview and speak with the person and, to be quite

⁵⁵ Respondent number as follows: 'Useful': 22 responses (16 'to a great extent', 5 'to some extent' and 1 did not respond). 'Timely': 22 responses (14 'to a great extent', 6 'to some extent' and 2 did not respond). 'Relevant': 22 responses (19 'to a great extent' and 3 'to some extent'). 'Accurate': 22 responses (9 'to a great extent', 5 'to some extent', 6 'don't know' and 2 did not respond).

⁵⁶ Relevant: 16 responses (none answered 'don't know'), 13 answered 'to a great extent', 3 answered 'to some extent'. Timely: 16 responses (none answered 'don't know'), 12 answered 'to a great extent', 4 answered 'to some extent'. Useful: 16 responses (none answered 'don't know'), 14 answered 'to a great extent', 2 answered 'to some extent'. Accurate: 16 responses (1 answered 'don't know'), 12 answered 'to a great extent', 3 answered 'to some extent'.

blunt, to confirm to us whether they do have mental health issues or not. Sometimes, you know, the defendant claims that they have mental health issues and [this is] not necessarily true.

Magistrate, area 6

Overall, interviewees from magistrates' courts were also positive about the *quality and accuracy* of L&D reports presented to them. Interviewees thought the reports were professional, concise, helpful, had insight, provided sufficient information about mental health issues and other vulnerabilities and apart from a few instances used user-friendly language. One interviewee expressed some concerns and thought that the L&D reports were not always of good quality, as the L&D service sometimes did not look at the defendants' issues closely enough, but this was a minority view. A small number of stakeholder interviewees also raised questions about the quality of L&D reports. Based on information collected the research team are not able to comment upon the quality of reports, but we note that a template for court reports was introduced in March 2015, which was agreed with senior judiciary, to provide a consistent approach to information reporting (see Box 3.1).

Three judges interviewed from areas 6 and 10 commented positively on the *timeliness* of L&D reports, with one interviewee indicating that L&D reports were quicker than full psychiatric reports. This interviewee from area 6 indicated that information could speed-up the court process:

[I]t [the L&D service] has provided information which we would not have previously received and assists us considerably, not least [in] speeding up the process. As I said, prior to this, if there was any slight indication of mental health issues, I'm not saying we would step back, but we're trained to take things very seriously and very slowly and so if there was a mental health issue identified during the court hearing, we would then tend to either adjourn [...] for some intervention or some report to be made. [...] The information we receive is not dissimilar to what we would receive beforehand, but we now receive it prior to the court hearing. I mean, that's the biggest difference to me.

Magistrate, area 6

The findings from the judges' web survey and interviews are in line with comments made by stakeholder interviewees, who expressed similar views that, following the introduction of the National Model of L&D, there had been an improvement in terms of the amount and quality of information reaching the court.

Stakeholders commented that L&D service information led to more awareness and expertise about mental health and vulnerabilities and more reassurance to make informed and rounded decisions – similar to comments made regarding the reassurance L&D services provided to the police in custody suites:

[T]hose cases where the magistrates are concerned there's something wrong, but they're not sure and they can get that reassurance that someone's got access to their records and has assessed them and then that can be factored into the, in terms of the process.

Manager Probation Service, area 8

This outreach worker from area 5 described how he was able to provide more in-depth information to the court about service user needs and their behaviour in the community, echoing judges' comments that the information was relevant and timely:

I just think they treat me very well, they value my opinion, they just think that I'm very important in the sense that I tell them what the Forensic Mental Health Practitioner cannot tell them, because when you see the [service user] in custody, it's one thing, but life outside custody is a totally different thing. Of course, when you are in court, you might say, oh, you know, you have to engage with drug and alcohol services, and when they are back in court again, say, "Oh, yes, I have," but nobody's able to tell you they actually have, or are they even engaged yet?"

Outreach worker, area 5

The majority of the interviewees commenting on this indicated that the introduction of L&D had meant that court processes had been speeded up.

For example, courts did not have to wait for more information, as service users had already been assessed while in police custody:

In terms of timing I think there's probably an improvement because I know where people are being seen at the police station, where we have people that have been remanded overnight in custody and obviously appear in court the following day, the information is coming through with the police papers to the court as to what happened with the assessment that took place at the police station so that's much better. What used to happen in the past, somebody would turn up in custody at court and then they would be seen by a mental health practitioner. If they've already got five other people to see, that person could be held in the cells all day just waiting to see the mental health nurse before coming into court. So it's now done before they even get to court at the police station, that's a great saving in terms of time.

Court staff, area 6

There was evidence that information from the L&D service had avoided the need for an adjournment in some cases, but judges and magistrates were cautious about claiming that L&D services had an impact on adjournments.

There was a strong view expressed by stakeholder interviewees from several areas that the L&D service *could* lead to fewer adjournments of cases for further mental health assessments to be conducted. A smaller number of interviewees provided evidence that the service *actually* had reduced adjournments, as a member of court staff indicated:

It gives us an enormous amount of background and insight into the person we're dealing with [...] Whereas we used to adjourn a lot of cases for mental health input before, it's quite rare now that we adjourn for that reason. I mean I can't remember the last time that we've had to adjourn because they want a doctor to do a report.

Court staff, area 2

What we have managed to do is cut down the need for remands or delays for pre-sentence reports from psychiatrists.
Referred to agency, area 4

These findings were replicated in the stakeholder survey. Of the fourteen people who responded, ten said that information provided by the L&D service since the implementation of the new national L&D model in April 2014 had reduced the number of adjournments, two said it had increased adjournments and two said it had no effect.

Judges were less certain about the impact on adjournments. Three of the judges interviewed indicated that L&D information could reduce the number of adjournments. Two interviewees, thought that adjournments would still take place (be it for an L&D report if this was not provided, or for a full psychiatric report following a recommendation by the L&D service that the defendant was not fit to plead), but this would still be more timely compared to not having the L&D service in place. It should be noted, however, that four interviewees stressed that there are hardly any requests for full psychiatric reports made at magistrates' courts.

Feedback about the impact on adjournments was also more equivocal in the web-survey of judges. Of the 33 respondents who answered the question:

- A third (11 respondents) said that information provided by the L&D service since the implementation of the new national L&D model in April 2014 has *reduced* the number of adjournments for reports.
- 19 (58% of respondents) said that there had been *no impact*.
- Only three respondents said that the new L&D service had resulted in an *increased* number of adjournments. It should be noted that this might be an appropriate and useful effect of L&D; in some cases, a delay for a valid reason may result in a better, more just outcome.

Information from the L&D service could inform decisions about remand from court.

The majority of judges responding on this issue in the web survey indicated that information from L&D services was relevant to decisions about remand⁵⁷ although a minority (23%, n=5) thought that it did not inform these decisions.

One of the judges interviewed also commented that this information could have an impact on remand decisions:

I think the most obvious one [impact of information from L&D] would be bail. If he'd got a settled good address and it was a borderline custody/bail application and we found out he had significant mental health problems and there was a secure environment for him to be managed we would go for that.

Magistrate, area 10

One stakeholder interviewee gave an example where she felt the input of the L&D service had resulted in a decision to bail, rather than remand:

Well, for example, I was [working in ...] court a few weeks ago where a young man had a mental age a lot younger than [...] his years. He was granted bail, where had the magistrates not had that information and they may well have just remanded in custody to a prison. [...] but certainly it [information from the L&D service] prevented that vulnerable young man being remanded in custody.

Court staff, area 7

[...] It can make a difference in the sense that the magistrates can be more confident [...] it's not so much sentencing perhaps, it's when they give them bail or not for their own protection, say, for example. They can be really robust and know that they're making an informed decision about a person, rather than just guessing whether they're a risk to themselves or not, or... So it makes a difference in that way, having the reports.

Police manager, area 10

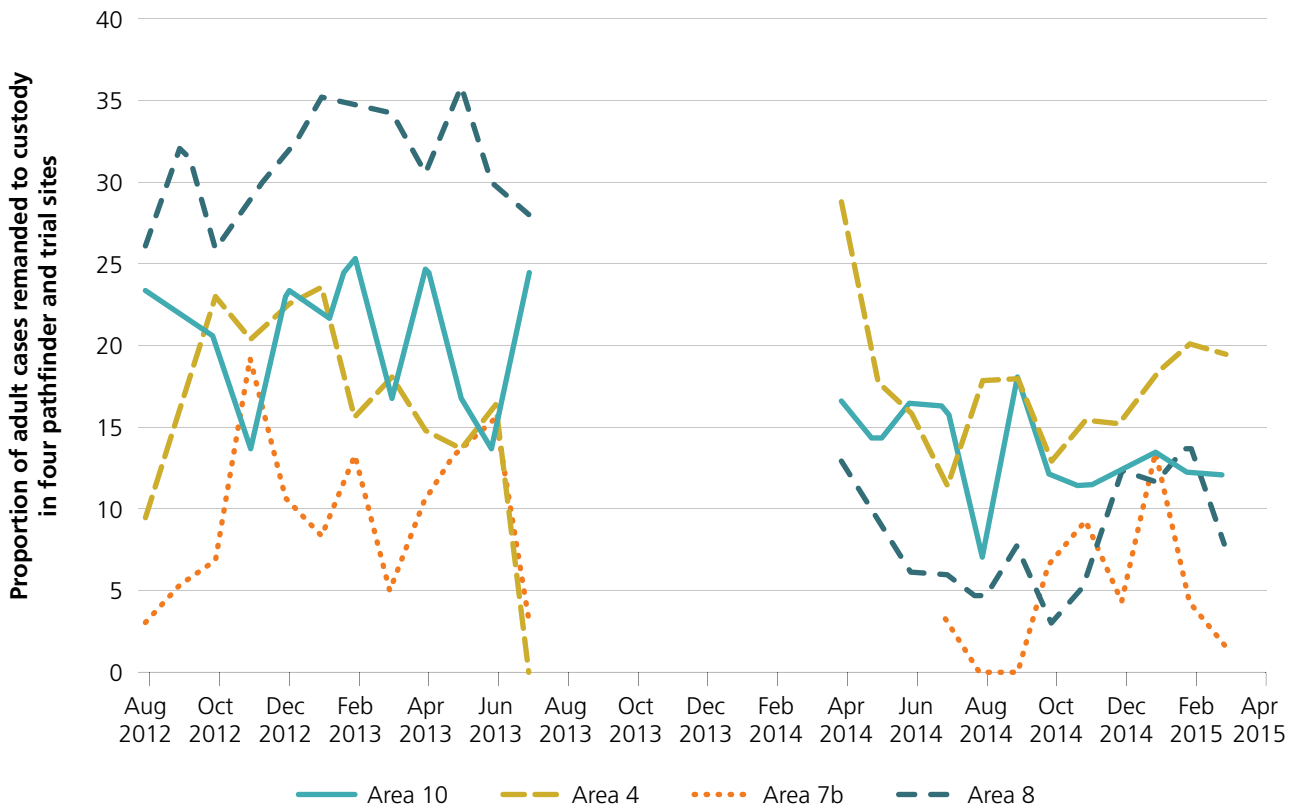
Comparison in four sites indicated a small non-significant reduction in the proportion of cases remanded to custody following introduction of the National Model, but this could be due to missing data.

Analysis of the case management information recorded in the pathfinder data set and the trial minimum data set suggests a slight decrease in the proportion of cases remanded to custody (Figure 7.7), however our regression analysis finds that on average this decrease was not significant (b=-4.20, S.E. 2.64, p=0.12).⁵⁸ There was low recording of remand outcomes in the trial data set (37% missing or unclear) and our analysis looked only at those cases for which remand was recorded. Given the extent of missing data, caution is required relating to findings on remand or other criminal justice outcomes.

⁵⁷ Twenty-one responses (none answered 'don't know'). Five said that information provided by L&D services had been used 'not at all' to inform decisions about whether to remand to custody or to remand on bail, eight said it had been used 'to a great extent', 8 said it was used 'to some extent'.

⁵⁸ Analysis undertaken for the economic evaluation (Section 8.3) did find a statistically significant reduction in the proportion of cases diverted from remand. The different result could be explained because the economic analysis looked at a slightly different group of areas (2, 4, 8 and 10) and the economic analysis used L&D cases as a *proportion of all arrestees* before and after implementation of the National Model as the basis for calculation. The regression analysis compared the proportion of remand outcomes among L&D cases before and after the implementation of the National Model.

Figure 7.7: Proportion of adult cases remanded to custody (pathfinder and trial periods, areas 4, 7b, 8 and 10)



Note: data were not available between August 2013 and March 2014

Interviewees thought the L&D service could inform sentencing decisions.

Judges responding to the web survey indicated that they had used the information from L&D services to inform decisions about the conditions to attach to a community sentence and to decide whether to impose a custodial or community sentence (Figure 7.6).⁵⁹

This view was also expressed by judges interviewed, the majority of whom thought that L&D information was relevant or even essential for sentencing decisions.

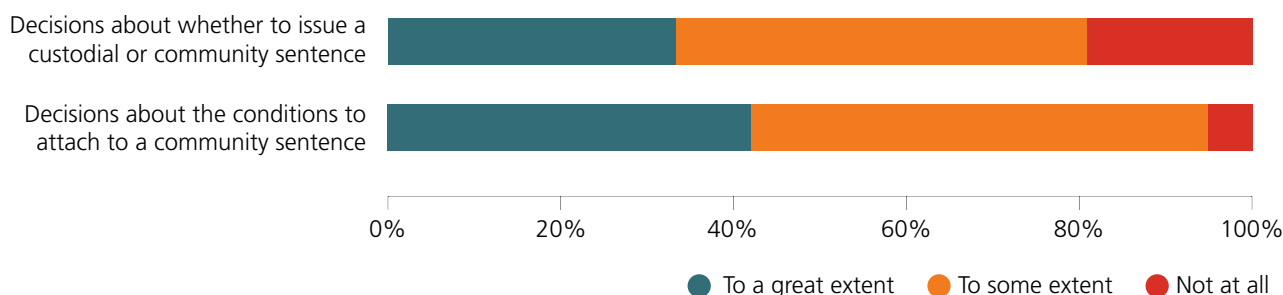
One interviewee commented that the more information courts have, the more they can tailor the sentence on the offender. Knowing that a defendant had support in the community was said by this magistrate to be taken into account in decision-making sentencing:

It would be extremely helpful to know that that person had support [...] and that would mean we could step back to a community order with some kind of unpaid work, curfew or just supervision, to know that the person was voluntarily engaging and getting that support would be hugely influential.

Magistrate, area 8

⁵⁹ Respondent number as follows: 'Decisions about the conditions to attach to a community sentence': 22 responses (8 'to a great extent', 10 'to some extent', 1 'not at all', 2 'don't know' and 1 did not respond). 'Decisions about the conditions to attach to a community sentence': 22 responses (7 'to a great extent', 10 'to some extent', 4 'not at all' and 1 'don't know').

Figure 7.8: Judges' responses to web survey – 'to what extent have you used information provided by L&D services to inform the following decisions made at court?'



Among the stakeholders interviewed, although a few interviewees found it difficult to indicate the impact of L&D on sentencing decisions or thought it did not have an impact, a majority of interviewees thought that L&D service *could have* an impact on decisions about sentencing, and a small number said the service had *actually* had an impact. Reiterating the comments made by judges, stakeholders said that information about the support available in the community could inform decisions about the appropriateness of community sentences and improve the quality of decision-making about sentencing:

This young male came into custody presenting with self-harm, possible psychotic symptoms... he went to court and met one of our support workers, because he had a number of social issues that impacted on his offending [...] He didn't have any stable accommodation, had no benefits, had no GP, no access to medication in the community which had been commenced in prison. So he went to court, we discussed with the judge that we were referring him to the community mental health team, we were providing him with some support in accessing other agencies to stabilise him within the community. The judge gave him a suspended sentence order. He would've got a prison sentence [without the input of the L&D service].

Court staff, area 4

Another interviewee commented that the information from L&D services could also inform sentencing decisions through contributing to pre-sentence reports prepared by the probation service:

They [the courts] do pay more attention to what we recommend [...] We've also had magistrates themselves that have read the report and have then decided based on the information that's in those court reports, that they will adjourn it, or they will recommend an alcohol treatment order or something like that, because they can see from what's in the report what the issues are. So, it is getting better and they are using the information more, and certainly, probation find it helpful as well [...] If they're recommending a mental health treatment requirement, then they can use the information we've provided as well, to back up what they're recommending, and it just gives them more evidence to get the outcome that they need.

Frontline L&D member of staff, area 6

There were, however, instances where the interviewees reported that the court did not follow the recommendation of the L&D service, and instances where judges sentenced offenders to prison when L&D staff members indicated it was inappropriate to do so.

The perception that information provided by the L&D service had been used to inform decisions about whether to issue a custodial or community sentence⁶⁰ and the conditions to attach to a community sentence⁶¹ was also found among respondents to the web survey.

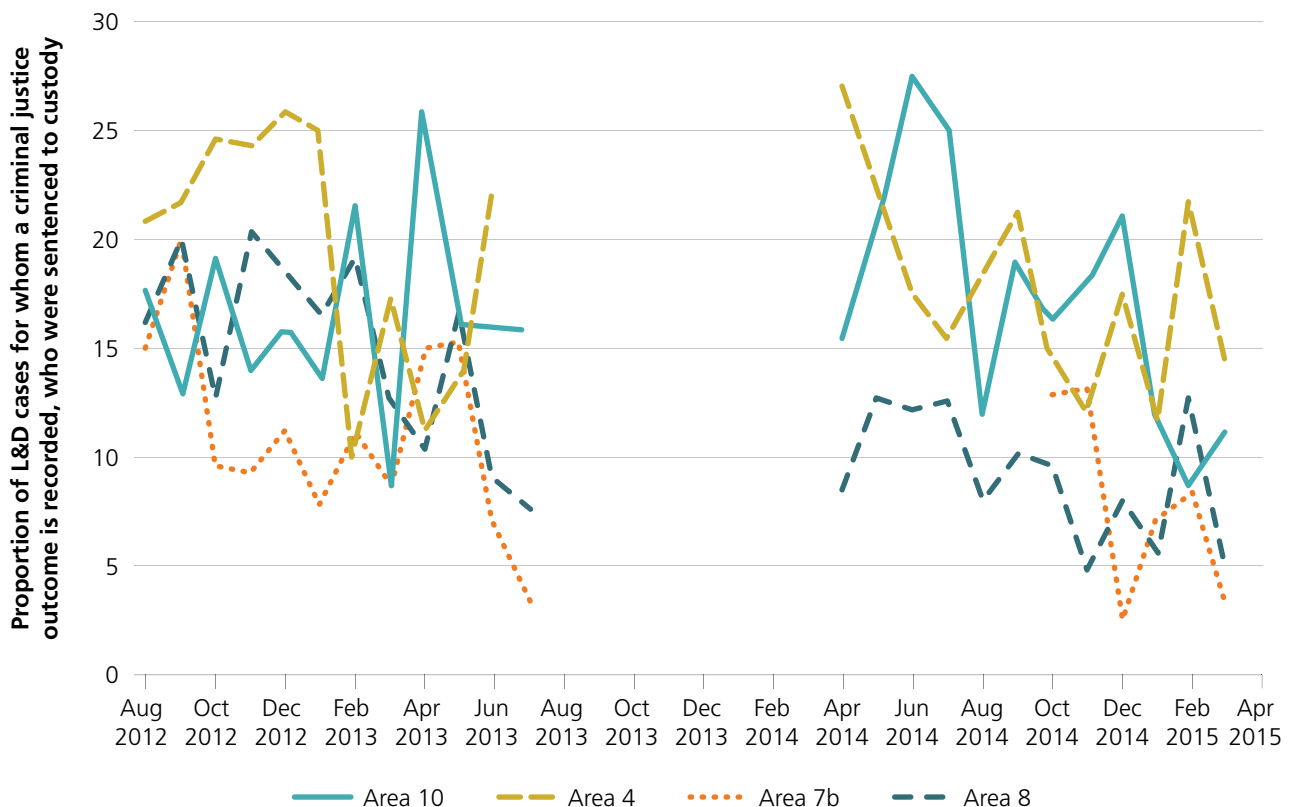
⁶⁰ Twenty-three respondents answered this question (17 answered 'don't know'). 10 said the information was used 'to a great extent', 13 said it was used 'to some extent'.

⁶¹ Twenty-three respondents answered this question (17 answered 'don't know'). 9 said the information was used 'to a great extent', 14 said it was used 'to some extent'.

Analysis of case management data in four sites indicated little difference in the proportion of cases receiving a custodial sentence.

There was a consensus among stakeholders and judges that the L&D service had impacted sentencing decisions, but this was not reflected in findings from analysis of the trial sites minimum data set and pathfinder data sets (in the four comparable sites). This analysis found little difference in the proportion of cases receiving a custodial sentence between pathfinder and trial data (Figure 7.9) ($b=-1.14$, S.E. 1.47, $p=0.44$).⁶² However, this result should be interpreted cautiously. There was a large proportion of missing data. It could be that impacts on sentencing take time to materialise, and/or were not captured in the data sets, or recording of criminal justice outcome might not have been accurate.

Figure 7.9: Proportion of adult cases in which a criminal justice outcome was recorded, who were sentenced to custody (pathfinder and trial periods, areas 4, 7b, 8 and 10)



Note: data were not available between August 2013 and March 2014

Judges and stakeholders thought the L&D service could inform case management decisions.

Just over two-thirds of judges responding to the web survey ($n=14$) said that information provided by L&D services informed decisions about the use of special measures to some extent or to a great extent. A third answered that it was not useful for this purpose.⁶³ Similarly, the majority of respondents to the stakeholder survey indicated that L&D information was used to inform decisions about special measures.⁶⁴ During interviews with judges, fitness to plead decisions and the use of intermediaries were also mentioned as decisions where information from the L&D service could be useful.

⁶² We have analysed final criminal justice outcome as a *proportion only of those cases for which a criminal justice outcome is recorded* in the minimum data set. See Figure A4 for number of cases listed as complete or ongoing.

⁶³ Twenty responses (1 answered 'don't know'). 6 answered that they had 'not at all' used information provided by L&D services to inform decisions about the use of special measures, 7 responded that they had used it 'to some extent', 7 responded 'to a great extent'.

⁶⁴ Sixteen respondents answered this question (22 answered 'don't know'). 4 said the information was used 'to a great extent', 12 said it was used 'to some extent', 2 said it was used 'not at all'.

7.4. Health impacts

The evaluation was not able to collect any quantitative data on health impacts, but interviewees were asked to comment on whether they thought the L&D service resulted in health impacts for service users. Overall, interviewees expected that impacts would materialise as a result of early identification of vulnerabilities and referrals to support services. Interviewees also gave examples of other positive impacts on service users.

Interviewees and survey respondents expected that positive health impacts would result from referrals.

Survey respondents were asked if implementation of the new national L&D model had any impact on *access* to healthcare and support services for vulnerable individuals. Of the 28 respondents who answered, 1 said it had got worse, 3 said there was no change, and 24 said it had improved. Stakeholder interviewees from a range of areas thought that an impact of the L&D service would result from engaging or re-engaging service users in services and having (more) support available for this group. As interviewees from areas 4, 5 and 9 explained:

I think obviously getting people into services or re-engaging them with services if they've fallen out of services, always has a positive impact on people's mental health.

Referred to agency, area 4

I mean, you'd have to do a range of interviews with service users to say, to ask them to get a really authoritative view on whether their health has improved as a result of contact with the L&D, really. But all we can say is that [...] the more people we assess, then the more people who are referred into services who are then accepted, and we hope their health will improve.

Local manager of L&D trial, area 5

With a lot of [the service users], they don't see a GP, they are not registered, they don't look after themselves, don't eat properly. If we can support and help them get to a GP, whether a first registration or a review, that is going to help their health.

Outreach worker, area 9

These respondents were, in effect, reiterating the logic model behind L&D, but were not able to provide examples of demonstrable health impacts. One interviewee responded that it was difficult for the L&D service to know if health impacts had resulted from a referral, since treatment might take months or years. Interviewees were realistic about the absence of hard evidence regarding health impacts and pointed out that it would be difficult to prove such an impact this early in the process.

Increased and earlier identification of people with vulnerabilities were viewed as likely to lead to health impacts for service users.

Several interviewees indicated that improved health outcomes could be generated if service users' vulnerabilities were identified earlier in the criminal justice process:

I think from a health perspective it's about identifying people earlier on [...] identifying them at an earlier point before they get so far down the line that it's more difficult to work with them [...] I think in that respect there's going to be wider benefits for everybody.

Local manager of L&D trial, area 3

There were anecdotal reports or other impacts on service users' well-being and quality of life.

Interviewees provided anecdotal examples of other impacts on service users:

- An interviewee from area 9 described a case where a pregnant woman was due to have her child removed, but due to the work L&D practitioners undertook with social services and the court, the woman was given the opportunity to keep her child.⁶⁵
- L&D services were described as supporting service users who had threatened suicide, whom other services did not have the capacity to support. Several interviewees noted that the L&D service could play a role in suicide prevention.
- An example of a service user was a 50-year-old male with a learning disability who was living with his mother. The L&D service, through the support worker, arranged social care support for the mother and encouraged the service user to engage with a day centre.
- L&D services put a service user in touch with a homelessness prevention service, which a service user reported made a big difference to his life.

7.5. Impact on reoffending

Overall, there was very limited evidence that the L&D service had translated into impacts on reoffending. The evaluation did not have access to any data about offending or reconviction (such as from the Police National Computer), and findings in relation to impacts on offending are drawn from interview and web survey data. Further, given the service had only been operating for just over one year at the point of data collection, impacts on offending might not be expected to have materialised.

Interviewees provided some anecdotal evidence of reduced reoffending:

Some of the police have certainly said that they're grateful for the service, and they've noticed a difference, as well. Some of the ones that were coming in quite regularly don't seem to be coming in as often. Some of them have stopped coming through, and that's because we've put them in hospital so they can get the treatment, because they're not on their medication. I've certainly now had one for definite who hasn't been through custody for a good number of months now because we were able to get him into hospital.

Frontline L&D member of staff, area 6

Early on one of their social worker was able to hand-hold somebody to a GP's appointment, to their welfare office, to their housing [appointments] and that individual never came back, [...] and since their intervention, that individual has not been back in police custody

Area team leader, area 6

Others commented that it was too early to know whether L&D could impact on reoffending or the 'revolving door'.

The following chapter presents findings from the economic analysis of the National Model.

⁶⁵ Of course, this would only be regarded as being a positive outcome if the L&D involvement had actually reduced risk in safeguarding terms, and that this was why a previous decision to remove the child was not taken.

Chapter 8 Cost-benefit analysis of the National Model compared to local L&D models

This chapter presents the findings of the economic analysis. The methodology for this analysis, and the limitations, were summarised in Section 2.4.9 and are described in detail in Appendix B.

8.1. Impacts on numbers of service users brought into L&D services

Following implementation of the National Model there was nearly double the number of cases brought into L&D services per 1,000 arrests

The total number of arrests across the four sites⁶⁶ included in the economic evaluation was 107,317 in the pre/local period and 113,856 in the post/national period. The number of service users entering L&D services in these sites was 5,181 in the pre/local period (4.8% of arrests) and 10,061 in the post/national period (8.8%), a relative increase of 83 per cent.⁶⁷

8.2. L&D Service Costs

National Model L&D services were more expensive, but the increase in the volume of cases meant that the cost per case was much lower.

Across the four sites included in the economic evaluation, L&D service costs, total arrests and L&D case numbers for each time period are shown in Table 8.1.

Table 8.1: L&D costs, arrests and case numbers (areas 2, 4, 8 and 10)

	'Pre' Local L&D Model period	'Post' National L&D Model period
Total L&D service costs, £	2,215,400	3,956,994
Number of arrests	107,317	113,856
Cost per 1,000 arrests, £	20,640	34,750
L&D cases	5,181	10,061
Cost per L&D case, £	428	393

The incremental cost of moving from the local to the National Model of L&D service provision was £14,110 per 1,000 arrests (relative increase of 68%) and -£34.30 per service user (relative decrease of 8%). The decrease in the

⁶⁶ The economic analysis looked at four sites: areas 2, 4, 8 and 10. Cost data were also available for areas 6, 7b and 9.

⁶⁷ The before and after analysis of the impacts of L&D on case numbers in Chapter 7 (and the descriptive analysis in Chapter 4 and 5 looked at the absolute number of L&D cases). The economic analysis uses the number of arrests as the denominator for calculations.

cost per L&D service user occurred because the relative increase in the number of arrestees entering the L&D service (83%) was greater than the relative increase in cost (68%).

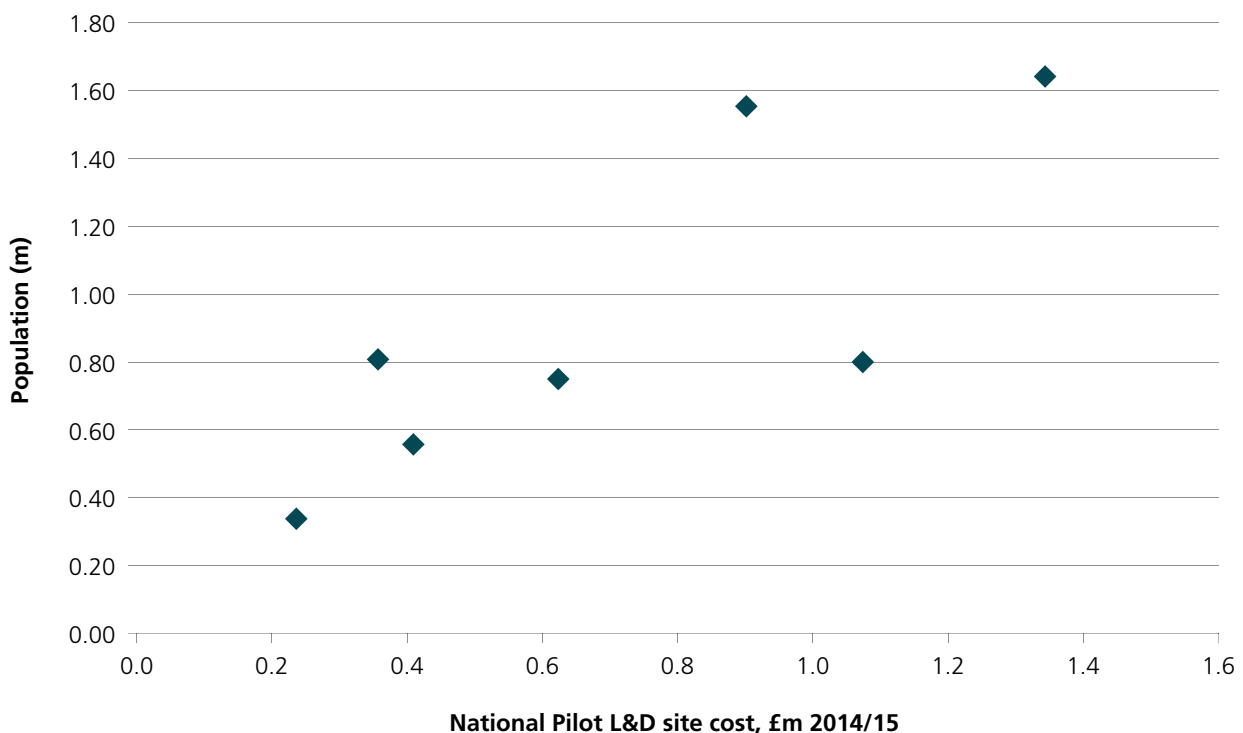
There was variation in cost per head of general population across sites.

Figure 8.1 plots national trial L&D costs against general population for all sites providing costs data. The mean cost per head of general population across all seven sites was £0.77 (however there was a large range from £0.44 at area 6 to £1.35 at area 4).⁶⁸ In the four sites included in the economic evaluation the overall mean cost per head of general population was £0.83, with a range of £0.58 at area 10 to £1.35 at area 4).

There was large variation in the cost of the National Model of L&D per arrest, but data on this were extremely limited.

An important limitation to the economic evaluation is that it is not possible to evaluate the relationship between arrests and L&D costs with only four sites and the cost per arrest varied considerably across sites, from £26 (area 10) to £54 (area 2).

Figure 8.1: Comparison of costs and population/arrests across sites (trial period), with cost per arrest (£) for economic evaluation sites (areas 2, 4, 6, 7b, 8, 9 and 10)

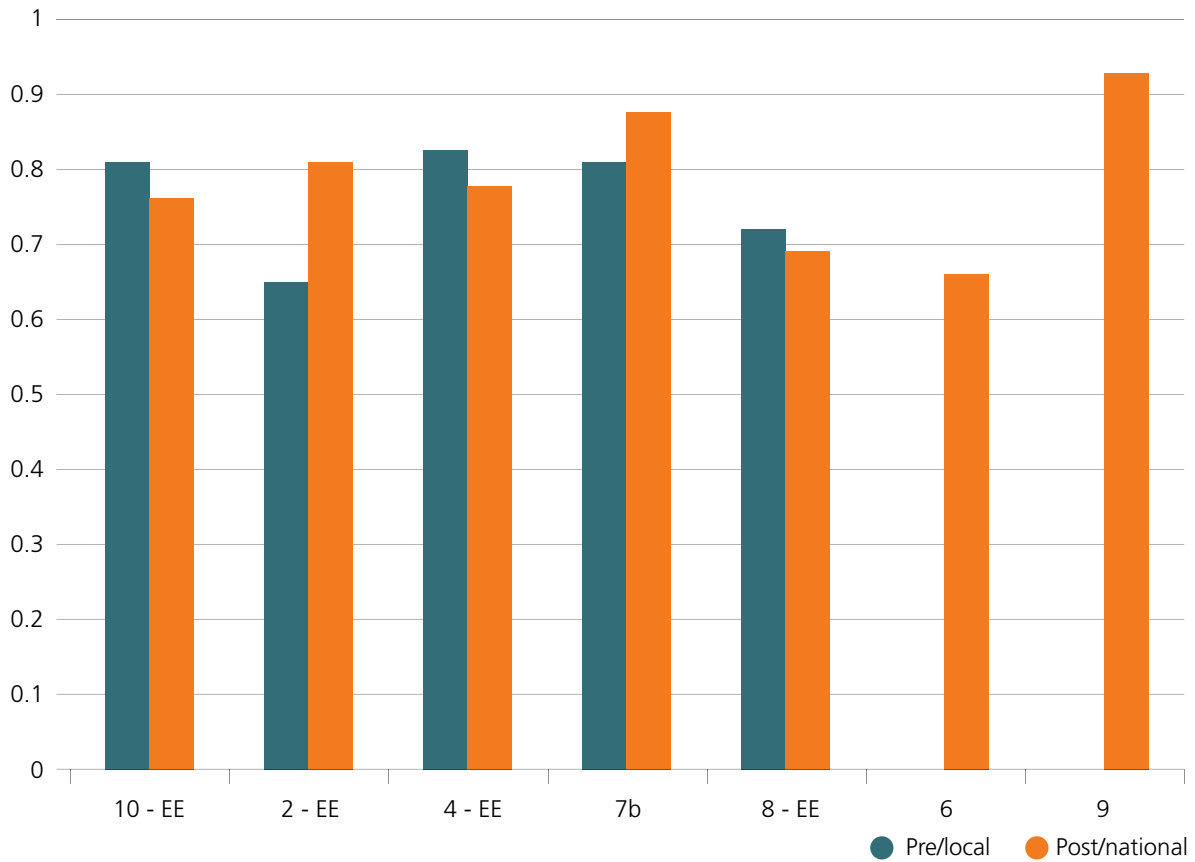


Across four sites the proportion of L&D budgets allocated to staff costs did not change following the implementation of the National Model of L&D, but there were variations between sites.

Figure 8.2 shows the percentage of total spending on staff costs by site and time period. Averaged across the five sites with pre and post cost data, 76 per cent of expenditure was on staffing in both time periods, although this consistency masks variation between both sites and time periods. The site with the lowest cost per head of population had the lowest proportion of expenditure on staffing during the post period (66%), spending a significant amount on data entry and project management.

⁶⁸ It should also be noted that in the area with the lowest cost per head an increase in the budget for 2015/16 was required as the budget allocation for 2014/15 reported here was found insufficient to cover all of the extended hours required in the National L&D Model specification.

Figure 8.2: Percentage of total expenditure spent on staffing, by site and time period (areas 2, 4, 6, 7b, 8, 9, 10)



Note: Areas with the suffix EE were included in the economic evaluation.

8.3. Criminal Justice System outcomes

Criminal justice system outcomes in each site included in the economic evaluation, and overall totals across the four sites, are shown in Table 8.2, which also indicates the amount of missing data on these outcomes. Although Chi-squared tests of statistical significance reported below have been based on cases with known outcomes only, the findings reported here should be treated cautiously given the high proportion of missing data.

Table 8.2: Criminal Justice Outcomes summary (areas 2, 4, 8 and 10)

	Site 2		Site 4		Site 8		Site 10		Total	
	Local	National	Local	National	Local	National	Local	National	Local	National
Arrests	13,167	11,486	30,374	36,147	34,368	31,367	29,408	34,856	107,317	113,856
L&D Service users	515	2,935	729	1,742	3,264	3,830	673	1,554	5,181	10,061
L&D remand outcome not known (N)	79	2,003	19	231	86	1,066	1	180	185	3,480
L&D remand outcome not known (%)	15.3	68.2	2.6	13.3	2.6	27.8	0.1	11.6	3.6	34.6
L&D final criminal justice outcome not known (N)	246	2,693	312	782	1,043	2,738	269	590	1,870	6,803
L&D final criminal justice outcome not known (%)	47.8	91.8	42.8	44.9	32.0	71.5	40.0	38.0	36.1	67.6
L&D held on remand	55	99	123	300	1,019	318	137	208	1,334	925
L&D Custodial sentences	29	25	83	166	340	100	66	170	518	461
L&D Community sentences	15	3	123	277	500	97	144	203	782	580
L&D Non-sentence/ other disposal	225	214	211	517	1,381	895	194	591	2,011	2,217

In the four sites included in the economic evaluation, the National Model diverted a higher proportion of service users away from remand compared to the local service.

Across the four sites, compared with the pathfinder period, during the trial period the proportion of L&D service users held on remand fell from 26.7 per cent (95% CI 25.5 to 27.9%) to 14.1 per cent (95% CI 13.2 to 14.9%), Chi-squared=289, $p < 0.001$, $DF=1$.⁶⁹ The national average was 4.1 per cent, so L&D service users were more likely to be remanded than the average arrestee.

This analysis – of areas 2, 4, 8 and 10 – produces a different finding from that presented in the regression analysis in Section 7.3. The latter looked at slightly different areas and found that the reduction in the proportion of cases remanded was not significant.

⁶⁹ Three significance tests are reported here and a further two for health outcomes (see section 5.4) and thus the critical p-value for statistical significance has been set at 0.01 (i.e. 0.05/5). Since Chi-squared tests are based on large sample sizes, Fisher's exact test for 2x2 tables has not been applied.

In the four sites included in the economic evaluation a reduction in custodial sentencing rates was small and not statistically significant, with no real evidence of diversion from custodial to community sentences.

In the four sites, compared with the pathfinder period, during the trial period the proportion of L&D service users sentenced to custody fell slightly from 15.6 per cent (95% CI 14.4 to 16.9%) to 14.1 per cent (95% CI 13.0 to 15.4%), Chi-squared=2.89, p=0.089, DF=1. The national average was 2.7 per cent. This means that L&D service users were more likely to be sentenced to custody than the average arrestee.

The proportion of L&D cases given community sentences fell from 23.6 per cent (95% CI 22.2 to 25.2%) to 17.8 per cent (95% CI 16.5 to 19.1%), Chi-squared=33.8, p<0.001, DF=1. The national average was 6.1 per cent. This means that L&D service users were more likely to be given a community sentence than the average arrestee. The data do not suggest diversion from custodial to community sentences, but based on the data available to the evaluation team it is not possible to attribute causality to L&D services.

The incremental net monetary benefit of the National Model in terms of criminal justice outcomes is only positive if those incrementally referred by the National Model had the same (or higher) probability of being held on remand or sentenced to custody as those referred by the local model.

Table 8.3 shows the incremental criminal justice system effects and costs per 1,000 arrests of moving from the local to National Model of L&D service provision for each of the three scenarios describing criminal justice outcomes for those incrementally referred (as described in 2.4.9).⁷⁰ The process by which these effects have been calculated is shown in Appendix B. Table 8.1 shows how the scenario used is pivotal in terms of determining the incremental net monetary benefit of the National Model of L&D compared with the local model:

- The scenario in which those incrementally referred would have had the same probability of remand/custodial sentences/community sentences as non-L&D cases results in an estimated increase in costs of £81,047 per 1,000 arrests (including L&D service costs).
- The scenario in which those incrementally referred would have had the same probability of remand/custodial sentences/community sentences as L&D cases referred in the local model results in an estimated saving of £67,920 per 1,000 arrests (including L&D service costs).

This large range of potential incremental net monetary benefits of the National Model of L&D is partially the result of the large increase in the number of L&D referrals, since it is these 'incremental' referrals for whom we cannot easily predict their criminal justice *counterfactual* – what would have happened had they not been referred. The other main reason is the large difference in the probability of each of the criminal justice outcomes between L&D cases (determined from local model case management data sets) and non-L&D arrestees (determined using national statistics).

It is important to reiterate that L&D services aim to provide benefits to service users over and above those relating to criminal justice outcomes and thus it is important to interpret the findings in this section with this in mind, i.e. the total incremental cost of providing L&D services according to the National Model has been included, while in reality L&D service provision is intended to address more than criminal justice outcomes alone.

The implications of this finding relate more to the need for better data on which to base evaluation of L&D services, than they do to the need for action by policy-makers. The evaluation team urge caution in using these findings as the basis of decision-making about roll-out. These findings point to the need for better information about a comparison group with which L&D service users could be compared.

⁷⁰ The uncertainty of the estimates of each outcome rate has not been incorporated into the analysis.

Table 8.3: Incremental effects and costs on the criminal justice system, per 1,000 arrests.

	Criminal justice system outcome scenario for incremental L&D cases:		
	National probabilities	Local L&D probabilities	Mid-point probabilities
Reduction in remand cases	2.11	11.17	6.64
Reduction in custodial sentences	-3.87	1.32	-1.27
Increase in community sentences	-1.88	5.14	1.63
Reduction in cost of criminal justice outcomes, £	-66,937	82,030	7,547
Incremental National L&D service cost, £	14,110	14,110	14,110
Incremental net benefit, £	-81,047	67,920	-6,563

8.4. Health Service outcomes

In the four sites included in the economic analysis, the proportion of L&D cases being given a first appointment fell slightly, but the proportion attending increased following the implementation of the National Model.

Compared with the pathfinder period, during the trial period the proportion of L&D cases being given a first appointment fell from 14.6 per cent (95% CI 13.6 to 15.5%) to 13.3% (95% CI 12.7 to 14.0%), Chi-squared=4.25, $p=0.039$, DF=1.

The proportion of L&D cases attending their first appointment (out of those given one) increased from 78.8 per cent (95% CI 75.9 to 81.7%) to 85.8% (95% CI 82.0 to 89.5%), Chi-squared=7.35, $p=0.007$, DF=1). A summary of attendance for health care treatments by time period and health need is shown in Table 8.4.

Table 8.4: Health care appointment attendance (areas 2, 4, 8 and 10).

	Mental Health		Substance Misuse		Alcohol Misuse		Total appointments (not cases)	
	Local	National	Local	National	Local	National	Local	National
First appointment given	670	1147	56	165	79	202	805	1514
First appointment outcome known	670	307	56	26	79	29	805	362
First appointment actual attendance	544	267	36	18	42	22	622	307
First appointment scaled up attendance	544	998	36	114	42	153	622	1284
Estimated satisfactory discharges	189	347	13	40	15	53	216	440
Incremental first appointments per 1,000 arrests	3.69		0.67		0.95		5.48	
Incremental satisfactory discharges per 1,000 arrests	1.28		0.23		0.33		1.85	

Positive health effects of the National Model of L&D have been estimated.

The satisfactory discharge rate (mean 35%) from the expert elicitation (see Appendix B) was applied to both periods. The increased rate of entry into L&D in the trial period and the increase in first appointment attendance rate, resulted in:

- An additional 5.48 first appointment attendances at an additional cost to the health service of £364, both per 1,000 arrests.
- An additional 1.85 satisfactory discharges at an additional cost to the health service of £2,632, both per 1,000 arrests.
- Total additional health service costs of £2,996 and health service plus L&D service costs of £17,106, both per 1,000 arrests.
- 0.20 additional QALYs per 1,000 arrests.

Based on the results of the expert elicitation, only the provision of mental health care for L&D cases under the National Model would be considered cost-effective, according to the NICE threshold of £20,000 per QALY.

Including both L&D service and health service costs, the mean cost of getting one additional arrestee to an initial appointment was £2,641 (including initial appointment but not subsequent treatment costs, i.e. $(364+14,110)/5.48$). The mean cost per QALY gained including L&D service and health service costs, initial appointments and subsequent treatment was £85,400 (i.e. $17,106/0.2$).

Since the aim of the L&D service goes beyond the provision of health care, it is not appropriate to draw conclusions regarding the cost-effectiveness of the National model of L&D based on this cost per QALY of £85,400 alone, since L&D services are intended to impact on other outcomes besides health (as was also noted above in the analysis of criminal justice system impacts). The next section of this report therefore aggregates the effect of the National Model of L&D across sectors.

However, considering only health service costs and the mean QALY gains from the expert elicitation, only treatment for mental health needs would be considered cost-effective at the lower end of the NICE threshold of £20,000 per QALY, although full treatment for alcohol misuse/substance misuse meet or almost meet the upper end of the NICE threshold of £30,000 per QALY (full results in Appendix B). These results suggest that the L&D service will only be able to realise cost-effective health care if cases attend not only their initial appointment but also a full treatment package. Alternatively, the specific needs of the L&D service user population may require alternative treatment pathways to be developed if the value of their health care is to be judged by the same yardstick as that for other health care interventions for the general population (i.e. the threshold of £20,000 to £30,000 per QALY generally used by the National Institute for Health and Care Excellence).

8.5. Overall incremental net monetary benefit

Table 8.5 summarises the results set out in this Chapter and shows the estimated overall net monetary benefit of moving to the National Model of L&D. The overall assessment of value for money depends on the scenario describing criminal justice outcomes for those incrementally referred in the National Model. **An overall net benefit would only be realised if the incremental arrestees entering the L&D service could be considered 'more of the same' in terms of their likely criminal justice outcomes. The overall net benefit, at £20,000 per QALY using this counterfactual scenario, is £69 per arrest.** However, as discussed below, the evaluation team would discourage policy makers and practitioners from basing decisions about further roll-out on these findings. As noted throughout this chapter, they are subject to a number of limitations.

Table 8.5: Economic evaluation results summary

Per 1,000 arrests	National probabilities*	Local L&D probabilities*	Mid-point probabilities*
National model of L&D service provision incremental cost, £	14,110	14,110	14,110
Criminal justice system costs/consequences	-66,937	82,030	7,547
Health service costs, £	2,996	2,996	2,996
QALYs gained	0.2	0.2	0.2
Incremental net benefits @ £20,000/QALY, £	-80,038	68,929	-5,555
Incremental net benefit @ £30,000/QALY, £	-78,036	70,931	-3,552

Discussion and chapter conclusion

This chapter has provided an economic evaluation of the National Model of L&D, comparing this to the local model previously being used in four sites in England. The key difficulty arose because of the increase in the L&D referral rate, since we do not know what the criminal justice outcomes of those incrementally referred to L&D in the National Model would have been had the local model continued. We therefore used three possible scenarios to describe these outcomes, which can be summarised as ‘the same as other non-L&D arrestees’, ‘the same as other L&D arrestees’ and a ‘half-way house’ between these two extremes.

There would be cost savings for the criminal justice system if those incrementally referred were ‘the same as other L&D arrestees’. However, when only considering health service costs (i.e. not including the cost of delivering the L&D service), providing health care to L&D cases is only cost-effective (at £20,000 per QALY) for those being treated for mental health needs. Increasing the number of L&D cases receiving any other form of health care considered in this evaluation reduced overall incremental net benefit.

The results should be interpreted cautiously, bearing in mind the limitations set out in Section 2.4.9, and summarised below. Because of these limitations, the evaluation team do not recommend that policy makers or commissioners used the findings from this economic evaluation as a basis for decision-making for further roll-out. Key limitations of the economic evaluation were:

- Only including four of ten trial sites – we do not know if results can be generalised to other sites.
- Use of a pre-post comparison, which cannot control for other factors affecting the outcomes.
- We have been unable to make any claims regarding likely outcomes in the absence of any L&D service provision.
- Missing data, particularly related to final criminal justice outcomes (68% on average across the four sites included in the economic evaluation) and first health care appointment attendance (76%) in the trial period. We had to extrapolate outcomes based on those for cases for which data were available.
- Lack of clarity regarding the appropriate criminal justice outcome scenario for incrementally referred cases, i.e. those entering the L&D service in the National Model, but who would not have done so in the local model. This means that we are unable to give a clear indication of whether the National Model is likely to be a cost-effective addition to pre-existing local services.
- Use of a one-year time horizon in the evaluation. This means we were unable to include potential impacts on reoffending and any ‘bedding in’ effects (i.e. services taking some time to get up to speed with the National Model, for example due to delays in staff recruitment). Both of these limitations mean the benefits of the National Model are likely to be underestimated.
- Limited availability of accurate cost data to match to outcome data for the pathfinder period in all sites.
- Inclusion of only three health needs.

Chapter 9 Service user views on the L&D service

This chapter presents findings from interviews with service users. As described in Section 2.4.5. The evaluation gathered feedback from 18 service users. The findings presented here are not necessarily representative of all service users' experiences of L&D. Those who agreed to take part in the evaluation were more likely to have engaged in the service and found it useful.

9.1 Entry into the service

The majority of service users interviewed first met an L&D worker while they were being held in police custody.

A few also met workers while they were in court. This service user described how they came into contact with the L&D service:

I met a police officer who [...] basically went through my history, to see if there's any suicide, self-harm, drug abuse, all those different things. And at that time he said, 'have you got any mental health issues? Do you want anyone to represent you for your mental health?', and that's when I said, 'oh yeah'. He said, 'Okay, I will make a referral... and then [name] came within about two hours and saw me... she basically talked me through things, you know how I was at the time, just stabilising me type of thing.

Service user, area 7

Service users reported developing rapport with L&D staff members

Service users interviewed described their custody suite experience of L&D staff members positively. Most of the positive comments related to the nature of the human interaction rather than the practicalities of the process.

Pleasant... Got on like a house on fire... Good sense of humour too... Yeah, lovely person.

Service user, area 2

The following quotation indicates how such a rapport might encourage a service user to 'open up' during the assessment process.

I was assessed... I give her [L&D practitioner] background on why I was there, she didn't look at me as... how can I put it... she didn't look at me I'm a guilty party, I'm in a custody suite... She took a neutral side. She looked at the benefit that she'd be able to give me... she was giving me all the assessment questions and I give her the information back.

Service user, area 4

A female service user reported during a forum discussion that she initially declined to be seen by an L&D worker because of the potential involvement of social services, but later changed her mind. The personality of the support worker was a positive inducement to her engagement.

Some service users perceived L&D workers they met to be qualitatively 'different' from criminal justice system staff

In this example, a service user describes how they immediately perceived a difference in the approach and attitude of the L&D worker attending the custody suite, compared to other professionals previously encountered

I knew straight away this person was here to help. I just knew the signals, I've dealt with people... being in custody before, and this person just seemed to be different in the sense of more sincerity... the eye contact, and the actual listening to my story, it didn't, to me ... look like it was landing on deaf ears. ...I could tell that straight away 'cause I have been let down enormously by the NHS, and I was at me wits' end, basically ...I was in custody because of that reason... it was a case of this was the last chance... last chance for me, and all of a sudden [she] was there to actually... the catalyst for my recovery in a major way.

Service user, area 4

Similarly, during an L&D service user forum in area 6, participants discussed how service users are stigmatised in the criminal justice system, but felt more at ease with L&D workers. Members of L&D staff were experienced as non-judgmental, honest and open and treated service users as 'human beings rather than criminals'.

9.2. Subsequent contact, follow-up and referrals

Subsequent interactions with L&D staff were similarly reported as positive. The relationships that service users had with their workers varied and their ways of working were (necessarily) flexible. A few service users invited their workers into their homes, but most meetings were in public places such as libraries and cafes.

The L&D service could provide reassurance during a distressing time

A number of service users indicated that supportive treatment from an L&D worker could be very reassuring in a stressful situation in police custody and at court:

...initially it was just... a non-governmental face who was sympathetic. Non-judgemental; didn't really go to the issues, but was very supportive. Said the right things at the right time type of thing, and made me feel a bit more reassured and said, 'there will be this service' ...it was going to be provided.

Service user, area 7

I got referred... three o'clock... [L&D worker] came in roughly about seven o'clock ... To be honest with you, by this time I am really agitated, really, really agitated... I said, 'can you get me out of here?', he said, 'no, but are you on any medication?... Do you need some?'. I said, 'Yes, I do, actually...'. He said... 'Have you got any problems at all? ...tell us what troubles you have got, and we will help you'.

Service user, area 9

[The L&D worker] works out the probation room, and she came and sat with me while I was waiting to go into court which was forever. She kept me calm because I was really worked up and she did some breathing exercises with me and talked to me and tried to distract me. I was quite lucky because she didn't have a lot of other stuff to do so she sat with me! Then she came into court with me, sat next to me in court to support me which was nice.

Service user, area 9

Practical support to access and referrals

Service users made reference to a wide range of areas of practical assistance provided to them by L&D team members, including:

- Accessing GP services.
- Securing accommodation.

- Sorting out finances, benefits and debt.
- Accessing courses or training.
- Working with family members of service users.
- Helping to sort out medication (which some respondents suggested has had the effect of reducing the extent to which cases 'self-medicate' on illicit drugs instead).

These comments from one service user indicate the importance attached to such practical support:

...If it hadn't been for the liaison and diversion team, helping me, day-to-day things like coming twice a week, and looking at my mail, and 'phoning people... because I couldn't talk to people, or if my phone ring, I didn't answer it, do you know what I mean? If it hadn't been them I would have definitely ended me back in the hospital phoning the crisis team ... [The L&D worker] is absolutely brilliant... I would have screwed up so many times if it weren't for them, because I know what they have done for me, I would have been thrown off my benefits... not replying to things, I wouldn't have any furniture left because they wanting to repossess stuff... cheques that haven't been paid what I thought I have been paying...

Service user, area 9

'Being available to talk' was an equally important element of the service as receiving referrals and practical support

Service users described their L&D workers providing contact that was not directed at an immediate, tangible outcome, but was about listening and keeping in contact, as this interviewee described it, 'simple practical human things':

I was put into a bail hostel, [the L&D worker] made contact again... every week she would come... when I was going to appear in court... both times she took me there and brought me back, to make sure I was okay. When I first went to the bail hostel she came to see me there. And again it was just nice to go out for a cup of coffee and she just let me talk about whatever I wanted to talk about. That gave me that... She put me in for like counselling, and she explained that it would be a number of weeks to wait, which was fair enough... it was the simple practical human things which I really valued at that time, and she was just somebody I could talk to who wasn't a probation officer, wasn't a residential officer... She was just somebody who was interested in my mental health.

Service user, area 7

Similarly, this service user reported valuing the ongoing contact:

Just the fact that somebody phones me up is very useful... That's possibly the only support I feel I need. Didn't get it before [...] I know [the L&D worker is] going to phone me... there's somebody there that's going to phone you, every Tuesday so far... Even when I'm on holiday, or a weekend... he phones me on a Sunday. What sort of person works on a Sunday?

Service user, area 2

Supporting findings from stakeholder interviewees, service users described the value of L&D workers acting as advocates, to ensure they could access services

This service user related how, when she was not well enough to speak for herself, the local L&D worker would liaise with other agencies and assist:

He [L&D practitioner] took me out the cell and I talked to him about what was going on... he got in touch with my CPN [Community Psychiatric Nurse] and when I went to court, he's been in court and set up a meeting with probation and my CPN, we all met together. They could talk to each other and I was there... [the L&D worker] would talk to the court when I wasn't well enough to go into court ... I was in the waiting area for court but he got them to have the session with just my solicitor and I'd not to go in. When I was with probation, he got my CPN involved and got a mental health order... instead of having to go to probation, I had to see my CPN and my CPN would report to probation ... [the L&D staff member] spoke because I couldn't... to the doctor. I couldn't even

talk right, I'd felt like either running away or checking in, he was not listening to me but I didn't have strength in me to put my thing across, when [the L&D worker] came and sat down and explained to him that's when the medication got sorted out.

Service user, area 9

The service user - L&D worker relationship

Indeed, when taken together, the overall feedback from service users strongly suggests that the way in which workers engage with service users is a key part of ensuring that the more practical interventions from L&D services gain 'traction' with users. Service users themselves highlighted a number of key features, including:

- Being treated with respect.
- Not being judged adversely for being a 'criminal' or for having mental health difficulties.
- Being 'listened to' by workers.
- Being encouraged to play a key role in addressing their own difficulties, but not being judged when they are not able to do so (e.g. because they feel that they cannot cope, or because their condition leaves them less able to communicate or understand events taking place around them).

This resonates with findings presented in Section 3.2 where L&D team members spoke about the importance of relationships and engagement.

9.3. Impacts of the L&D service

Comments from service users presented throughout this Chapter have described the impacts they thought the L&D service had on them – from the practical help with securing state benefits and housing, making referrals to treatment services and being available to provide more general support. Some service users attributed improved outcomes to the role of the L&D service. The following quotation is from a service user who felt the L&D service had a significant impact:

I've never let her down... somebody who's gone out their way to help me like that... a massive help in my recovery, massive... from one interview ...through my incarceration ...the bail application... She remembered my condition, remembered, you know... I call her an angel from above came to see me that day. She was that, because I would not have been released... And it was that initial... with mental health, getting that backing means a lot... but with the day when [the worker] stood in that box and I was in the custody suite, getting me handcuffs taken off me, my daughter was crying, my wife was crying, and I just said, 'Thank you', and [the L&D worker] said, 'don't mention it' ...that was it for me. ...I know it sounds dramatic, but to me it was dramatic... it was a corner that I've turned round, and since then I've not looked back ...with that positivity that the L&D showed to me... compassion.

Service user, area 4

It is not possible to comment on whether this experience is typical of other service users, or whether the change the interviewee described would have occurred without the L&D service. However, it indicates some of the mechanisms through which L&D services might impact on service users, aside from providing referrals, motivation and engagement and developing a relationship with service users.

A different interviewee was of the opinion that support from the L&D service had prevented them from losing benefits or accommodation, being hospitalised and may even have prevented suicide:

I would have been in the hospital for a long time... probably would have attempted suicide in all honesty I would have probably attempted suicide, and if I wasn't successful, I would have been Sectioned... [the L&D worker] took me to an interview, if it hadn't been for him, no way I would have gone to that interview, all my benefits would have been stopped, ...[the L&D worker] is absolutely brilliant... I would have screwed up so many times if it weren't for them, because I know what they have done for me, I would have been thrown off my benefits... not replying to things, I wouldn't have any furniture left because they wanting to repossess stuff

Service user, area 9

As noted above, it is difficult to assess whether this individual really would have lost benefits or attempted suicide without the L&D service. But these comments do indicate that the support offered by the L&D service was perceived to have had a very important impact in the life of a vulnerable individual. The prevention of hospitalisation or suicide not only brings benefits to a service user's quality of life, but could result in substantial savings to the health, social care and criminal justice systems. It has not been possible to look at such long-term impacts within the timeline and scope of this evaluation, but mapping and quantifying these potential benefits would provide important evidence on which to more fully assess the effectiveness and cost effectiveness of the National Model for L&D.

Chapter 10 Conclusions

This report has described the findings from an evaluation of the Offender Liaison and Diversion (L&D) Trial Schemes. Under these schemes, ten areas in England implemented a new National Model of L&D.

The strengths of the evaluation lie in the depth of data collected through interviews and web surveys with a wide range of stakeholders involved in or affected by L&D services – including a small number of judges and magistrates. These data provide a strong basis for conclusions about how the National Model had been implemented and the challenges and facilitators of implementation and provide indicative findings about the possible impacts on outcomes for service users.

The limitations of the evaluation stem from challenges in the availability of data on which to base quantitative analysis. The key limitations are as follows:

- Despite efforts by the evaluation team it was not possible to devise a robust evaluation approach that compared the National Model for L&D with areas with no L&D services. This was due to a lack of data available about the population who *would* have accessed L&D services if they had existed in these areas. The evaluation looks only at the *incremental impact* of moving from the existing, local models of L&D to the National Model.
- The lack of a control group and the use of a before and after design in comparing the National Model to local L&D services means that it was not possible to control for other factors that may have changed over the period of time.
- The ten trial sites had well-developed locally-designed L&D services before the introduction of the National Model of L&D, which means that findings may not be generalisable to areas with no existing L&D services and could underestimate the benefits of implementation of the National Model.
- Due to changes in the geographic area covered by the L&D schemes before and after the implementation of the National Model and limited data availability, only four sites are included in the economic analysis and before and after analysis. These sites might not be representative of all ten trial sites.
- There were limited quantitative data on the impacts of the National Model of L&D on health outcomes because health outcomes are not recorded in the trial minimum data set (the key data source for this evaluation). The evaluation has explored health outcomes qualitatively. There was also limited data about criminal justice outcomes recorded in the minimum data set and such outcomes take time to materialise and might not be expected during the period of the evaluation.
- The evaluation looks at a narrow range of outcomes. The before and after analysis and economic evaluation focuses on L&D cases recorded as having one of three kinds of need: mental health, alcohol misuse and substance misuse. The National Model covers a much wider range of vulnerabilities.
- While all ten sites implemented the National Model, their experience of implementation and operation of the scheme varied. For this reason, the evaluation team are cautious in generalising findings between sites, especially those related to barriers and facilitators to operation and local partnership arrangements.
- The quantitative elements of the evaluation relied on information recorded in the trial minimum data set. Unfortunately, there was a relatively high proportion of missing data, in particular in relation to the criminal justice outcomes of L&D cases – whether a service user was remanded to custody, and whether, and if so how, they were sentenced.

Because of these limitations, *the research team advise policy makers, commissioners and practitioners to be cautious in relying on findings from the before and after analysis or the economic evaluation to inform decisions about further roll-out or assessments of cost effectiveness.* The limitations of the quantitative elements of the evaluation are such that the findings do not provide a definitive basis for such decision-making.

In order to build a robust evidence base as to the impacts of the National L&D Model, it is recommended that evaluation be considered integrally to decisions about wider roll-out. This is discussed further below.

The main findings from the evaluation in relation to the four research questions are summarised below. These are explained fully throughout the report and in the report summary.

10.1. How has the national L&D model been implemented in each trial site and how is the model functioning locally?

Implementation of the National Model

The implementation of the National Model for L&D resulted in significant changes in all ten sites. Schemes had more staff, provided increased and more timely access to information from mental health (and other) service users databases, provided longer hours of coverage and covered more vulnerabilities. Aspects of the National Model that were most commonly reported to be still in development were service user involvement in L&D services and operating the schemes in the crown courts. The extent to which each element was implemented differed considerably between sites.

Overall, the implementation of the L&D service for young people was experienced positively, in particular with regard to the well-established links to local agencies to which this particular group could be referred.

Referral routes into the L&D service

For adults, initial entry into the L&D service was primarily through police custody, but a range of other referral routes had also been established. The fact that, increasingly, young people do not come into police custody had led a number of areas to develop appropriate mechanisms through which to ensure that young people needing the L&D service could be identified.

Numbers of cases, needs identified and referrals to other agencies

Even though all of the trial areas had existing services, the number of adult cases referred to L&D services increased steadily then stabilised following implementation of the National Model. In the four areas included in the before and after analysis the percentage of adult L&D cases in which needs were identified was lower following implementation of the National Model. It appears that, at least in these four areas, the increase in referred cases did not result in a proportionate increase in needs identified. This finding should be interpreted in light of the important limitation that these four sites likely had the most developed L&D services before the implementation of the National Model. It can also be argued that an increase in the absolute number of needs identified is an important outcome from the implementation of the National Model.

In the four sites where data were available, there were small but significant increases in the number and proportion of adult cases in which appointments were offered with services providing support for learning disabilities and financial needs. This finding is important, as the National Model had the intention of broadening the scope of L&D services to include learning disabilities (beyond the traditional focus of such services on mental health). There were no *significant* differences in the number and proportion of appointments offered (appointments with local agencies and agencies providing support for identified needs) to adult service users for other needs following implementation of the National Model.

Effective aspects of the Model

Aspects of the National Model reported to be particularly effective were that members of L&D staff had access to the case management and service user information databases of a range of agencies – which allowed information about service users to be accessed quickly – and the support worker role. This was a new role included in the National Model supporting service users to attend referral appointments. There was a strong view across interviewees and across sites that support workers were able to fill possible service gaps between contact with L&D staff members in custody and the first appointment with an agency in the community. Support workers provided ‘hands-on’ practical help to service users and described working to motivate service users to engage with the agencies to which they were referred. The evaluation was able to gather information about the day-to-day work of L&D practitioners and this highlighted the importance in this role of advocacy with agencies on behalf of service users and work to motivate services users.

10.2. What are the immediate, and possible longer term, impacts on local organisations of L&D services?

Increased and more timely information provision to police and courts

The evaluation found evidence of impacts of the implementation of the National Model on the police and courts. L&D staff members were said to be providing valuable advice to the police and courts (case management data from the sites indicated that the police were the criminal justice agency recorded as most commonly receiving information from the L&D service), and this information was available more quickly than under previous L&D services. Interviewees from the police and the judiciary described L&D services as providing reassurance and sharing responsibility for assessment and decision-making about difficult cases.

Impact on local agencies

There is no indication from the data collected that the implementation of the National Model for L&D had substantially increased demands on drug and alcohol services, mental health services, housing or benefit services – the most common referrals made by the L&D service – or other local agencies. However, the evaluation team are not able to draw conclusions about the extent to which L&D services experienced problems in securing referrals for L&D service users. In the current financial climate all agencies were operating under resource constraints that created pressures to tighten thresholds for services and could result in waiting lists for appointments. It may be relevant here to note that over half of adult L&D cases and just over a quarter of cases of under 18s had previously been in contact with mental health services, and to this extent the L&D service was not creating entirely new demands on these services.

Partnership working

The National Model of L&D has inter-agency cooperation at its heart and accordingly the evaluation enquired about the status of partnership working. Across the ten sites there was no single partner agency that was consistently considered to be uncooperative and no single agency to which referrals were reported to be consistency difficult to arrange – findings indicated variability between sites in relation to the extent of involvement from partner agencies. Youth provision within L&D was able to benefit from the multi-agency pathways and professional networks already developed by local Youth Offending Teams. Information sharing between agencies was considered to be working well, but was time consuming to establish.

Interviewees working in L&D services felt it was necessary to undertake further communication to increase awareness of the scheme in partner agencies.

10.3. What are the impacts on children, young people and adults in contact with L&D services?

Providing information to the criminal justice system and interventions offered

Based on information recorded in the trial sites case management data, almost all of the adult cases screened by the L&D services in the ten sites had some information communicated on their behalf to criminal justice services (92% of those screened and 72% of all cases referred). Some 42 per cent of those referred to the L&D service, or 53 per cent of those receiving the initial screening, received one or more interventions. Only ten per cent of cases in which needs were identified declined contact with the L&D service.

Impacts on remand and sentencing

There was a high level of missing data regarding the criminal justice outcomes of L&D cases (for example, across all sites, data on remand status were unknown or missing for 40% of cases). Findings based on these data should be treated cautiously.

Comparisons using case management data in four sites indicated a small (but not statistically significant) reduction in the proportion of cases remanded to custody from initial court hearings following the introduction of the National Model but little difference in the proportion of cases receiving a custodial sentence (but recall key limitations: as well as the high levels of missing data, this was based on analysis of only four sites, and compared the National Model to pre-existing local models).

Potential relevance of information from L&D to remand and sentencing decisions and court adjournments

There was consensus among participants that the kind of information provided *could* be relevant to police decision-making around charge and remand, and court decision-making about adjournments (for example, for psychiatric reports to be prepared) and sentencing – both whether a custodial sentence was appropriate and the kinds of conditions to attach to a community sentence.

Some stakeholders indicated that the information from L&D services had *actually* informed decision-making in police custody and courts and gave examples of individual cases in which this had happened. It is difficult for the evaluation to assess how typical or widespread these reported impacts were.

Health impacts

The evaluation was not able to collect any quantitative data on health impacts, but interviewees were asked to comment on whether they thought the L&D service resulted in health impacts for service users. Overall, interviewees expected that impacts would materialise as a result of early identification of vulnerabilities and referrals to support services. Interviewees also gave examples of other positive impacts on individual service users. It is not possible for the evaluation to draw conclusions about how widespread these effects were, or whether impacts lasted in the long-term.

Evidence from the small number of interviews with service users also indicated how the L&D service made a difference in individual cases. Service users reported developing rapport and valued the reassurance L&D workers provided during a distressing time (such as arrest), the practical support for referrals and having members of L&D staff to act as advocates to help them gain access to services.

10.4. What are the costs and benefits associated with the national L&D model, against appropriate comparators?

As with the before and after analysis, the economic analysis only included four of the ten sites and adult cases only, and had to estimate the nature and length of impacts on health, given the limited available data. The economic

evaluation also estimated the incremental costs and benefits of areas moving from an existing L&D scheme to the National Model for L&D (rather than from a baseline of no L&D services).

In the four areas included in the economic analysis the National Model was found to divert a slightly higher proportion of service users away from remand compared to the local services that existed previously in the areas. This is a slightly different result from the before and after analysis, which found a reduction in the proportion of cases remanded that was not statistically significant. The difference in these results is likely to be because the economic analysis used the number of arrests in each area as the denominator for the calculations and looked at a slightly different group of areas. As with the before and after analysis, the economic analysis found a reduction in custodial sentencing rates that was small and not statistically significant, with no real evidence of diversion from custodial to community sentences. Again, these results should be treated cautiously, given missing data.

Cost per L&D case under the National Model

The economic analysis found, as expected, there was an increased overall cost of delivering the National Model compared to the local models. However, the cost per L&D case was reduced, due to increased numbers of cases.

Positive incremental net benefit of the National Model

It was found that the National Model in the four areas included in the economic analysis would only produce a positive incremental net benefit if those cases, which were referred under the National Model, were equally (or more) likely to be remanded to custody or sentenced to custody than those who would have been referred under the old model. The implications of these findings speak to the need for better data to determine whether L&D service users referred are at equal or higher risk of remand than service users in locally-designed services, rather than providing a basis for policy recommendations. The challenges of selecting the appropriate counterfactual for this analysis are discussed in Chapter 2.

Cost of referring an additional arrestee under the National Model

Including both the L&D service and health service costs, the mean cost of getting one additional service user to an initial appointment was estimated at £2,641. This cost should be interpreted with the knowledge that the L&D service is expected to lead to wider benefits beyond health care – not all of the L&D service cost should be allocated to health care.

Cost effectiveness of the L&D services

Using only health service treatment costs and the mean expected QALY gains, only the treatment for mental health needs would be considered cost-effective using what is considered to be the National Institute for Clinical Excellence's lower threshold of £20,000 per QALY. Again, policy makers should not use this finding as a basis for decision-making about further roll-out, given the limitations of the evaluation.

10.5. Conclusion and policy implications

The evaluation found that stakeholders from partner agencies and those delivering L&D services were overwhelmingly positive about the National Model. It was perceived to have resulted in an increase in useful information about vulnerabilities being provided to decision-makers in the criminal justice system and closer working between mental health, and other professionals, and the police and courts. There is some evidence that the National Model may have decreased remand to custody from court slightly, at least in some areas.

Although this evaluation has made an important contribution to the knowledge base – highlighting potentially promising practices for further roll-out and indicating how the service can achieve impacts – further evidence is needed in order to determine whether the National Model for L&D has an impact on health outcomes and to fully understand the impact of information passed on to the criminal justice system. The quality of assessments and recommendations from L&D services could also be examined. The quantitative findings from this evaluation are

an insufficient basis for decision-making about further roll-out.

To generate a better knowledge base, it is strongly recommended that further roll-out of the National Model is designed to maximise the opportunities for evaluation (for example, phasing roll-out randomly to provide a more robust counterfactual). It is important that data on health and criminal justice impacts is consistently collected (either by L&D schemes themselves – which the research team acknowledge could create burdens on members of L&D staff – or from national databases such as the Police National Computer). Further, in line with ethical standards of research, it is important that L&D service users are systematically asked to consent to their records being used for research and linked to other data sets. This would facilitate robust evaluation of impacts on a range of outcomes, including but not limited to health and mental health.

References

- Allison, P.D. 2009. *Fixed Effect Regression Models*. Thousand Oaks: Sage Publications.
- BMJ Group and Royal Pharmaceutical Society of Great Britain 2014. *British National Formulary September 2014 to March 2015*. London: BMJ Group and Pharmaceutical Press.
- Bradley, K. 2009. London: Department of Health.
- Brooker, C., Duggan, S. and Fox, C. 2008. *Short-changed: Spending on prison mental health care*. London: Sainsbury Centre for Mental Health.
- Cowell, A. J., Hinde, J. M., Broner, N. and Aldridge, A. P2013. The impact on taxpayer costs of a jail diversion program for people with serious mental illness. *Evaluation and Program Planning*, 41: 31-37.
- Cowell, A.J., Broner, N., and R. Dupont, R. *The Cost-Effectiveness of Criminal Justice Diversion Programs for People with Serious Mental Illness Co-Occurring with Substance Abuse Four Case Studies*. Journal of Contemporary Criminal Justice, 2004. 20(3): 292-314.
- Department of Health. 2014. *National Schedule of Reference Costs 2013-14*. London: Department of Health.
- Durcan, G., Saunders, A., Gadsby, B. and Hazard, A. 2014. *The Bradley Report five years on: An independent review of progress to date and priorities for further development*. Centre for Mental Health: London. As of 12 November 2015: http://cdn.basw.co.uk/upload/basw_15825-2.pdf
- First Time in Prison. 2015. *First time in prison: Release, tag and home leave*. As of 12 November 2015: <http://www.firsttimeinprison.co.uk/release/>
- GOV.UK. *Community Sentences*. As of 12 November 2015: <https://www.gov.uk/community-sentences/overview>
- Haines, A., Goldson, B., Haycox, A., Houten, R., Lane, S., McGuire, J., Nathan, T., Perkins, E., Richards, S. and Whittington, R. 2012. *Evaluation of the Youth Justice Liaison and Diversion (YJLD) Pilot Scheme: Final Report*. Liverpool: University of Liverpool.
- Harrington, R. and Bailey, S. 2005. *Mental Health Needs and Effectiveness of Provision for Young Offenders in Custody and in the Community*. London: Youth Justice Board for England and Wales.
- Healthcare Commission and HM Inspectorate of Probation. 2009. *Actions Speak Louder: A second review of healthcare in the community for young people who offend*. London: Healthcare Commission and HM Inspectorate of Probation.
- Hean, S., Warr, J., Heaslip, V. and Staddon, S. 2009. *Evaluation of the South West Mental Health Assessment and Advice Pilot*. As of 12 November 2015: http://eprints.bournemouth.ac.uk/12048/1/Final_report_BOURNEMOUTH_UNIVERSITY_PROJECT_EVALUATION.pdf

- HM Government. 2009a. *Healthy Children, Safer Communities A strategy to promote the health and well-being of children and young people in contact with the youth justice system*. London: HM Government.
- HM Government. 2009b. *Improving Health, Supporting Justice: The National Delivery Plan of the Health and Criminal Justice Programme Board*. London: HM Government.
- HM Government. 2014a. *Benefits*. As of 12 November 2015: www.gov.uk/browse/benefits
- HM Government. 2014b. *National Minimum Wage rates*. As of 12 November 2015: <https://www.gov.uk/national-minimum-wage-rates>
- HM Inspectorate of Prisons. 2012. *Remand prisoners: A thematic review*. London: HM Inspectorate of Prisons.
- HM Treasury. 2014. *The Green Book: Appraisal and evaluation in central government*. London: HM Treasury.
- Home Office. 1990. *Provision for Mentally Disordered Offenders: Circular 66/90*. London: Home Office.
- Hughes, D. et al. 2012. 'A simulation modelling approach for planning and costing jail diversion programs for persons with mental illness.' *Criminal Justice and Behavior*, 39(4): 434-446.
- James, D. 1999. 'Court diversion at 10 years: Can it work, does it work and has it a future?' *The Journal of Forensic Psychiatry*, 10(3): 507-524.
- James, D. V. and Hamilton, L. W. 1991. 'The Clerkenwell Scheme: Assessing Efficacy and Cost of a Psychiatric Liaison Service to a Magistrates' Court.' *British Medical Journal of Adolescence*, 303: 282-285.
- James, D. and Harlow, P. 2000. Maximising the Efficacy of Court Diversion Schemes: 'Evaluation of a Supra-District Court Diversion Centre.' *Medicine, Science and the Law*, 40(1): 52-60.
- James, D. et al., 2002. *Outcome of psychiatric admission through the courts*. Home Office Research, Development and Statistics Directorate.
- Joseph, P. and Potter, M. 1993. 'Diversion from custody. I: psychiatric assessment at the magistrates' court. II: effect on hospital and prison resources.' *British Journal of Psychiatry*, 132: 325-334.
- Kane, E., Jordan, M., Beeley, C., Huband, N., Roe, J. & Frew, S. 2013. *Liaison and Diversion: Narrative Review of the Literature*. Nottingham: Centre for Health and Justice, Institute of Mental Health, University of Nottingham and Nottinghamshire Healthcare NHS Trust.
- Khalil, E.L. 2010. 'The Bayesian fallacy: Distinguishing internal motivations and religious beliefs from other beliefs.' *Journal of Economic Behavior & Organization*, 75(2): 268-280.
- Kingham, M. and Corfe, M. 2005. 'Experiences of a mixed court liaison and diversion scheme.' *Psychiatric Bulletin*, 29: 137-140.
- Landsburg, S.E. 2007. *The Armchair Economist (revised and updated May 2012): Economics & Everyday Life*. New York: Simon and Schuster.
- Lange, S., Rehm, J. and Popova, S. 2011. 'The Effectiveness of Criminal Justice Diversion Initiatives in North America: A Systematic Literature Review', *International Journal of Forensic Mental Health*, vol. 10: 200-214.
- Liaison and Diversion Programme. 2014. *Liaison and Diversion Standard Service Specification 2013/14*. As of 12 November 2015: <http://www.england.nhs.uk/commissioning/wp-content/uploads/sites/12/2014/04/ld-ser-spec-1314.pdf>
- Lilford, R.J. et al. 2014. 'Protocol for evaluation of the cost-effectiveness of ePrescribing systems and candidate prototype for other related health information technologies.' *BMC health services research*, 14(1): 314.

- McKenzie, K., Michie, A., Murray, A. and Hales, C. 2012. 'Screening for offenders with an intellectual disability: the validity of the Learning Disability Screening Questionnaire.' *Res Dev Disabil.*, 33(3): 791-5.
- Meyer, M. and J. Booker. 2001. *Eliciting and analysing expert judgement*. London: Academic Press Limited.
- Ministry of Justice. 2013a. *Probation trust Unit Costs Financial Year 2012/13*. 2013: London: Ministry of Justice.
- Ministry of Justice. 2013b. *Offender management annual tables 2013*. As of 12 November 2015: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/305747/2013-Annual.zip
- Ministry of Justice. 2013c. *Costs per place and costs per prisoner*. London: Ministry of Justice.
- Ministry of Justice. 2014. *Criminal Justice Statistics: Quarterly Statistics to September 2014 (Sentencing tables)*. As of 12 November 2015: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/405306/sentencing-tables.xls
- Ministry of Justice. 2015. *Youth Justice Statistics 2013/14 England and Wales*. As of 12 November 2015: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/399379/youth-justice-annual-stats-13-14.pdf
- Nacro. 2015. Offender Health Collaborative. As of 12 November 2015: Available at <http://www.nacro.org.uk/about-us/policy-partnerships/offender-health-collaborative/>
- NHS England (2014a). *Liaison and Diversion programme: key messages and Q&A*. As of 12 November 2015: <http://www.england.nhs.uk/commissioning/wp-content/uploads/sites/12/2014/04/ld-faqs-2014.pdf>
- NHS England (2014b). *Liaison and Diversion Bulletin: April 2014*. As of 11 November 2015: <http://www.england.nhs.uk/2014/04/23/ld-bulletin-apr14/>
- NHS England Liaison and Diversion Programme. 2014. *Liaison and Diversion Operating Model 2013/14*. As of 12 November 2015: <https://www.england.nhs.uk/wp-content/uploads/2014/04/ld-op-mod-1314.pdf>
- NICE. 2011. *Alcohol dependence and harmful alcohol use: full guideline (CG115)*. London: NICE.
- NICE. 2009. *Depression in adults: full guideline (CG90)*. London: NICE.
- Offender Health Research Network. 2011. *Liaison and Diversion Services: Current practices and future directions*. Manchester: Offender Health Research Network.
- Office for National Statistics. 2015a. *Consumer Price inflation, December 2014*. As of 12 November 2015: <http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcM%3A77-323617>
- Office for National Statistics. 2015b. *Arrest statistics - financial year 2012/13*. As of 12 November 2015: <http://www.ons.gov.uk/ons/rel/crime-stats/crime-statistics/year-ending-march-2015/sty-chd.xls>
- Pakes, F. and Winstone, J. 2009. 'Effective practice in mental health diversion and liaison.' *The Howard Journal of Criminal Justice*, 48(2): 158-171.
- Parsonage, M. 2009. *Diversion: A better way for criminal justice and mental health*. London: Sainsbury Centre for Mental Health.
- PSSRU. 2014. *Unit costs of health and social care 2013-14*. Canterbury: PSSRU.
- R Development Team. 2008. *R: A language and environment for statistical computing*. R Foundation for Statistical Computing. Vienna, Austria.

- Radhakrishnan, M., Hammond, G., Jones, P. B., Watson, A., McMillan-Shields, F. and Lafortune, L. 2013. 'Cost of Improving Access to Psychological Therapies (IAPT) programme: An analysis of cost of session, treatment and recovery in selected Primary Care Trusts in the East of England region.' *Behaviour Research and Therapy*, 51(1): 37-45.
- Ridgely, M. S., Engberg, J., Greenberg, M., Turner, S., DeMartini, C. and Dembosky, J. W. (2007) *Justice, treatment, and cost: An evaluation of the fiscal impact of Allegheny County mental health court* Santa Monica, Calif.: RAND Corporation.
- Rowlands, R., Inch, H., Rodger, W. and Soliman, A. 1996. 'Diverted to where? What happens to the diverted mentally disordered offender.' *Journal of Forensic Psychiatry*, 7: 284-296.
- Scott, D., McGilloway, S., Dempster, M., Browne, F. & Donnelly, M. 2013. 'Effectiveness of Criminal Justice Liaison and Diversion Services for Offenders with Mental Disorders: A Review.' *Psychiatric Services*, 64(9): 843-9
- Tarling, R. 2008. *Statistical Modelling for Social Researchers: Principles and Practice*. Abingdon: Routledge.
- Yao, G. L., Novielli, N., Manaseki-Holland, S., Chen, Y.-F., van der Klink, M., Barach, P., Chilton, P. J. and Lilford, R. J. 2012. 'Evaluation of a predevelopment service delivery intervention: an application to improve clinical handovers.' *BMJ quality & safety*, 21(Suppl 1): pp i29-i38
- Zarkin, G. A., Cowell, A. J., Hicks, K. A., Mills, M. J., Belenko, S., Dunlap, L. J. and Keyes, V. 2012. 'Lifetime benefits and costs of diverting substance-abusing offenders from state prison.' *Crime & Delinquency*: 1-22

Appendix A Description of the Adult L&D population (April 2014 to March 2015)

Figure A1: Distribution of age of L&D cases

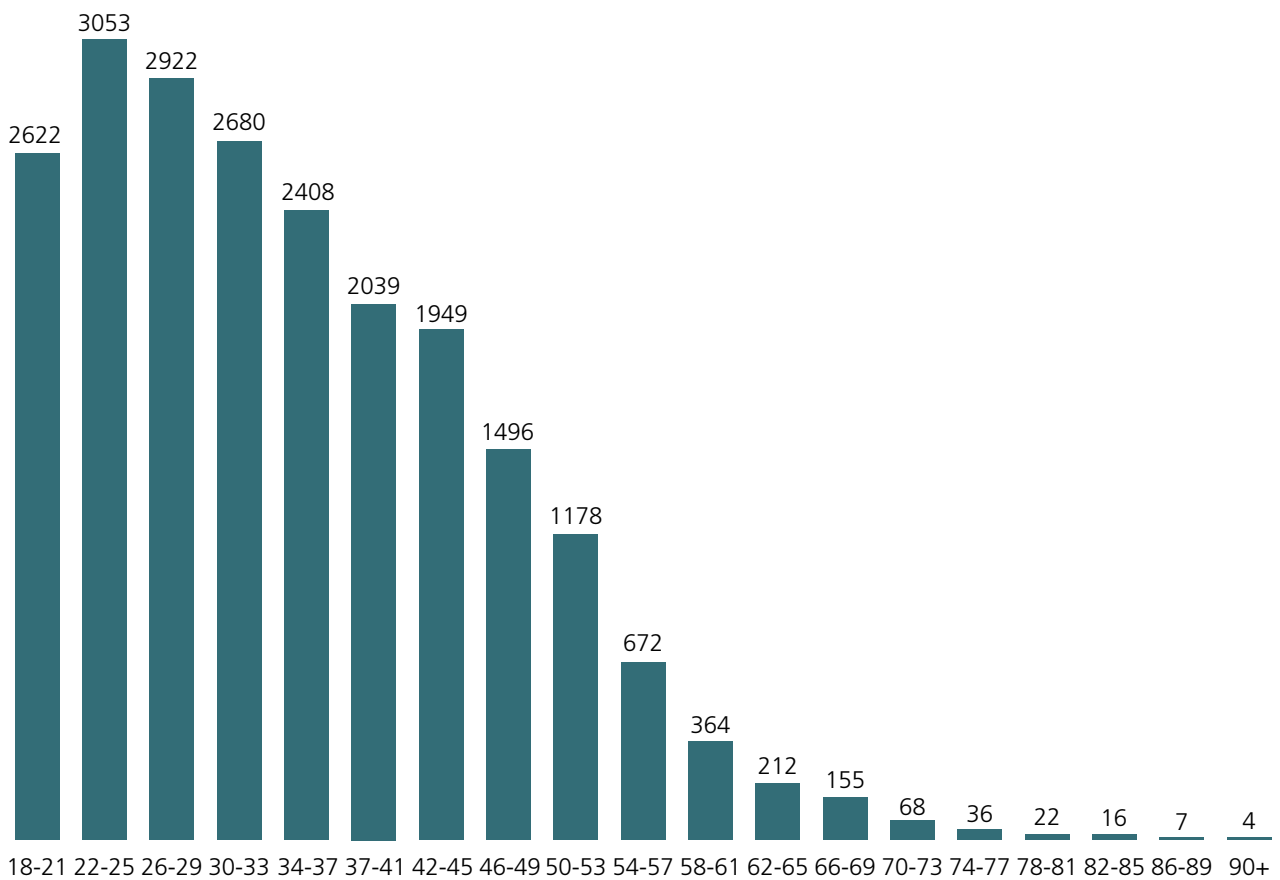


Table A1: Gender and ethnicity of L&D cases

Gender	Number	Percentage	Range across sites
Male	17181	76%	75-85%
Female	5067	22%	14-25%
Other/Prefer not to say/intersex	134	1%	0-5%
Missing	120	1%	0-2%
Total	22502	100%	
Race Ethnicity			
White British	16,702	74%	37-94%
White other	1,128	5%	0-14%
Mixed/Multiple ethnic groups	591	3%	0-7%
Asian/Asian British	842	4%	0-10
Black/African/Caribbean/Black British	1,391	6%	0-24%
Other ethnic group	253	1%	0-3%
Not stated	1,241	6%	0-19%
Missing	354	2%	0-28%
Total	22,502	100%	

Table A2: Accommodation and employment status of L&D cases

Accommodation Status			
Homeless	1,561	7%	2-11%
B&B/Hostel	1,282	6%	2-12%
Squatting	580	3%	0-5%
Family/friend home	2,651	12%	5-16%
Rented house	9,605	43%	21-88%
Own house	890	4%	1-8%
Hospital	97	0%	0-2%
Other	669	3%	0-6%
Unknown	3,002	13%	2-41%
Missing	2,165	10%	0-57%
Total	22,502	100%	
Employment Status			
Paid employment incl. part-time	2,402	11%	2-22%
Self-employed	419	2%	0-4%
Housewife/Husband/Carer	160	1%	0-1%
Full time student	286	1%	0-2%
Long term sickness/disability	1,846	8%	2-17%
Retired	331	1%	0-3%
Unemployed	11,859	53%	21-82%
Other	163	1%	0-2%
Unknown	2,905	13%	3-41%
Missing	2,131	9%	0-57%
Total	22,502	100%	

Table A3: Membership of armed services among L&D cases

Member of Armed Services			
No	16,585	74%	37-89%
Current member of armed services	51	0%	0-1%
Previous member	283	1%	0-3%
Unknown	3,150	14%	1-36%
Missing	2,433	11%	0-57%
Total	22,502	100%	

Table A6: Adult cases registered with a GP

Registered with GP			
No	874	4%	1-8%
Yes	2,668	12%	39-99%
Unknown	16,930	75%	0-39%
Missing	2,030	9%	0-57%
Total	22502	100%	

Figure A2: Number of needs identified for each case referred to L&D services

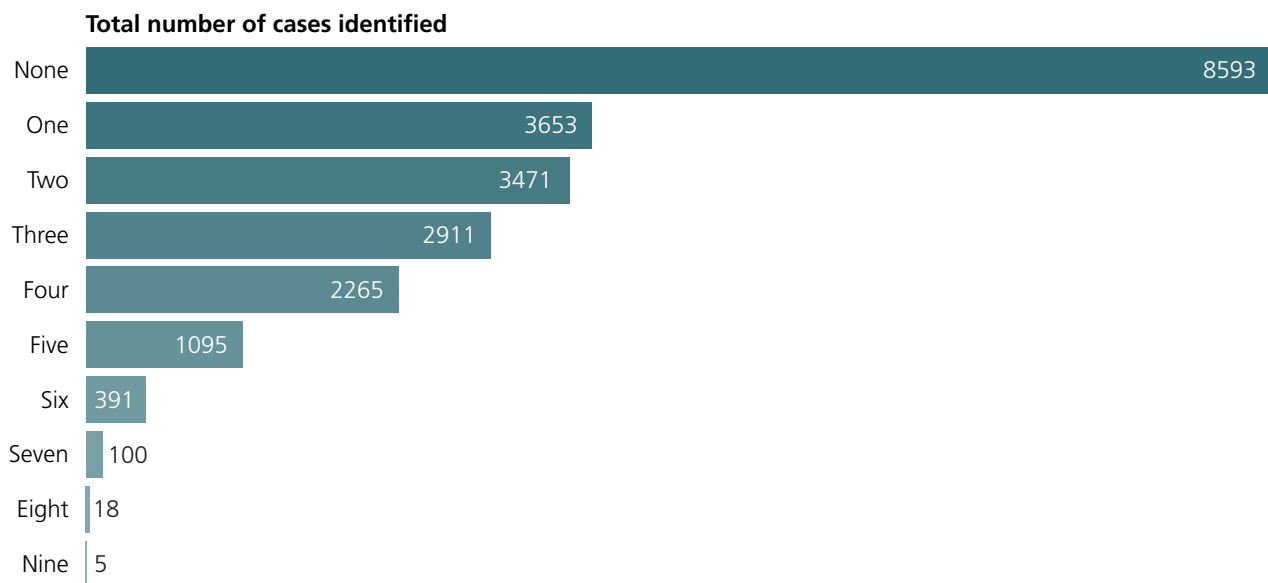
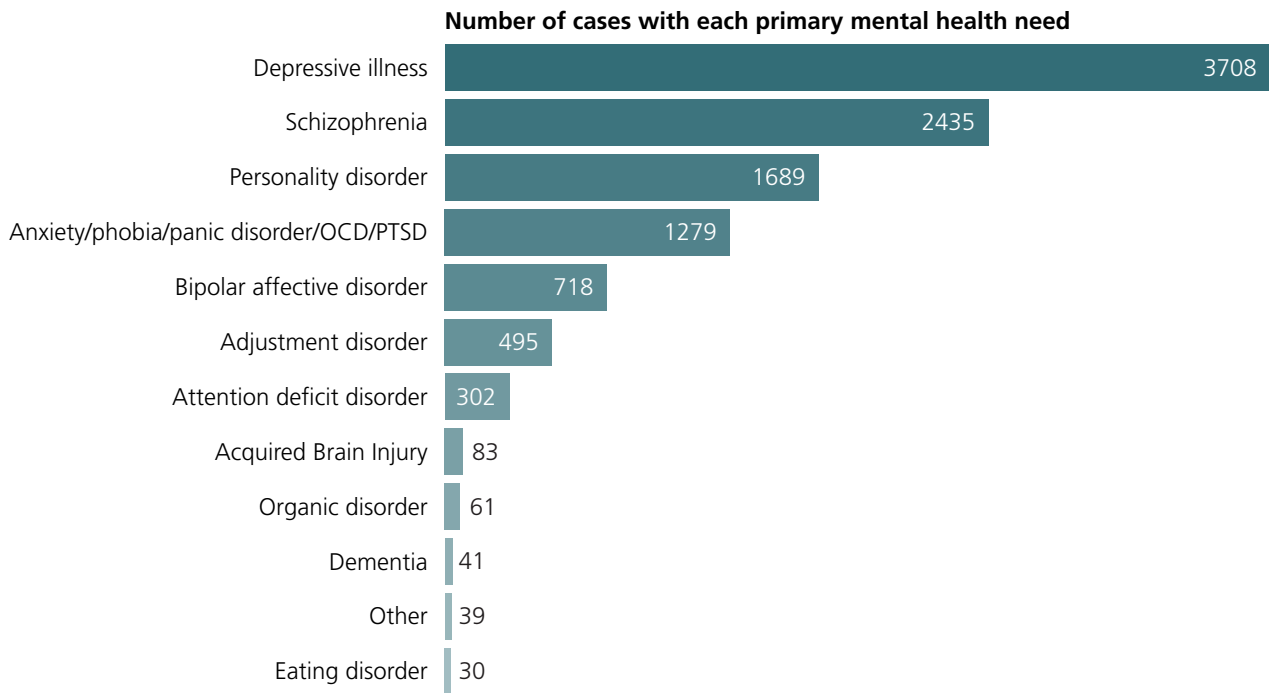


Figure A3: Percentage of those with mental health needs identified who were identified with each kind of primary mental health need

Note: 'Schizophrenia' includes schizophrenia and other delusional disorders

Table A5: Health and social needs of L&D services users, compared to main offence at charge

Type of main offence at charge	Accommodation need		Alcohol misuse		Financial need		Learning disability		Mental Health		Physical		Social Communication		Substance Misuse	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Acquisitive crimes	485	19%	746	14%	344	24%	113	14%	1,737	16%	311	17%	91	12%	1,253	26%
Breach	173	7%	227	4%	69	5%	37	5%	477	4%	94	5%	38	5%	225	5%
Criminal damage	260	10%	496	9%	107	7%	90	11%	929	8%	145	8%	76	10%	364	8%
Drugs	95	4%	131	2%	44	3%	18	2%	434	4%	67	4%	18	2%	401	8%
Fraud & Forgery	8	0%	20	0%	10	1%	7	1%	87	1%	26	1%	4	1%	21	0%
Motoring	41	2%	299	5%	44	3%	19	2%	385	4%	58	3%	14	2%	124	3%
Possession offensive weapon	81	3%	177	3%	52	4%	19	2%	359	3%	53	3%	33	4%	170	4%
Public order	286	11%	934	17%	118	8%	92	11%	1,217	11%	198	11%	74	10%	444	9%
Sexual offences	75	3%	133	2%	43	3%	77	10%	461	4%	90	5%	82	11%	117	2%
Violent offences	644	25%	1468	27%	336	23%	213	27%	3,049	28%	518	28%	187	25%	1,027	21%
Other	389	15%	732	13%	244	17%	104	13%	1,624	15%	279	15%	106	14%	586	12%
Unknown	36	1%	85	2%	18	1%	12	1%	148	1%	22	1%	16	2%	78	2%
Missing	4	0%	19	0%	3	0%	2	0%	41	0%	0	0%	4	1%	8	0%
Totals	2,577	100%	5,467	100%	1,432	100%	803	100%	10,948	100%	1,861	100%	743	100%	4,818	100%

Appendix B Further information about the economic evaluation

Estimating average custodial sentence length for L&D clients

Pathfinder data on the type of crime for which clients in all ten sites were given a custodial sentence were collected as shown in the table below. These crime type categories were the lowest level of detail available in the data set. Where possible, each crime type category was matched to its equivalent in a Ministry of Justice publication detailing average sentence length by type of crime for England and Wales in the year ending 30 September 2014 (Ministry of Justice, 2014). Crime types for 75 per cent of L&D clients sentenced to custody could be directly matched with those from the Ministry of Justice data (assuming Burglary as a type of Theft). We then indirectly matched vehicle crime as theft and unknown, missing and other crimes as miscellaneous crimes against society. National average sentence lengths from the Ministry of Justice data were then applied to these crime types, leaving murder/manslaughter unmatched. For this crime, a mean sentence length of 15 years was assumed, based on correspondence with the Ministry of Justice. The table below therefore shows how the mean sentence length of 615 days was calculated.

Pathfinder data - all sites		MOJ Data for year ending Sept 2014		
	Number sentenced to custody	Offence Group	Ave sentence length (months, excluding life sentences)	Pathfinder total sentence (months)
1 - Public nuisance/order, inc alcohol related behaviour	112	Public order offences	7.1	795
10 - Violence against the person	286	Violence against the person	23.6	6,750
2 - Drug related	52	Drug offences	32.0	1,664
3 - Criminal damage + 11 - Arson	85	Criminal damage and arson	25.1	2,134
4 - Fraud and forgery	16	Fraud offences	15.2	243
5 - Theft + 7 - Burglary	396	Theft offences	9.2	3,643
8 - Robbery	55	Robbery	40.9	2,250
9 - Sexual offence	75	Sexual offences	60.9	4,568
6 - Vehicle crime	33	Theft offences	9.2	304
99 - Unknown	21	Miscellaneous crimes against society	10.3	216
14 - Other	287	Miscellaneous crimes against society	10.3	2,956
101 - Missing	5	Miscellaneous crimes against society	10.3	52
12 - Murder/manslaughter	20	Sentence of 15 years applied	180.0	3,600
Total	1,443		MEAN (months):	20.2
			Days:	615

Bayesian expert elicitation

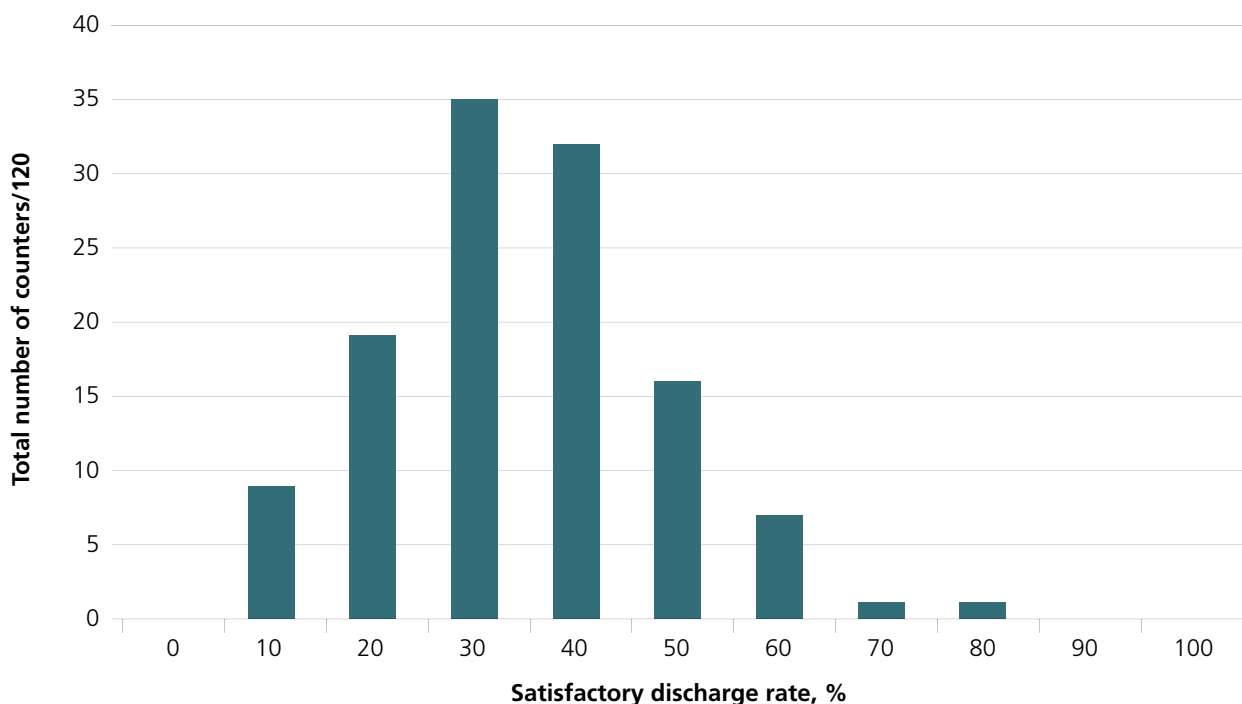
Given the limitations in the data available for this economic evaluation, we used a Bayesian expert elicitation approach to obtain values for key variables relating to health benefits arising from L&D referral. The experts were knowledgeable of the domain but had no emotional or other interest in the outcome of the evaluation (Khalil, 2010)

This Bayesian elicitation solution has been applied by members of our research team for other healthcare interventions, including improving clinical handovers (Yao et al, 2012) and electronic prescribing. (Lilford et al. 2014). Expert opinion has also been used to populate economic models in the field of criminal justice (Hughes et al. 2012), but not using an established method of elicitation.

Satisfactory discharge rate

For the satisfactory discharge rate, we pooled the final responses of the six experts additively (i.e. added up the total number of counters in each interval). This resulted in the following distribution:

Figure B1: Outcome of the elicitation exercise: satisfactory discharge rate



QALY gains from health care

For each health need and type of appointment, we combined data on HRQOL gains and their duration for each expert before pooling across experts. For each expert, we generated a matrix of HRQOL gains vs. duration and populated each cell with the product of the number of counters from the relevant HRQOL gain and duration responses. An example is shown below, with the number of counters for each variable in the shaded cells and their products in the white cells.

Table B1: Example output from elicitation exercise: HRQOL gains and duration

			Initial treatment duration (years)											
			0.019	0.038	0.058	0.077	0.096	0.115	0.135	0.154	0.173	0.192	0.212	0.231
		ELICITED:	1	3	4	4	3	2	2	1	0	0	0	0
Initial treatment HRQOL gain*100	0	1	1	3	4	4	3	2	2	1	0	0	0	0
	5	2	2	6	8	8	6	4	4	2	0	0	0	0
	10	2	2	6	8	8	6	4	4	2	0	0	0	0
	15	2	2	6	8	8	6	4	4	2	0	0	0	0
	20	4	4	12	16	16	12	8	8	4	0	0	0	0
	25	4	4	12	16	16	12	8	8	4	0	0	0	0
	30	3	3	9	12	12	9	6	6	3	0	0	0	0
	35	2	2	6	8	8	6	4	4	2	0	0	0	0

We then summed the products in each cell across experts and used this summed matrix to calculate the mean and standard deviation of the QALY gain, assuming HRQOL gains began at the end of treatment and were maintained at a constant rate until they ceased altogether. (We acknowledge that in reality, gains are likely to build over the course of treatment and then wear off following completion of treatment; however, while the first would increase the QALY gain from that calculated using the above method, the latter reduces it, and in the absence of evidence regarding timelines, we have assumed these effects cancel each other out.)

Health service costs compared to QALY gains by health need and appointment type

The table below shows the estimated cost per QALY gained for each health need, for both initial appointments and satisfactory discharge. The latter includes the cost and QALYs associated with an initial appointment, since we assume that subsequent treatment requires attendance at an initial appointment.

Table B2: estimated cost per QALY gained for each health need, for both initial appointments and satisfactory discharge

	Mental Health	Substance Misuse	Alcohol Misuse
Initial appointments			
Cost (assuming not continuing), £	98	186	76
QALY gain	0.010	0.003	0.002
Cost per QALY gained, £	10,316	54,706	40,000
Satisfactory discharge			
Cost, £	1,334	1,711	1,566
QALY gain	0.111	0.056	0.058
Cost per QALY gained, £	12,018	30,829	27,140

Table B3: Calculation of effects of moving from the local to National Model of L&D on criminal justice outcomes

	Actual data		National model ('local' referrals)	National model (incremental referrals)		
	Local	National	(adjusted for arrest numbers)	National probabilities	Local L&D probabilities	Mid-point probabilities
Arrests	107,317	113,856				
L&D clients	5,181	10,061	5,497	4,564	4,564	4,564
Remand rate (%)	26.7	14.1	26.7	4.1	26.7	15.4
Held on remand (extrapolated N)	1,383	1,414				
Expected to be held on remand given remand rate (N)			1,468	187	1,219	703
Total expected held on remand (local + incremental referrals) (N)				1,655	2,686	2,171
Remand cases 'saved' by National model				241	1,272	756
Remand cases 'saved' per 1,000 arrests				2.11	11.17	6.64
Custodial sentence rate (%)	15.6	14.1	15.6	2.7	15.6	9.2
Given custodial sentence (extrapolated N)	811	1,424				
Expected to be given custodial sentence given custodial sentence rate (N)			860	123	714	419
Total expected custodial sentences (local + incremental referrals) (N)				983	1,574	1,279
Custodial sentences 'saved' by National model				-440	150	-145
Custodial sentences 'saved' per 1,000 arrests				-3.87	1.32	-1.27
Community sentence rate (%)	23.6	17.8	23.6	6.1	23.6	14.9
Given community sentence (extrapolated N)	1,224	1,791				
Expected to be given community sentence given community sentence rate (N)			1,298	278	1,078	678
Total expected community sentences (local + incremental referrals) (N)				1,577	2,376	1,976
Additional community sentences in National model				-214	585	185
Additional community sentences per 1,000 arrests				-1.88	5.14	1.63

Table B4: Summary of assumptions and exclusions for the economic evaluation

Assumption/exclusion	Expected direction/size	Expected effect on cost-effectiveness if included	Justification/ explanation
General			
Only adults are included.	Incremental costs biased downwards Effects biased downwards	Unclear	Not all sites had services for young people in their local models.
Any reduction in custodial sentences reflects appropriate diversion away from a custodial sentence.	N/A	N/A	
All arrests are independent of each other.	N/A	N/A	Some people may be arrested more than once.
Only healthcare costs and benefits relating to L&D needs and accessed via the L&D referral system are included for those not in prison; for those in prison the receipt of mental health care is assumed.	N/A	N/A	
There is no underlying temporal change.	Unclear	Unclear	No data from comparator sites are available.
Criminal justice system			
All prison custodial sentences have the same daily cost, including by type of L&D need.	Unclear	Unclear	Type of crime (and therefore type of prison) may be affected by L&D need.
Daily costs of remand and custody are equal.	Unclear	Unclear	
The average length of time on remand (9 weeks) is applied to all.	Unclear	Unclear	
The average duration of a sentence (avoided) is the same by type of L&D need.	Unclear	Unclear	
The duration of custodial sentences avoided are based on national averages for the types of crimes committed by L&D clients.	Cost savings biased upwards	Decreased	Shorter sentences (relating to less serious crimes and those of first offenders) are more likely to be diverted.
All L&D clients are released half-way through their custodial sentence and supervised on licence.	Unclear	Unclear	Both earlier and later releases are possible.
The average length of a community sentence (12 months), including 170 hours of Community Payback is applied to all.	Unclear	Unclear	
Savings and utility gains due to reductions in court hearings (frequency and/or length) and psychiatric/psychologist reports are excluded.	Cost savings biased downwards Effects biased downwards	Increased	Court hearings are expected to be shorter/less frequent in the national L&D model. Such gains are likely to be negligible.
No account is taken of possible long-term reductions in crime; including changes in legal aid and fines/victim surcharges.	Cost savings biased downwards	Increased	The intervention is expected to reduce custodial sentences; those sentenced more likely to reoffend than those not sentenced. Those supported with their L&D needs are less likely to reoffend.

Assumption/exclusion	Expected direction/size	Expected effect on cost-effectiveness if included	Justification/ explanation
The psychological value of freedom is excluded.	Effects biased downwards	Increased	
Criminal justice outcomes of those whose outcomes are known occur at the same rate of those with known outcome.	Unclear	Unclear	
Health and social care services			
Costs and benefits are only included for three L&D needs.	Incremental costs biased downwards Effects biased downwards	Unclear	The three needs included cover around 90% of referrals.
All mental health needs are combined.	Unclear	Unclear	In the April-August case management database 50% of mental health needs were classified as 'unknown'.
The nature and duration of treatment provided is the same for each type of L&D need and by time period.	Unclear	Unclear	
Health gains (QALYs) and costs of attending multiple appointments/ treatment are the sum of the gains from attending individual appointments/ treatment.	Unclear	Unclear	The costs of each appointment/treatment are also summed. Combined gains could be more or less than the sum of the individual gains.
The attendance rate at first appointments amongst those whose outcome is unknown is the same as for clients with a known outcome (by L&D need).	Unclear	Unclear	
The rate of drop out from treatment following the first appointment is the same by type of L&D need and by time period.	Incremental cost biased downwards Incremental effects biased downwards	Unclear	The national model includes outreach workers who should encourage clients to attend for longer-term treatment.
Only those who attend their first appointment attend any further appointments.	Incremental cost biased downwards Incremental effects biased downwards	Unclear	It is very unlikely any further care would be received through the L&D service if the first appointment is not attended.
Some clients would have accessed care outside of the L&D service.	Incremental cost biased upwards Incremental effects biased upwards	Unclear	Such care should not be attributed to L&D; but (where known) numbers affected are fairly low. All appointments are considered additional to current care.
Attendees will be classified as did not attend after first appointment or achieved satisfactory discharge.	Incremental costs biased upwards Incremental effects biased upwards	Unclear	Some clients will drop out mid-way through their treatment so the full cost will not be incurred, neither will the full health benefit be realised.

Assumption/exclusion	Expected direction/size	Expected effect on cost-effectiveness if included	Justification/ explanation
All those on remand or serving custodial sentences receive mental health care while in prison, but have no net utility gain from this.	Cost savings biased upwards	Decreased	Some may refuse treatment and not all have mental health needs. Those in prison tend to have a lower HRQOL than those not in prison, which is assumed to net off the utility gain from mental health care received.
Utility gains are constant by type of L&D need.	Unclear	Unclear	
Utility gains from treatment last less than one year and only effect quality and not quantity of life.	Effects biased downwards	Increased	It is plausible the effects will last longer than one year and may prolong life.
No consideration is made regarding treatment that is part of a client's sentence.	Unclear	Unclear	Such treatment is not strictly voluntary; but numbers affected are very low.

Appendix C Fields in the Minimum Data Set

Site Code
Local Case Identifier
GP Registered
D.O.B.
Sex
Transgender
Race/Ethnicity
Sexual Orientation
Accommodation Status
Employment Status
Armed Services Veteran (incl. reserve forces)
Main Current Offence at Time of Charge
Main Current Offence when Case Concludes
Source of Referral
When Referred to L&D Service - Date
When Referred to L&D Service - Time
L&D Contact Declined
When Seen by L&D Service - Date
When Seen by L&D Service - Time
Where seen by L&D Service
Screening Undertaken
Assessment Undertaken
Physical Disability/Need Identified
MH Need Identified (1)
MH Need Identified (2)
MH Need Identified (3)
Learning Disability Identified
Social and Communication Difficulty Identified
Identified Current Suicide/Self Harm Risk

Identified Alcohol Misuse
Identified Substance Misuse
Identified Accommodation Need
Identified Financial Need
Identified Gang Involvement
Identified Abuse Victim
Previous Contact With MH Services
Previous Contact With Substance Misuse Services
Previous Contact With LD Services
Previous Contact with Autism Services
Previous Contact With S,L&C Services (speech, language and communication services)
Previous Contact with Social Services
Previous Contact with Other Services
Intervention to address Physical Health Need
Intervention to address MH Need
Intervention to address Learning Disability Need
Intervention to address S&C Difficulty
Intervention to address Alcohol Misuse
Intervention to address Substance Misuse
Intervention to address Accommodation Need
Intervention to address Financial Need
Outcome of Physical Health Referral
Date of First Appointment
Outcome of Mental Health Referral
Date of First Appointment
Outcome of LD Referral
Date of First Appointment
Outcome of S&CD (social and communication difficulty) Referral
Date of First Appointment
Outcome of Alcohol Misuse Referral
Date of First Appointment
Outcome of Substance misuse referral
Date of First Appointment
Outcome of Accommodation Referral
Date of First Appointment
Outcome of Financial Referral
Date of First Appointment
Information Communicated to Police

Information Communicated to Court
Information Communicated to Probation
Information Communicated to Prison
Information Communicated to Court Detention Staff
Information Communicated to Prisoner Escort Service
Information Communicated to Bail Accommodation Providers
Remand Status
Final Criminal Justice Outcome for Individual
Date of Disposal

Appendix D: Evaluation and Data collection approaches investigated in the scoping and feasibility stage

Comparisons between L&D trial sites and areas with no dedicated L&D services

This would have provided a counterfactual that would have allowed the evaluation team to test the impact of L&D services on outcomes

Why this was not possible: In order to make quantitative comparisons at the area level, a similar level of detail as was in the minimum data set would be needed for areas with no L&D. In 'no L&D' areas there was no such data set.

Constructing a matched comparison group with which to compare L&D service users, using Police National Computer (PNC) data.

This might have allowed the evaluation team to construct a counterfactual to test the impact of L&D services on criminal justice outcomes.

Why this was not possible: (i) was not possible to link to PNC data (ii) even if this could have been possible, matching on criminal justice characteristics alone would not have given a valid match.

Using a difference-in-difference design to compare the trial sites to sites using local models of L&D

This might have allowed the evaluation team to construct a counterfactual to test the impact of L&D services on criminal justice and health outcomes.

Why this was not possible: This approach was dependent on data being collected in 13 sites (areas not selected to be in the 'wave one' roll-out. During the scoping and feasibility stage the research team determined that only two sites had collected potentially usable data. This would not have been a sufficient basis for a robust comparison.

Linking to L&D service users' records in the Hospital episode statistics (HES) inpatient data set; Hospital episode statistics (HES) A&E data set; Mental Health Minimum Data Set (MHMDS).

This would give, for each individual, all A&E attendances, inpatient admissions, mental health treatments and drug and alcohol treatments received over this five-year period, together with the dates of these treatments and the primary diagnoses, an assessment of patients against a number of health outcomes scales.

Why? To look at health services utilisation and test, for example, a belief that L&D service users disproportionately attend A&E rather than access medical provision such as GPs, which carries a much higher cost to the health service.

Why this was not possible: (i) Individual L&D service users would need to give consent to individual-level data about them (stored in the Trial minimum data set) being shared with the research team and with the owners of these data sets. The ten trial sites were asked to seek consent from L&D service users, but numbers consenting were very low, and none at all consented from some areas. (ii) Even for service users who had consented it was not clear whether the consent given was adequate to cover sharing data with the owners of these data sets. (iii) The linkage required trial sites to record NHS number in the minimum data set and this was not always completed.

Linking to L&D service users' records in the Police National Computer, the Ministry of Justice Linked data set, and the Offender Assessment System (OASys) database, in order to provide further details on the criminal justice background of those individuals accessing L&D services.

By describing the criminal justice background, the research team could determine whether the population was made up of persistent or long-term offenders and the extent to which L&D service users had been to prison. The characteristics of L&D service users could be compared to the offender population as a whole to determine the subset of the population in contact with L&D Services

Why this was not possible: (i) The need to secure service user consent (as described above) (ii) Questions about the adequacy of the consent given (as described above) (iii) The linkage required trial sites to record NHS number in the minimum data set and this was not always completed.

Accessing quantitative data from the courts service about the number of adjournments and numbers of psychiatric reports

Why? Fewer adjournments or fewer full psychiatric reports could be an indicator that the L&D Trial was having an effect.

Why this was not possible: (i) No single, national database (would be too time consuming for researchers to access). (ii) Data were available on the number of court adjournments however this does not include reasons for adjournment.

Appendix E: Overview of data collected in each area

	Strand 1: Qualitative data collection									Strand 2 Descriptive analysis of information in the trial minimum data set	Strand 3 Before and after comparison using information in the trial minimum data set	Strand 4 Economic analysis
					Case Studies - qualitative data collection							
	Interviews with stakeholders (number of interviews)	Web survey of stakeholders (number of respondents)	Web survey of judges and magistrates (number of respondents)	Service user feedback	Impact of L&D services on courts (Interviews with judges and magistrates)	The role of support workers	The perspective of referred- to agencies	Impact on police custody -	L&D pathways for young people			
Area 1	11	3	18	0			X			X		
Area 2	26	5	17	5		X				X		X
Area 3	14	6	15	0				X		X		
Area 4	14	8	35	2			X	X		X	X	X
Area 5	20	9	18	1		X	X			X		
Area 6	25	5	7	4	X 2 interviews			X		X		
Area 7	28	13	24	3					X	X	X	
Area 8	12	3	39	0	X 4 interviews					X	X	X
Area 9	15	4	23	3		X			X	X		
Area 10	12	7	27	0	X 3 interviews					X	X	X

Appendix F Survey instruments

Instruments for the stakeholders' survey and survey of judges and magistrates are provided separately.