



## Summary

This analysis assessed the impact on re-offending of a project run by Brighton & Hove City Council, in HMP Lewes. The one year proven re-offending rate<sup>1</sup> for 30 offenders on the POAL (Preventing Offender Accommodation Loss) course was 33%, compared with 53% for a matched control group of similar offenders. Statistical significance testing has shown that this difference in the re-offending rates is statistically significant<sup>2</sup> suggesting that individuals targeted by the POAL Project, who had been convicted and served a custodial sentence, experienced a reduction in re-offending between 1 and 38 percentage points.

However, it should be noted that we have been unable to statistically control for accommodation or homelessness status in this analysis, or any other factors associated with resettlement following a custodial sentence. Therefore we cannot say with certainty that it was the service delivered by Brighton & Hove City Council, rather than accommodation or homelessness status in this group or the matched control group that led to the observed difference in re-offending.

**What you can say:** This analysis indicates that individuals targeted by the POAL Project, who had been convicted and served a custodial sentence, experienced a reduction in re-offending between 1 and 38 percentage points.

## Introduction

The POAL Project is a service delivered by Brighton & Hove City Council, in HMP Lewes. The Project specifically targets short term offenders (remand, and those sentenced to less than 12 months custody), although other cases are dealt with on a case-by-case basis beyond this remit. The POAL Project is funded to provide a homelessness intervention specifically for offenders in custody. For offenders who are homeless, this can take the form of assessing statutory duties under the Housing Act (1996, 2002), referrals to supported housing, rehabilitation, private sector Landlord and floating support providers; for offenders with accommodation, this can involve liaising with landlords and colleagues in housing benefit in order to sustain, or terminate, a tenancy; whichever is the more suitable. The POAL Project works in

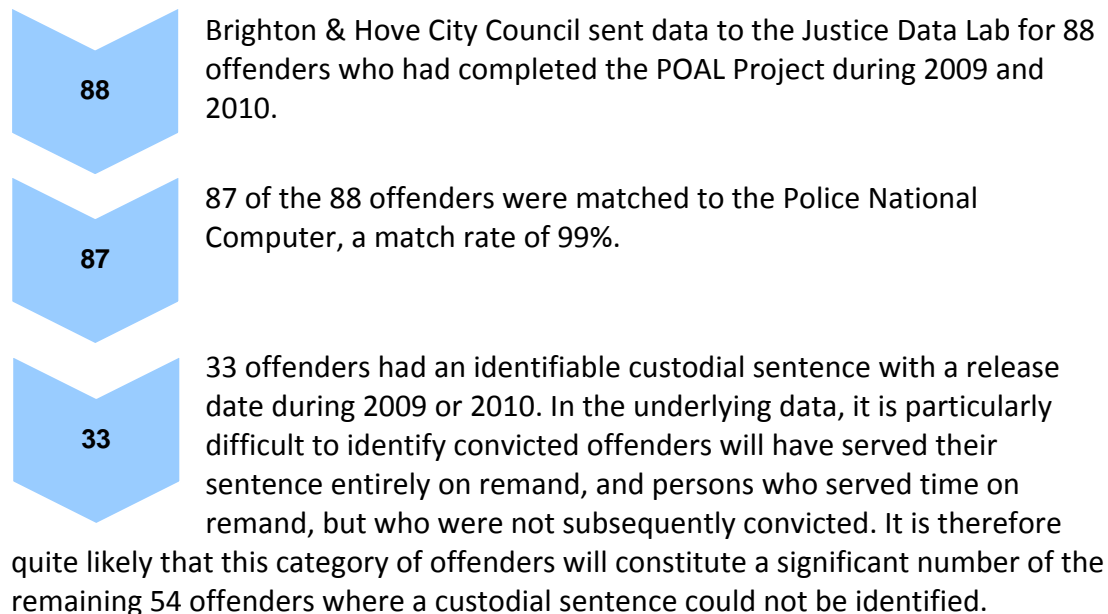
---

<sup>1</sup> 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 or start their probation sentence.

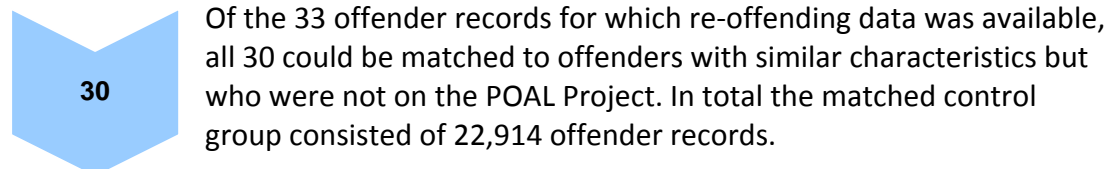
<sup>2</sup> The p-value for this significance test was 0.03. Statistical significance testing is described on page 4 of this report.

conjunction with established multi-agency frameworks such as Integrated Offender Management (IOM) and Multi Agency Public Protection Arrangements (MAPPA). This analysis relates to offenders who were targeted by the POAL Project during 2009 and 2010 in HMP Lewes.

## Processing the Data



## Creating a Matched Control Group



The Annex provides information on the similarity between the treatment and control groups. Further data on the matching process is available upon request.

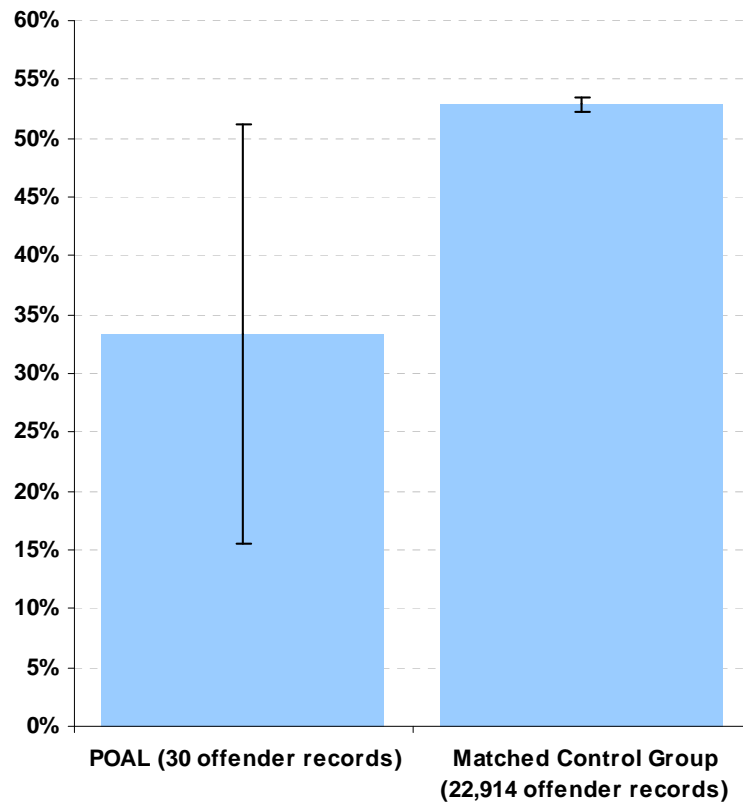
## Results

The one year proven re-offending rate for 30 offenders on the POAL Project was 33%. This compares to 53% for a matched control group of similar offenders. This information is displayed in Figure 1, which is shown on the next page.

Figure 1 below 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 this analysis we can be confident that the true difference in re-offending between two groups is between 1 and 38 percentage points. 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 on the POAL Project and a matched control group.*



The precision of this estimate could be improved if the size of the offender group used in the analysis was increased.

### **Additional proven re-offending measures**

#### **Frequency of re-offending**

The frequency of one year proven re-offending for 30 offenders targeted by the POAL Project was 0.77 offences per individual, compared with 2.03 per individual in the matched control group. Statistical significance testing has shown that this difference in the re-offending rates is statistically significant<sup>3</sup>.

This result is in line with the findings around the indicator of one year proven re-offending; the subject of this report. The same caveats and limitations apply to these findings, which are described below.

<sup>3</sup> The p-value for this significance test was less than 0.01. Statistical significance testing is described on page 4 of this report.

## **Caveats and Limitations**

The statistical methods used in this analysis are based on data collected for administrative purposes. While these include details of each offenders' 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. It is possible that underlying characteristics about the individuals included in the analysis which were not captured by the data (e.g. attendance at other interventions or services targeted at offenders) may have impacted 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.

Furthermore, only 30 of the 88 offenders targeted by the POAL Project 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 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 have been on the POAL Project. 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.

Additionally, due to limitations in the underlying administrative data used for this analysis, it was not possible to identify persons who served time on remand, but who were not subsequently convicted. The offending rate for these persons subsequent to being targeted by the POAL Project is therefore not reflected in these results. This means that the conclusions drawn in this analysis are only applicable to individuals that the POAL Project targeted in custody, and who had been convicted.

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 POAL Project participants who 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](http://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 control groups**

	Treatment Group	Matched Control Group	Standardised Difference
<b>Number in group</b>	<b>30</b>	<b>22,914</b>	
<b>Ethnicity</b>			
White	90%	90%	<b>0</b>
Black	10%	10%	<b>0</b>
<b>Nationality</b>			
UK Citizen	100%	100%	<b>0</b>
<b>Gender</b>			
Proportion that were male	100%	100%	<b>0</b>
<b>Age</b>			
Mean age at Index Offence	35	35	<b>1</b>
Mean age at first contact with CJS	17	17	<b>3</b>
<b>Index Offence<sup>1</sup></b>			
Violence	63%	63%	<b>0</b>
Burglary	10%	10%	<b>-1</b>
Theft and handling	7%	6%	<b>3</b>
Fraud and Forgery	7%	7%	<b>-1</b>
Motoring offences	13%	13%	<b>-1</b>
<b>Length of Custodial Sentence</b>			
6 months or less	80%	80%	<b>1</b>
6 months to 12 months	20%	20%	<b>-1</b>
<b>Criminal History<sup>2</sup></b>			
Mean Copas Rate	-0.67	-0.67	<b>0</b>
Mean total previous offences	39	37	<b>5</b>
Mean previous criminal convictions	14	14	<b>4</b>
Mean previous custodial sentences	4	4	<b>3</b>
Mean previous court orders	5	5	<b>3</b>
<b>Employment and Benefit History</b>			
In P45 employment (year prior to conviction)	27%	26%	<b>1</b>
In P45 employment (month prior to conviction)	13%	13%	<b>2</b>
Claiming Out of Work Benefits (year prior to conviction) <sup>3</sup>	83%	83%	<b>0</b>
Claiming Job Seekers Allowance (year prior to conviction)	70%	67%	<b>7</b>
Claiming Incapacity Benefit (year prior to conviction)	20%	20%	<b>0</b>
Claiming Income Support (year prior to conviction)	10%	15%	<b>-14</b>
<b>Notes:</b>			
1 Index Offence is based on OGRS categories. Further details on make-up of categories available upon request.			
2 All excluding Penalty Notices for Disorder. All prior to Index Offence.			
3 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%.			
<b>Standardised Difference Key</b>			

<b>Green - the two groups were well matched on this variable (-5% to 5%)</b>
<b>Amber - the two groups were reasonably matched on this variable (6% to 10% or -6% to -10%)</b>
<b>Red - the two groups were poorly matched on this variable (greater than 10% or less than -10%)</b>

Table 1 shows that the two groups were well matched on all but one of the 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. The variable “claiming income support in the year prior to conviction” is not as well balanced in the treatment and control groups in this instance, but overall the groups were still well balanced on the vast majority of 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:

### Justice Data Lab Team

Ministry of Justice

Justice Data Lab

Justice Statistical Analytical Services

7<sup>th</sup> Floor

102 Petty France

London

SW1H 9AJ

Tel: 0203 334 4396

E-mail: [Justice.DataLab@justice.gsi.gov.uk](mailto: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](mailto:statistics.enquiries@justice.gsi.gov.uk)

General information about the official statistics system of the United Kingdom is available from [www.statistics.gov.uk](http://www.statistics.gov.uk)

© Crown copyright 2013

Produced by the Ministry of Justice

You may re-use this information (not including logos) free of charge in any format or medium, under the terms of the Open Government Licence. To view this licence, visit [www.nationalarchives.gov.uk/doc/open-government-licence/](http://www.nationalarchives.gov.uk/doc/open-government-licence/) or email:

[psi@nationalarchives.gsi.gov.uk](mailto:psi@nationalarchives.gsi.gov.uk)

Where we have identified any third party copyright material you will need to obtain permission from the copyright holders concerned.