Ministry of Justice

Justice Data Lab Re-offending Analysis: Home Group (Stonham) Support Only service (Overall – delivered whilst on community sentences or after prison sentences)

Summary

This analysis assessed the impact on re-offending of the support service run by Home Group where the service was delivered to individuals on community sentences or after release from custody. The one year proven re-offending rate[1] for 455 offenders who received the support service run by Home Group was 32%, compared with 34% for a matched control group of similar offenders. Statistical significance testing has shown that this difference is not significant[2]; suggesting that at this stage there is insufficient evidence to draw a conclusion about the impact of the persons who received the support service run by Home Group on re-offending. However, the results of the analysis do not mean that the support service run by Home Group failed to impact on re-offending.

However, it should be noted that it has only been possible to control for a limited amount of information about the offenders who are included within this analysis. Due to the nature of our underlying administrative data we have unfortunately been unable to statistically control for accommodation issues, employment outcomes, mental health issues, multiple complex needs or any other factors that may be associated with referrals to the Support Only service for both the group that Home Group worked with, and the matched control group. The control group against which re-offending rates for those who received support from Home Group have been compared with will therefore include offenders both with and without the specific needs that Home Group are seeking to address. Individuals with accommodation, employment or mental health problems are known to have particular difficulties in breaking the cycle of re-offending. As this key information is missing from the underlying data used, the results of this analysis should be interpreted with particular care. Further detail about the caveats and limitations to this analysis can be found later in this document.

[1] 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.

[2] The difference was non-significant, p = 0.33. 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 individuals who received the support service run by Home Group (Stonham) on re-offending.
What you cannot say: This analysis shows that individuals who received the support service run by Home Group (Stonham) decreased proven re-offending by 2 percentage points, or by any other amount.

Introduction

Home Group is a charity and social enterprise that is one of the UK's largest providers of quality housing and supported housing services and products. Stonham (which is part of Home Group) provides housing and support services for vulnerable people with a wide range of support needs, including people with a history of offending behaviour.

Individuals are referred to the services run by Home Group (Stonham) from courts, other housing associations, community mental health teams, health services, social services, voluntary agencies, youth offending teams, police services, probation offices, and prisons across England and Wales. Direct applications/self-referrals can also be made to the services provided by Home Group. Referrals are rejected if the individuals present an unacceptable level of risk to staff, other clients, or the community. The Support only service is commissioned by Local Authorities, with the aim of targeting individuals, in this case offenders, with specific needs around housing and accommodation, and helping individuals achieve independent living. Whilst the service will have essentially been the same in each Local Authority area, there will have been differences in the scale of the implementation in each area.

The Support Only service run by Home Group (Stonham) provides support to people in the community in their own homes. The service includes support to retain and maintain existing housing or to obtain suitable and settled accommodation. In addition to this, offenders will typically receive support around a range of other need areas, predominantly ensuring the offenders are enabled to achieve improvements across some or all of the reducing re-offending pathways. This will include working with other specialist agencies to achieve a positive outcome around the offender's particular needs such as accommodation, finances, meaningful use of time, physical health, mental health, family and friends. The offenders are visited at their homes on a weekly or fortnightly basis by a staff member for approximately one hour, for a support session which includes dealing with any current issues they may have and to follow the support plan that has been agreed with the offender. The work conducted varies with each offender over a period of up to two years.

This analysis relates to offenders who received the support service provided by Home Group whilst on community sentences or after release from custody between 2003 and 2010. A further set of analyses pertaining to other service types provided by Home Group was carried out. The results for these are available in Annex B and have also been published separately.

Home Group (Stonham) sent data to the Justice Data Lab for three services they provided to offenders: Support Only, Residential and support and support and Short Term Accommodation (STA). This report pertains to the Support Only service (please refer to other Justice Data Lab reports published separately for other service types).

Processing the Data

It should be noted that due to the nature of this analysis a significant number of offenders were lost when processing the data as it was unclear at what stage of the Criminal Justice System Home Group worked with them and what sentence types the offenders were serving. It should also be noted that there may be individuals that Home Group worked with that did not received a sentence, therefore the offences would not be possible for us to identify in our underlying datasets.

Home Group sent data to the Justice Data Lab for 1,638 offenders who received the support service provided by Home Group between 2003 and 2010.

1,387 of the 1,638 offenders were matched to the Police National Computer, a match rate of 85%.

524 offenders received the support service within six months of an identifiable community sentence (401 individuals) or within six months of release from custody (123 individuals). Having a six month period between the start of a community sentence or release from custody and the start date of the support service run by Home Group means that any observable difference in the one year proven re-offending rate would be more likely to be attributable to the work of Home Group, rather than any other factors which may have had an effect.

Analysis of the unmatched data revealed the following:

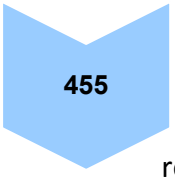
- Some were individuals who did not have a community sentence or prison sentence as the most recent proven offence before receiving the support service from Home Group; this could include persons who received cautions, fines, conditional discharges, positive drug tests or youth sentences (389 individuals across all different sentence types, 148 of these individuals received the support service from Home Group within 6 months of receiving a sentence). We would recommend that an additional analysis of the effectiveness of the Support Only service provided by Home Group is carried out on individuals who received the service within six months of a conditional discharge or fine, as there is enough for robust analysis to take place (59 individuals).
- There were 255 individuals who had a community sentence (176 individuals) or prison sentence (79 individuals) as the most recent proven offence before receiving the support service from Home Group, but who were not included

in the analysis. All of these individuals did not start receiving the support service from Home Group until at least 6 months after the start of a community sentence or after release from custody.

- There were 30 individuals that could not be included in the analysis as they had a previous sexual offence or their index offence appeared to be of a sexual nature.
- There were 164 individuals that had an intervention start date after June 2010, where the intervention carried on into 2011 to 2013. Home Group take referrals along the entire pathway of the Criminal Justice System, it is quite likely that this includes individuals who were yet to appear at court meaning that if they were convicted, this conviction may not have happened during 2010, the period for which we currently have re-offending data for. It is also possible that these individuals and those that Home Group worked with prior to June 2010 may not have received a conviction at court.
- Sentences could not be found on the administrative datasets for 25 remaining individuals. It should be noted that these individuals that Home Group worked with may not have received a sentence, therefore the offences would not be possible for us to identify in our underlying datasets.

69 persons were removed because they had committed a re-offence before the support service provided by Home Group commenced.

Creating a Matched Control Group



All of the 455 offender records for which re-offending data was available could be matched to offenders with similar characteristics, but who did not receive the support service run by Home Group. In total the matched control group consisted of 607,854 offender records (none of the control group were Home Group participants from any of the services the Justice Data Lab are reporting on).

As this analysis refers to those that received the support service provided by Home Group after release from custody or after the start of a community sentence, an additional check was imposed on the control group to ensure that the matched individuals had similar characteristics. All members of the matched control group could not have committed a proven re-offence before the intervention start date for the matched Home Group counterparts. Any matches where the control group had committed a proven re-offence prior to the start date of the Home Group counter part were excluded from the analysis. This check ensured that we have greater confidence that the matched control group presents a more accurate counterfactual for comparison.

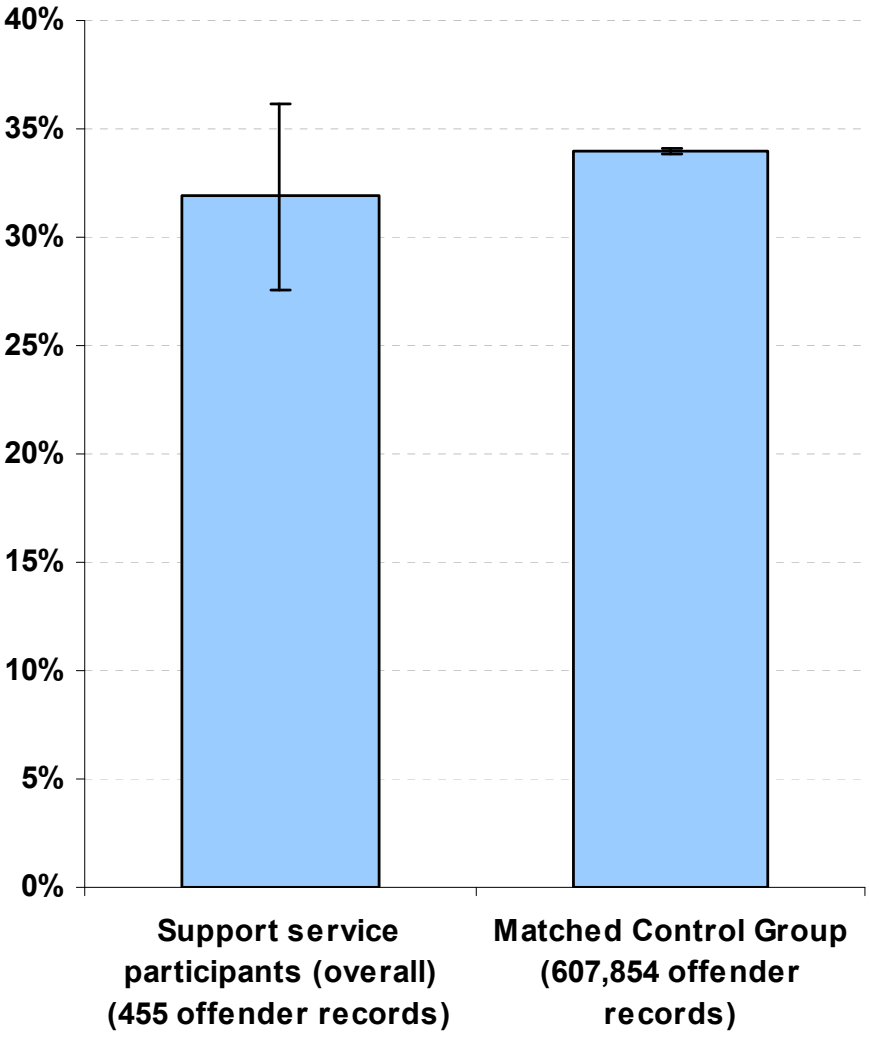
Annex A provides information on the similarity between the treatment and control groups. Further data on the matching process is available upon request.

Results

The one year proven re-offending rate for 455 offenders who received the support service run by Home Group was 32%. This compares to 34% for a matched control group of similar offenders. This information is displayed in Figure 1 below.

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 -7 and 2 percentage points. However, because this difference crosses 0, we cannot be sure either way that receiving the support service run by Home Group 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 received the support service provided by Home Group whilst on a community sentence or after release from custody, and a matched control group



The precision of this estimate could be improved if the size of the support service group used in the analysis was increased. It is recommended that the analysis is repeated on a larger sample, 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 for 455 offenders who received the support service run by Home Group after release from custody was 0.88 offences per individual, compared with 1.01 per individual in the matched control group. Statistical significance testing has shown that this difference in the re-offending rates is not statistically significant[3].

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.

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. 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 on other interventions targeted at offenders, that may have impacted re-offending behaviour.

In this instance, it would have been particularly beneficial to be able to take account of accommodation issues, employment outcomes and mental health issues for both the group that Home Group worked with, and the matched control group. This information is currently not available routinely to the Justice Data Lab. Whilst the success of the matching described in Annex A suggests that the individuals were well matched to the control group on key characteristics such as demographic and criminal history, individuals with accommodation issues or mental health problems are known to have particular difficulties in breaking the cycle of re-offending. Additionally, the service engages with offenders who have multiple complex needs, and as such could be considered to be harder to help to break the cycle of re-offending. As this key information is missing from the underlying data used, the results of this analysis should be interpreted with particular care.

[3] The p-value for this significance test was 0.14. Statistical significance testing is described on page 8 of this report.

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 455 of the 1,638 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 were on community sentences or had been released from custody and received the support service provided by Home Group. 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 received the support service provided by Home Group after release from custody or whilst on a community sentence, 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 A

Table 1: Characteristics of offenders in the treatment and control groups

	Treatment Group	Matched Control Group	Standardised Difference
Number in group	**455**	**607,854**	
Ethnicity			
White	100%	100%	**0**
Nationality			
UK Citizen	100%	100%	**0**
Gender			
Proportion that were male	69%	69%	**-1**
Age			
Mean age at Index Offence	32	32	**1**
Mean age at first contact with CJS	20	20	**2**
Index Offence[1]			
Violent offences including robbery	36%	37%	**-1**
Burglary	9%	8%	**1**
Theft and handling	23%	21%	**4**
Fraud and forgery	6%	6%	**-1**
Motoring offences, including theft of and from Vehicles	11%	10%	**1**
Drugs	11%	12%	**-3**
Criminal or malicious damage or other	5%	6%	**-3**
Criminal History[2]			
Mean Copas Rate	-1.01	-0.99	**-2**
Mean total previous offences	24	24	**0**
Mean previous criminal convictions	10	10	**-2**
Mean previous custodial sentences	2	2	**1**
Mean previous court orders	3	3	**-3**
Employment and Benefit History			
In P45 employment (year prior to conviction)	33%	32%	**2**
In P45 employment (month prior to conviction)	17%	16%	**3**
Claiming Out of Work Benefits (year prior to conviction)[3]	85%	87%	**-5**
Claiming Job Seekers Allowance (year prior to conviction)	42%	42%	**-1**
Claiming Incapacity Benefit (year prior to conviction)	49%	50%	**-1**
Claiming Income Support (year prior to conviction)	44%	45%	**-2**
Notes:			
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%.			
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 1 on the previous page shows that the two groups were well matched on all variables found to have associations with receiving treatment and/or re-offending. All of the standardised mean differences are highlighted green because they were between -5% and 5%, indicating close matches on these characteristics.

Annex B:
Different service type analyses of Home Group

The Justice Data Lab will be issuing six reports from three different services provided by Home Group. There are three different reports for the Support Only service, two reports for the Residential and support service and one report for the Short Term Accommodation (STA) service. A summary of the results are in the table below.

Table 2: Results of all service type analyses for Home Group

Service Type	Treatment Group size	Significant difference?	Estimate of impact on re-offending
Support Only (community sentences)	349	No	Inconclusive
Support Only (prison sentences)	106	No	Inconclusive
Support Only (overall)	455	No	Inconclusive
Residential and support (community sentences)	393	Yes	3% to 14% increase
Residential and support (prison sentences)	1,025	Yes	4% to 10% increase
Short Term Accommodation (HDC)	388	Yes	3% to 13% reduction

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