Summary

This analysis assessed the impact on re-offending of a mentoring scheme run by Inside Out[1] at HMP Wormwood Scrubs. The one year proven re-offending rate[2] for 42[3] offenders who participated in the mentoring scheme provided by Inside Out was 50%, compared with 52% for a matched control group of similar offenders from England and Wales. Statistical significance testing has shown that this difference is not significant[4]; suggesting that at this stage there is insufficient evidence to draw a conclusion about the impact of persons who participated in the mentoring scheme provided by Inside Out on re-offending. However, the results of the analysis do not mean that the mentoring scheme provided by Inside Out failed to impact on re-offending.

A regional analysis was also performed with HMP Wormwood Scrubs being located in London. The one year proven re-offending rate[1] for 41[5] offenders who participated in the mentoring scheme provided by Inside Out was 49%, compared with 55% for a matched control group of similar offenders from London only. As with the matched control group of similar offenders from England and Wales, statistical significance testing has shown that this difference is not significant[6].

An analysis involving taking the control group from former HMP Wormwood Scrubs inmates was also explored. This analysis proved unsuccessful as we were unable to match individuals from a control group of similar offenders that were released from HMP Wormwood Scrubs, to individuals who participated in the mentoring scheme run by Inside Out.

---

[1] Formerly Wormwood Scrubs Community Chaplaincy.

[2] The **one year proven re-offending rate** is defined as the proportion of offenders in a cohort who commit an offence in a one year follow-up period which was proven through receipt of a court conviction, caution, reprimand or warning during the one year follow-up or in a further six month waiting period. The one year follow-up period begins when offenders leave custody, start their court sentence, or from receipt of their caution.

[3] 42 individuals were matched from a cohort of 84 individuals, whose details were sent to the Justice Data Lab, as described on page 3 of this report.

[4] The difference was non-significant, p = 0.80. Statistical significance testing is described on page 8 of this report.

[5] 41 individuals were matched from a cohort of 84 individuals, whose details were sent to the Justice Data Lab, as described on page 3 of this report. 1 individual from the national analysis did not match to individuals in the regional control group.

[6] The difference was non-significant, p = 0.41. Statistical significance testing is described on page 8 of this report.

What you can say: There is insufficient evidence at this stage to draw a conclusion about the impact of the mentoring scheme run by Inside Out on re-offending.

What you cannot say: This analysis shows that the mentoring scheme provided by Inside Out decreased proven re-offending by 2 percentage points, or by any other amount.

Introduction

Inside Out (formerly Wormwood Scrubs Community Chaplaincy) is a venture for the public benefit, aiming to promote the care, resettlement and rehabilitation of ex-offenders to enable them to take control of their lives and remain free from re-offending.

The mentoring scheme is a voluntary intervention, so prisoners can decide whether or not they want a mentor. Individuals are referred to the mentoring scheme service whilst they are in prison, so referrals are most often made through departments and agencies within the prison, for example through Chaplaincy, Education, Substance Misuse, Probation and IOM (Integrated Offender Management) teams. The prisoners can also refer themselves to the mentoring scheme by submitting a general application or speaking to one of the mentoring scheme employees when they are on the wings. If individuals do want to be part of the mentoring scheme, the aim is to match them up with a volunteer mentor three months before they are released from prison. The mentors will visit their mentees regularly for (ideally) three months before release. Mentors will then meet their mentees at the gate on the day of their release and continue to support them in the community for several months and in some cases years depending on the amount of support that they need.
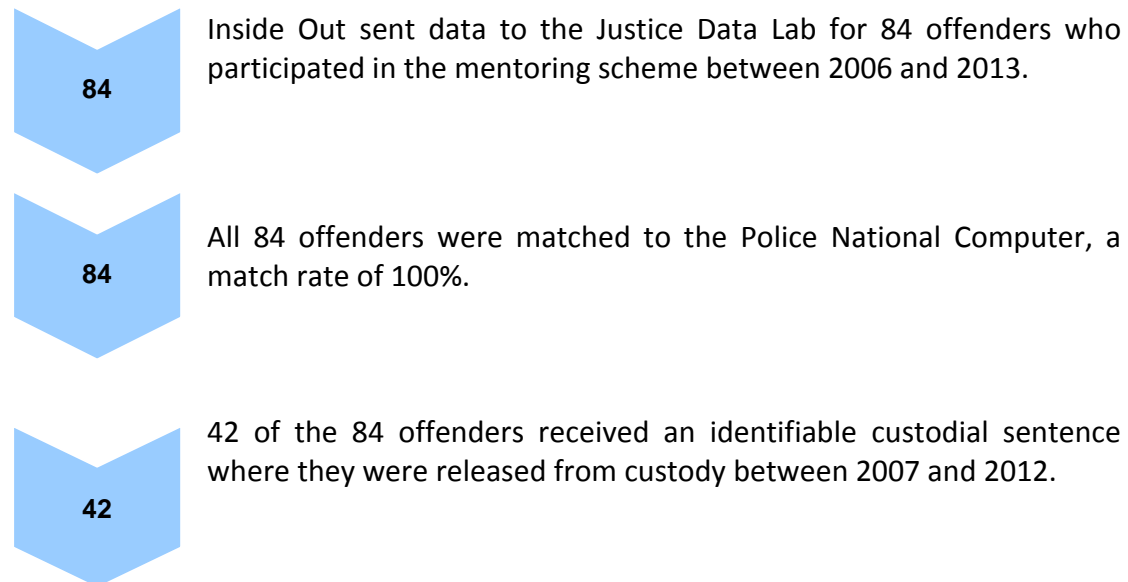
During the mentoring sessions, the mentor and mentee will discuss the mentee's practical needs, emotional well being and future aspirations. The mentors provide practical support through signposting and referring to other specialist agencies that can support the individual and help meet their practical needs. We work with other statutory and voluntary bodies to improve the offenders' prospects of housing, drug and alcohol support and employment in the community. The mentoring service also provides emotional support by promoting healing, forgiveness, personal growth and development to prisoners. Throughout each Mentoring relationship, we facilitate training courses inside the prison which encourage positive change through the offenders' increased understanding of the causes and triggers of their past behaviour. Leading up to the mentee's release, the mentoring sessions will be used to create an action plan focusing on how the mentee will cope with day to day life outside of prison and away from crime.

The mentoring relationship can vary depending on the needs of the individual and this is accommodated by recruiting a diverse mix of mentors with differing skill sets. However, we also offer psychotherapeutic intervention for those who are high risk and more complex, in order for them to also benefit from our services; through mentoring or alternative support.

This analysis relates to offenders who participated in the mentoring scheme run by Inside Out whilst in custody and into the community between 2007 and 2012[7].

More information on the mentoring scheme provided by Inside Out can be found here: www.wormwoodscrubscommunitychaplaincy.org.uk/

Processing the Data

84

Inside Out sent data to the Justice Data Lab for 84 offenders who participated in the mentoring scheme between 2006 and 2013.

84

All 84 offenders were matched to the Police National Computer, a match rate of 100%.

42

42 of the 84 offenders received an identifiable custodial sentence where they were released from custody between 2007 and 2012.

42 of the 84 offenders were not matched. Analysis of the 42 unmatched individuals revealed the following:

- There were 4 individuals who did not have a custodial sentence for the most recent proven offence before participating in the mentoring scheme run by Inside Out; this includes persons who appear to have received community sentences, conditional discharges, or cautions. However, it is possible that that these individuals also received a custodial sentence around the same time, and that they had not been released from that custodial sentence before the end of 2012, the period for which we currently have re-offending data.
- There were 14 individuals who were released from custody after the end of 2012 according to data provided by Inside Out, where re-offending data is not currently available.
- There were 19 individuals who participated in the mentoring scheme at Wormwood Scrubs Prison but the given start date for the mentoring scheme did not fall within or near the custodial sentence recorded (i.e. this conflicts with information about the mentoring scheme).

---

[7] Individuals who participated in the mentoring scheme in 2006 and 2013 were not included in the analysis as they did not match to the administrative datasets.

- Relevant sentences could not be found on the administrative datasets for the 5 remaining individuals.

Creating a Matched Control Group

42
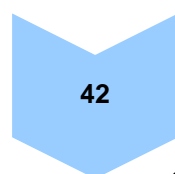
All of the 42 offender records for which re-offending data was available, could be matched to offenders with similar characteristics in England and Wales, but who did not participate in the mentoring scheme run by Inside Out. In total the matched control group consisted of 85,457 offender records from England and Wales.

In the regional analysis, 1 offender record could not be matched so 41 of the 42 offender records for which re-offending data was available could be matched to offenders with similar characteristics, but who did not participate in the mentoring scheme run by Inside Out. The regional matched control group consisted of 12,503 offender records from the London region. The Annex provides information on the similarity between the treatment and control groups. Further data on the matching process is available upon request.

Results

The one year proven re-offending rate[1] for 42[2] offenders who participated in the mentoring scheme by Inside Out was 50%. This compares to 52% for a matched national control group of similar offenders (see Figure 1).

In the regional analysis the one year proven re-offending rate[1] for 41[2] offenders who participated in the mentoring scheme by Inside Out was 49%. This compares to 55% for a matched regional (London) control group of similar offenders (see Figure 2).

Figures 1 and 2 presents the 95 per cent confidence intervals for the re-offending rates of both groups, i.e. the range in which we can be 95 per cent sure that the true re-offending rate for the groups lie. For the analysis at a national level we can be confident that the true difference in re-offending between the two groups is between an 18 percentage point reduction and a 14 percentage point increase. For the analysis at a regional (London) level we can be confident that the true difference in re-offending between the two groups is between a 23 percentage point reduction and a 10 percentage point increase. However, because both of these differences crosses 0, we cannot be sure either way that participating in the mentoring scheme provided by Inside Out led to a reduction or an increase in re-offending and thus cannot draw a firm conclusion about its impact. It is important to show confidence intervals because both the treatment and matched control groups are samples of larger populations; the re-offending rate is therefore an estimate for each population based on a sample, rather than the actual rate.

Figure 1: The best estimates for the one year proven re-offending rate for offenders who participated in the mentoring scheme, and a matched control group from England and Wales
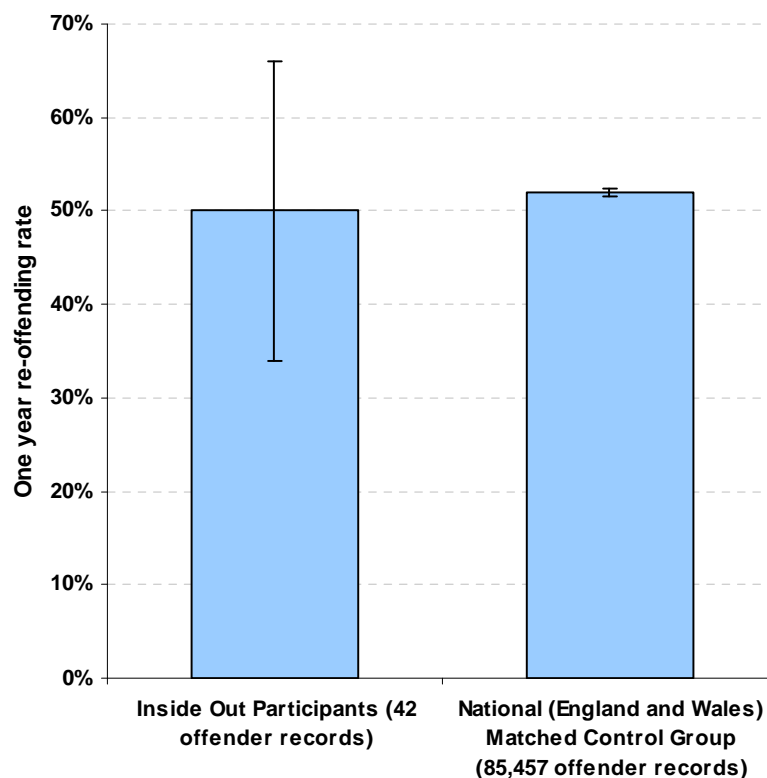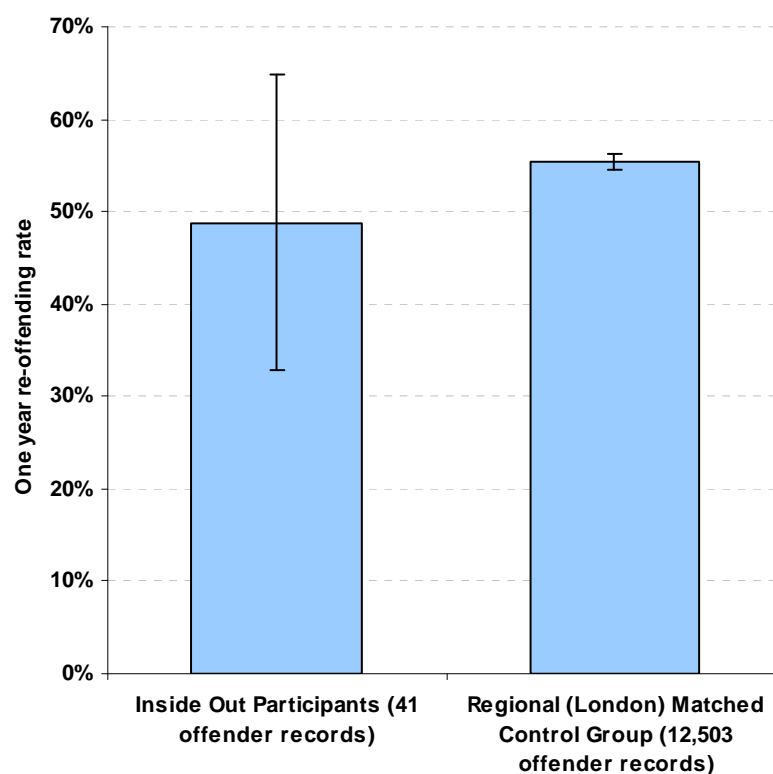

Figure 2: The best estimates for the one year proven re-offending rate for offenders who participated in the mentoring scheme, and a matched regional (London) control group

In both cases, the confidence intervals are particularly wide; this is to be expected when the size of the treatment group (in these case, participants is very small. The precision of this estimate could be improved if the size of the Inside Out group used in the analysis was increased. It is recommended that the analysis is repeated on a larger sample[8], including previous years of information, and when additional years of data become available.

Additional proven re-offending measures

Frequency of re-offending

The frequency of one year proven re-offending[9] for 42^2 offenders participating in the mentoring scheme by Inside Out was 2.14 offences per individual, compared with 1.94 per individual in the matched national control group. Statistical significance testing has shown that this difference in the frequency of re-offending is not statistically significant[10].

Similarly, in the regional analysis, the difference in the frequency of one year proven re-offending[7] for the 41^4 offenders participating in the mentoring scheme by Inside Out is not statistically significant[11] from the matched regional control group for London (2.05 offences per individual, compared with 1.97 per individual respectively).

Time to re-offending

The average time to the first offence within a year of release for the 21 individuals that were matched, and re-offended, after participating in the mentoring scheme provided by Inside Out was 154 days. This compares to 128 days for the 41,517 individuals who re-offended from the matched control group. Statistical significance testing has shown that this difference in the time to first re-offence within a year is not statistically significant[12].

For the regional analysis, the difference in the time to first re-offence within a year of release is also not statistically significant[13]. For the 20 individuals that were

---

[8] For the difference of the one year proven re-offending rates to be statistically significant for this report, in the national analysis a minimum size of 9,498 individuals participating in the mentoring scheme programme run by Inside Out would need to be in the matched treatment group. The figure is 814 individuals for the regional analysis.

[9] The **frequency of one year proven re-offending** is defined as the number of re-offences committed in a one year follow-up period which were proven through receipt of a court conviction, caution, reprimand or warning during the one year follow-up or in a further six month waiting period. The one year follow-up period begins when offenders leave custody, start their court sentence, or from receipt of their caution.

[10] The p-value for this significance test was 0.71. Statistical significance testing is described on page 8 of this report.

[11] The p-value for this significance test was 0.89. Statistical significance testing is described on page 8 of this report.

[12] The p-value for this significance test was 0.25. Statistical significance testing is described on page 8 of this report.

[13] The p-value for this significance test was 0.20. Statistical significance testing is described on page 8 of this report.

matched, and re-offended, the average time to the first offence within a year, after participating in the mentoring scheme provided by Inside Out was 161 days and for the 6,511 individuals who re-offended from the matched control group it was 132 days.

Caveats and Limitations

The statistical methods used in this analysis are based on data collected for administrative purposes. While these include details of each offender's previous criminal, benefit and employment history alongside more basic offender characteristics such as age, gender and ethnicity, it is possible that other important contextual information that may help explain the results has not been accounted for.

In particular, in these analyses we have been unable to statistically control for emotional support, motivation, forgiveness, personal growth and development. These are important as one of the main aims of the mentoring scheme provided by Inside Out is to provide practical and emotional support on a one-to-one basis, to prisoners at HMP Wormwood Scrubs. The control group against which re-offending rates for those participating in the mentoring scheme have been compared will therefore include offenders both with and without the specific needs that Inside Out are seeking to address. It is also possible that there are additional underlying characteristics about the individuals included in the analysis which were not captured by the data, for example attendance at other interventions targeted at offenders, that may have impacted re-offending behaviour. Therefore, there remains a possibility that any difference in re-offending behaviour after matching reflects differences in underlying characteristics between the two groups, which are not recorded in the data, rather than differences in re-offending behaviour.

Many organisations that work with offenders will look to target specific needs of individuals; for example improving housing, or employability. However, how the organisations select those individuals to work with could lead to selection bias, which can impact on the direction of the results. For example; individuals may self select into a service, because they are highly motivated to address one or more of their needs. This would result in a positive selection bias, meaning that for these persons we would generally expect a better re-offending outcome as they are more motivated. Alternatively, some organisations might specifically target persons who are known to have more complex needs and whose attitudes to addressing their needs are more challenging. This would result in a negative selection bias, meaning that for these persons we would generally expect a poorer re-offending outcome as they are not motivated. However, factors which would lead to selection bias in either direction are not represented in our underlying data, and cannot be reflected in our modelling. This means that all results should be interpreted with care, as selection bias cannot be accounted for in analyses. In this instance individuals are referred to the mentoring scheme run by Inside Out through departments and agencies within HMP Wormwood Scrubs or self referrals, therefore this will lead to positive and negative selection bias.

Furthermore, only 42 (41 for the regional analysis) of the 84 offenders originally shared with the MoJ were in the final treatment group. The section "Processing the Data" outlines key steps taken to obtain the final group used in the analysis. In many analyses, the creation of a matched control group will mean that some individuals, who will usually have particular characteristics – for example a particular ethnicity, or have committed a certain type of offence, will need to be removed to ensure that the modelling will work. Steps will always be taken at this stage to preserve as many individuals as possible, but due to the intricacies of statistical modelling some attrition at this stage will often result. As such, the final treatment group may not be representative of all offenders who participated in the mentoring scheme provided by Inside Out. In all analyses from the Justice Data Lab, persons who have ever been convicted of sex offences will be removed, as these individuals are known to have very different patterns of re-offending.

The re-offending rates included in this analysis **should not** be compared to the national average, nor any other reports or publications which include re-offending rates – including those assessing the impact of other interventions. The re-offending rates included in this report are specific to the characteristics of those persons who participated in the mentoring scheme provided by Inside Out, and could be matched. Any other comparison would not be comparing like for like.

For a full description of the methodology, including the matching process, see www.justice.gov.uk/downloads/justice-data-lab/justice-data-lab-methodology.pdf.

Assessing Statistical Significance

This analysis uses statistical testing to assess whether any differences in the observed re-offending rates are due to chance, or if the intervention is likely to have led to a real change in behaviour. The outcome of the statistical testing is a value between 0 and 1, called a 'p-value', indicating the certainty that a real difference in re-offending between the two groups has been observed. A value closer to 0 indicates that the difference in the observed re-offending rates is not merely due to chance. For example, a p-value of 0.01 suggests there is only a 1 per cent likelihood that any observed difference in re-offending has been caused by chance.

For the purposes of the analysis presented in this report, we have taken a p-value of up to 0.05 as indicative of a real difference in re-offending rates between the treatment and control groups.

The confidence intervals in the figure are helpful in judging whether something is significant at the 0.05 level. If the confidence intervals for the two groups do not overlap, this indicates that there is a real difference between the re-offending rates.

Annex

Table 1: Characteristics of offenders in the treatment and National (England and Wales) control groups

	Treatment Group	Matched Control Group	Standardised Difference
Number in group	**42**	**85,457**	
Ethnicity			
White	38%	39%	**-1**
Black	38%	38%	**0**
Asian and Other	24%	23%	**1**
Nationality			
UK Citizen	83%	84%	**-1**
Foreign and Unknown Nationality	17%	16%	**1**
Gender			
Proportion that were male	100%	100%	**0**
Age			
Mean age at Index Offence	32	32	**3**
Mean age at first contact with CJS	17	17	**0**
Index Offence[1]			
Violent offences including robbery	43%	44%	**-2**
Burglary	31%	30%	**1**
Theft and handling	10%	9%	**2**
Drugs related[2]	7%	7%	**1**
Other[3]	10%	10%	**0**
Length of Custodial Sentence			
12 months or less	24%	24%	**0**
12 months to 4 years	64%	64%	**1**
4 years to 10 years	12%	12%	**-1**
Criminal History[4]			
Mean Copas Rate	-0.48	-0.50	**3**
Mean total previous offences	37	35	**5**
Mean previous criminal convictions	18	17	**5**
Mean previous custodial sentences	6	6	**4**
Mean previous court orders	5	5	**4**
Employment and Benefit History			
In P45 employment (year prior to conviction)	26%	26%	**0**
In P45 employment (month prior to conviction)	24%	24%	**0**
Claiming Out of Work Benefits (year prior to conviction)[5]	74%	72%	**4**
Claiming Job Seekers Allowance (year prior to conviction)	43%	43%	**-1**
Claiming Incapacity Benefit and/or Income Support (year prior to conviction)	45%	44%	**2**
Notes:			

1 Index Offence is based on OGRS categories. Further details on make-up of categories available upon request.
2 Drug related offences including importation, exportation, possession, and supply of drugs.
3 Other offences including Fraud, Forgery and Motoring offences, including theft of and from Vehicles.
4 All excluding Penalty Notices for Disorder. All prior to Index Offence.
5 Out of Work Benefits include people on Jobseeker's Allowance (JSA), Employment and Support Allowance (ESA),

Incapacity Benefits (IB) and Income Support (IS) but it does not count people whose primary benefit is Carer's Allowance (CA).		
All figures (except mean copas rate) are rounded to the nearest whole number, this may mean that percentages do not sum to 100%.		
Standardised Difference Key		
Green - the two groups were well matched on this variable (-5% to 5%)		
Amber - the two groups were reasonably matched on this variable (6% to 10% or -6% to -10%)		
Red - the two groups were poorly matched on this variable (greater than 10% or less than -10%)		

Table 2: Characteristics of offenders in the treatment and Regional (London) control groups

	Treatment Group	Matched Control Group	Standardised Difference
Number in group	**41**	**12,503**	
Ethnicity			
White	37%	38%	-4
Black	39%	39%	0
Asian and Other	24%	23%	4
Nationality			
UK Citizen	83%	84%	-2
Foreign and Unknown Nationality	17%	16%	2
Gender			
Proportion that were male	100%	100%	0
Age			
Mean age at Index Offence	32	32	-3
Mean age at first contact with CJS	17	17	2
Index Offence[1]			
Violent offences including robbery	44%	44%	-1
Burglary	32%	31%	2
Theft and handling	7%	9%	-7
Drugs related[2]	7%	6%	4
Other[3]	10%	9%	3
Length of Custodial Sentence			
12 months or less	22%	25%	-6
12 months to 4 years	66%	63%	6
4 years to 10 years	12%	12%	-1
Criminal History[4]			
Mean Copas Rate	-0.52	-0.51	-1
Mean total previous offences	34	35	-4
Mean previous criminal convictions	16	17	-4
Mean previous custodial sentences	6	6	-1
Mean previous court orders	5	5	-6
Employment and Benefit History			
In P45 employment (year prior to conviction)	27%	24%	7
In P45 employment (month prior to conviction)	24%	21%	7

Claiming Out of Work Benefits (year prior to conviction)[5]	73%	73%	1
Claiming Job Seekers Allowance (year prior to conviction)	44%	43%	3
Claiming Incapacity Benefit and/or Income Support (year prior to conviction)	44%	47%	-7
Notes:			

1 Index Offence is based on OGRS categories. Further details on make-up of categories available upon request.
2 Drug related offences including importation, exportation, possession, and supply of drugs.
3 Other offences including Fraud, Forgery and Motoring offences, including theft of and from Vehicles.
4 All excluding Penalty Notices for Disorder. All prior to Index Offence.
5 Out of Work Benefits include people on Jobseeker's Allowance (JSA), Employment and Support Allowance (ESA), Incapacity Benefits (IB) and Income Support (IS) but it does not count people whose primary benefit is Carer's Allowance (CA).

All figures (except mean copas rate) are rounded to the nearest whole number, this may mean that percentages do not sum to 100%.

Standardised Difference Key

Green - the two groups were well matched on this variable (-5% to 5%)

Amber - the two groups were reasonably matched on this variable (6% to 10% or -6% to -10%)

Red - the two groups were poorly matched on this variable (greater than 10% or less than -10%)

We assess whether the treatment group and the matched control group are balanced and well matched through a comparison of the standardised differences generated for every variable included in the matching process. Table 1 shows that the two groups were well matched on all variables found to have associations with receiving treatment and/or re-offending. Nearly all of the standardised mean differences are highlighted green because they were between -5% and 5%, indicating close matches on these characteristics. Table 2 shows that the two groups were reasonably matched on all variables found to have associations with receiving treatment and/or re-offending. The standardised differences are highlighted as amber (i.e. between 6% to 10% or -6% to -10%) in a few cases, suggesting that the control group could have been slightly better matched in these cases, but were still indicative of a control group who exhibit similar characteristics.

Contact Points

Press enquiries should be directed to the Ministry of Justice press office:

Tel: 020 3334 3555

Other enquiries about the analysis should be directed to:

Sarah French
Justice Data Lab Team
Ministry of Justice
Justice Data Lab
Justice Statistical Analytical Services
7th Floor
102 Petty France
London
SW1H 9AJ
Tel: 0203 334 4770
E-mail: justice.datalab@justice.gsi.gov.uk

General enquiries about the statistical work of the Ministry of Justice can be e-mailed to: statistics.enquiries@justice.gsi.gov.uk
General information about the official statistics system of the United Kingdom is available from www.statistics.gov.uk