Justice Data Lab
Re-offending Analysis:
Home Group (Stonham)
Short Term Accommodation (STA) service

Summary

This analysis assessed the impact on re-offending of the Short Term Accommodation (STA) service run by Home Group (Stonham), where the service was delivered to individuals on Home Detention Curfew (HDC) following release from custody. This analysis supersedes the analysis "NOMS Bail Accommodation and Support Services, individuals on Home Detention Curfew" published in January 2014. The one year proven re-offending rate[1] for 388 offenders who received the STA service run by Home Group was 31%, compared with 39% for a matched control group of similar offenders. Statistical significance testing has shown that this difference in the re-offending rates is statistically significant[2]; meaning that we can be confident that there is a real difference in the re-offending rate for the persons who received the STA service run by Home Group by between 3 and 13 percentage points.

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. 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 we have been unable to statistically control for accommodation issues, homelessness status or any other factors associated with resettlement for individuals on Home Detention Curfew after release from custody or statutory referrals for both the group that Home Group worked with, and the matched control group. The control group against which re-offending rates for those using Home Group's STA service have been compared will therefore include offenders both with and without the specific accommodation needs that Home Group are seeking to address. Individuals with homelessness or accommodation 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.

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[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 p-value for this significance test was less than 0.001. Statistical significance testing is described on page 7 of this report.

It should also be noted that we have been unable to statistically control for HDC status in the control group. The control group will contain offenders who were released from custody on HDC and those who were not.

What you can say: This analysis indicates that individuals who received the STA service run by Home Group whilst on HDC after release from custody, experienced a reduction in re-offending between 3 and 13 percentage points.

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. Home Group (Stonham) took over the Bail Accommodation and Support Service (BASS) contract across England and Wales in June 2010.
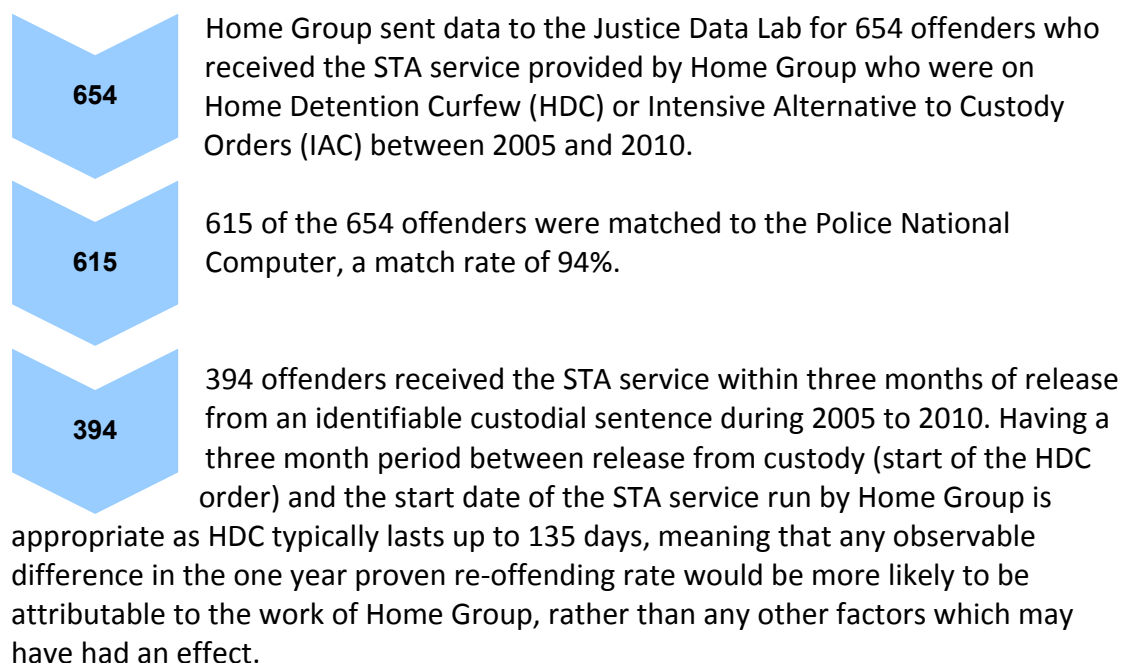
Bail Accommodation and Support Services run by Home Group (Stonham) provide support to those persons who have been referred to them by the prisons across England and Wales. These persons would normally be living in the community on Home Detention Curfew (HDC) or Intensive Alternative to Custody (IAC), but do not have a suitable address or are in need of some extra support during this period.

The STA service run by Home Group (Stonham) provides a very short term (maximum 2 months) housing related support service for offenders on Home Detention Curfew (HDC) or Intensive Alternative to Custody (IAC) orders and is based in small community residential units. The STA service is statutory for all individuals that are referred from prisons across England and Wales to the service. Individuals receiving the STA service are intensively monitored, with tightly defined requirements and the service helps the offenders comply with the conditions of their release. 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 support 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 particular needs such as accommodation, finances, meaningful use of time, physical health, mental health, family and friends.

This analysis relates to offenders who received the STA service provided by Home Group whilst on a HDC order after release from custody, from June to December 2010. A further set of analyses pertaining to other service types provided by Home Group were 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 Short Term Accommodation (STA). This report pertains to the Short Term Accommodation (STA) service otherwise known as NOMS BASS (please refer to other Justice Data Lab reports published separately for other service types).

Processing the Data

654

Home Group sent data to the Justice Data Lab for 654 offenders who received the STA service provided by Home Group who were on Home Detention Curfew (HDC) or Intensive Alternative to Custody Orders (IAC) between 2005 and 2010.

615

615 of the 654 offenders were matched to the Police National Computer, a match rate of 94%.

394

394 offenders received the STA service within three months of release from an identifiable custodial sentence during 2005 to 2010. Having a three month period between release from custody (start of the HDC order) and the start date of the STA service run by Home Group is appropriate as HDC typically lasts up to 135 days, meaning 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:
- There were 10 individuals on IAC orders that were removed from the analysis. It was not suitable to include those on IAC orders in the same analysis as those on HDC, as they are very different sentence types.
- The data sent by Home Group for the STA service suggested that most of the individuals on HDC were referred from prisons so these individuals would have custodial sentences as the most recent proven offence before receiving the service. However, we found that some individuals had different sentences as the most recent proven offence before receiving the STA service from Home Group. The majority of these sentences were community orders and suspended sentence orders. Other sentence types included cautions, fines, conditional discharges, positive drug tests and youth sentences. Across all these sentence types there were 133 individuals, 11 of these individuals received the STA service from Home Group within 3 months of receiving a sentence type listed above.
- There were 44 individuals who had a custodial sentence as the most recent proven offence before receiving the STA service from Home Group, but were not included in the analysis as they did not start receiving the STA service from Home Group until at least 3 months after release from custody.

- There were 3 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.
- Sentences could not be found on the administrative datasets for 31 remaining individuals.

389
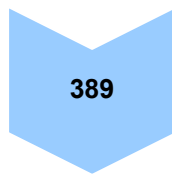
5 persons were removed because they had committed a re-offence before the STA service provided by Home Group commenced.

Creating a Matched Control Group

388
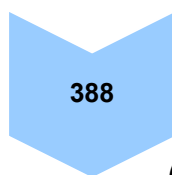
388 of the 389 offender records for which re-offending data was available could be matched to offenders with similar characteristics, but who did not receive the STA service run by Home Group. In total the matched control group consisted of 47,291 offender records (none of the control group were Home Group participants from any of the services the Justice Data Lab are reporting on).

As this analysis refers to those that received the STA service provided by Home Group after release from custody and on HDC, 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.
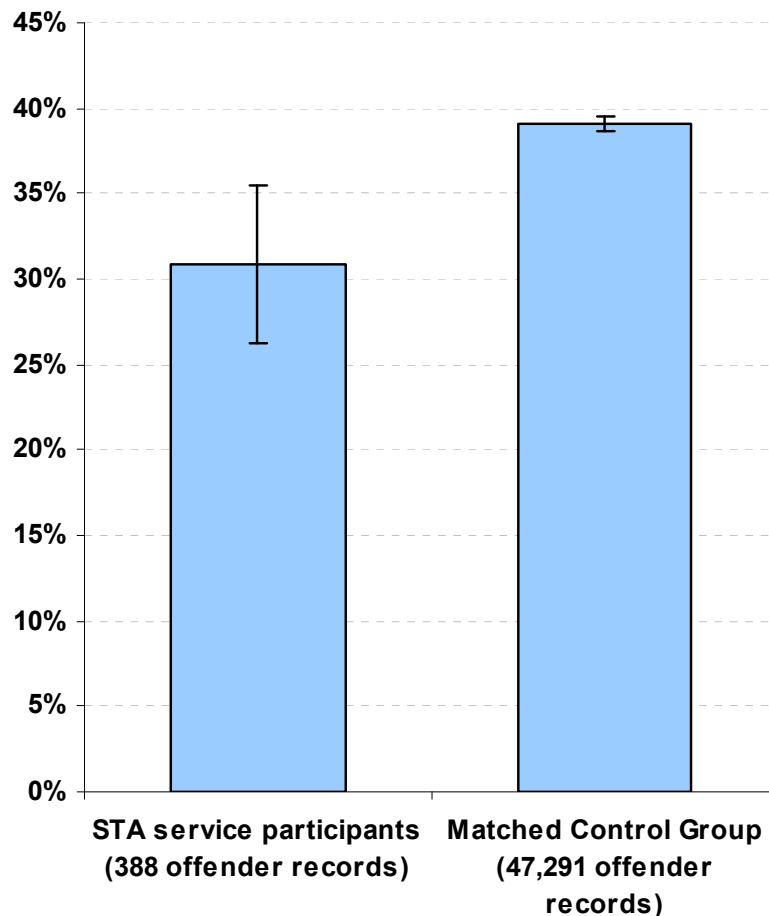
Results

The one year proven re-offending rate for 388 offenders who were on HDC after release from custody and received the STA service provided by Home Group was 31%. This compares to 39% for a matched control group of similar offenders. This information is displayed in Figure 1 on the next page.

Figure 1 on the next page 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 3 and 13 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 who received the STA service provided by Home Group, and a matched control group

Additional proven re-offending measures
Frequency of re-offending
The frequency of one year proven re-offending for 388 offenders who received the STA service provided by Home Group whilst on HDC after release from custody was 1.03 offences per individual, compared with 1.40 per individual in the matched control group. Statistical significance testing has shown that this difference in the re-offending rates is statistically significant[3].

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[3] The p-value for this significance test was 0.001. Statistical significance testing is described on page 7 of this report.

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. 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. 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, homelessness status and the intensity of the service 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. It also should be noted that those who received the STA service from Home Group consists of those on Home Detention Curfew (HDC) or Intensive Alternative to Custody (IAC) orders. It was not appropriate to include those on IAC orders and as such, this analysis will not be indicative of those on IAC orders receiving the STA service from Home Group. 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 homelessness or accommodation 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.

It should also be noted that we have been unable to statistically control for HDC status in the control group. The control group will contain offenders who were released from custody on HDC and those who were not.

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, persons on the STA service have received a statutory referral and this will therefore lead to a negative bias.

Furthermore, only 388 of the 654 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 HDC after release from custody and received the STA 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 STA service provided by Home Group, were on HDC after release from custody, 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 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 A

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

	Treatment Group	Matched Control Group	Standardised Difference
Number in group	**388**	**47,291**	
Ethnicity			
White	85%	84%	1
Black	10%	10%	-1
Other	5%	5%	-2
Nationality			
UK Citizen	95%	95%	0
Foreign National or Unknown Nationality	5%	5%	0
Gender			
Proportion that were male	83%	84%	-3
Age			
Mean age at Index Offence	32	31	3
Mean age at first contact with CJS	19	19	0
Index Offence[1]			
Violent offences including robbery	26%	26%	-1
Burglary	18%	18%	1
Theft and handling	15%	16%	0
Fraud and Forgery	7%	7%	0
Drugs	25%	25%	1
Other[2]	9%	9%	0
Length of Custodial Sentence			
6 months or less	11%	11%	0
6 months to 12 months	15%	15%	-1
12 months to 4 years	74%	74%	1
Criminal History[3]			
Mean Copas Rate	-0.91	-0.92	2
Mean total previous offences	26	25	1
Mean previous criminal convictions	10	10	1
Mean previous custodial sentences	2	2	-1
Mean previous court orders	3	3	2
Employment and Benefit History			
In P45 employment (year prior to conviction)	31%	32%	0
In P45 employment (month prior to conviction)	14%	14%	0
Claiming Out of Work Benefits (year prior to conviction)[4]	76%	76%	1
Claiming Job Seekers Allowance (year prior to conviction)	49%	50%	-1
Claiming Incapacity Benefit (year prior to conviction)	31%	30%	2
Claiming Income Support (year prior to conviction)	19%	19%	1
Notes:			

1 Index Offence is based on OGRS categories. Further details on make-up of categories available upon request.
2 Other offences including Motoring offences (including theft of and from vehicles) and criminal or malicious damage.
3 All excluding Penalty Notices for Disorder. All prior to Index Offence.
4 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

Contact Points

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