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Contact info:
research@justice.gsi.gov.uk

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The effect of early release of prisoners on Home Detention Curfew (HDC) on recidivism

Olivier Marie, Research Centre for Education and the Labour Market (ROA), Maastricht University and Centre for Economic Performance (CEP), London School of Economics

Karen Moreton, Offender Management Analytical Services, Ministry of Justice

Miguel Goncalves, Justice Statistics Analytical Services, Ministry of Justice

Key points

- Home Detention Curfew (HDC) was introduced across England and Wales in January 1999 and was aimed at enabling early release on an electronic tag for offenders who had received shorter term custodial sentences and who, in addition, also posed a less serious threat of reoffending upon release.
- This study used centrally held data on 499,279 discharges from prison between January 2000 and March 2006, with 63,384 discharged receiving HDC. Offender criminal histories and reoffending information were extracted from the Police National Computer to evaluate the effectiveness of HDC in terms of reducing reoffending using a quasi-experimental evaluation design: Regression Discontinuity Design.
- The analysis produced evidence that offenders who received HDC under the current provision were no more likely to engage in criminal behaviour when released from prison when compared to offenders with similar characteristics who were not eligible for early release on HDC. This was the case, even when controlling for the additional time that offenders on HDC are in the community, due to being released early.
- The cost of monitoring an offender on HDC is cheaper than the cost of keeping an offender in custody. Therefore, these findings suggest that HDC is likely to be a cost-effective policy.
- The analysis also highlighted a number of factors – such as specific offence types, number of previous offences and number of previous breaches – which are likely to be important to take into account when selecting prisoners into the HDC programme to avoid reoffending.
- This analysis does not explore whether offenders who do not currently receive HDC would return similar results in terms of reoffending behaviour. Any plans to extend the scheme to other offenders would need to take this into account.

Research summary

Background

Home Detention Curfew was introduced across England and Wales in January 1999. The scheme enables early release from prison, on an electronic tag, for offenders who have received shorter term custodial sentences and who pose a less serious threat of reoffending upon release. It is separate from other electronic monitoring regimes such as curfew requirements attached to a community order. It also operates in addition to licence conditions attached to the end of custodial sentences over 12 months. For example, where the offender would be subject to supervision under licence on release at the half-way point, the supervision begins when the prisoner is released on HDC (before the half-way point), up to the expiry of the licence.

The purpose of HDC is to manage more effectively the transition of offenders from custody back into the community (Prison Service Order 6700 – issued January 2000). Prisoners selected for HDC must have been given a custodial sentence of between three months and four years¹ and must meet the eligibility criteria. Some groups are excluded altogether including: registered sex offenders; those serving extended sentences for public protection; and foreign national prisoners who are liable to be removed from the UK. Offenders serving sentences for specified (mainly violence related) offences, plus prisoners with any history of sexual offending are presumed unsuitable and are not considered for release unless there are exceptional circumstances that would justify it. Once eligibility has been determined, the prisoner must additionally pass a risk assessment.

Early release from prison is a potentially contentious issue and good evidence is required on the balance of risks associated with it. Some argue that it may reduce the deterrent effect of custodial punishments on post-release criminal behaviour and also that some offenders could commit crimes while they should still have been incapacitated. There is, however, no consensus from international research on the impact of early prisoner release with electronic monitoring schemes on future criminal behaviour.² To date there has been no evaluation of the impact of HDC on recidivism. One of the reasons for this is that the offenders selected for the scheme are those who are already the least likely to reoffend, making it difficult to conduct straight comparisons between prisoners released on HDC and those who are not.

This research was commissioned after a Public Accounts Committee recommendation suggested that there was insufficient evidence available to establish what effects electronic monitoring has on reoffending (PAC, 2006).

Method

This research explored the issue of the effectiveness of HDC on reoffending through using a quasi-experimental evaluation technique: Regression Discontinuity Design. This method exploited the existing thresholds for selection for HDC, sentence length (offenders were only eligible for HDC if their sentence was between three months and four years). Using Regression Discontinuity Design, the analysis was able to compare the recidivism of prisoners on each side of the lower threshold (in this case, sentences of three months³) where the characteristics influencing recidivism (including those which can or cannot be observed), are likely to be very similar. See Annex B for further details of the Regression Discontinuity Design method used for this report. A detailed explanation of this methodology can also be found in Imbens and Lemieux (2008). The findings from the RDD were cross-checked using other quasi-experimental methods.

Recidivism was measured by matching released prisoners to the Police National Computer and establishing whether they offended at least once during the follow-up period (in this case 12 or 24 months) with an additional six-month period to allow for offences to be proved by a court conviction.⁴ In addition, 8% of prisoners released

1 See Annex A for table showing length of time in custody and on HDC compared to length of sentence being served.

2 Renzema and Mayo-Wilson (2005) offer a good meta-analysis of the existing evidence on the use of electronic monitoring on recidivism.

3 The upper threshold at four years could not be exploited for an RDD analysis as too few individuals were sentenced immediately around it.

4 For more details see MOJ (2010) *Reoffending of adults: results from the 2008 cohort*.

on HDC were recalled to prison for breach of their curfew conditions (compared to 2% who were recalled for committing an additional crime). These curfew breach cases were statistically counted as reoffending for the purposes of this analysis since they represent failures to complete HDC, but they are not reoffences.

The reoffending/recall period being examined was for the following.

- For HDC offenders – time spent on HDC plus 12 (or 24) months following the HDC period. This is equivalent to a one (or two) year reoffending window after the end of HDC.
- For all other offenders – 12 (or 24) months following release from prison.

For the HDC group this ensured that offending whilst on HDC was captured as well as the subsequent 12 (or 24) months.

Data

The study used criminal history and sentence data of offenders released from custody in England and Wales between January 2000 and March 2006. Just under 500,000 individuals were released during this time; however, since HDC was almost exclusively granted to offenders serving their first custodial sentence, only first discharges from prison within this period were used. Those who had committed certain types of offence that rendered them ineligible for HDC (e.g. sexual offences) were removed from the sample, as were those who had received sentences of less than three months or more than four years (a crucial eligibility criterion). This left a final sub-sample of 190,520 individuals who were potentially eligible for HDC release, with 63,584 receiving HDC.⁵

Sample characteristics

Basic analysis using descriptive statistics showed that there were some important differences between offenders released on HDC and those who were not (see Table 1 below). For example, there were a larger proportion of women prisoners released on HDC than those who were not. Offenders selected for HDC were also on average older and had committed approximately half as many offences in the past when compared to offenders who did not receive HDC.

Table 1 *Descriptive characteristics of offenders by discharge type*

Discharge type	Non-HDC	HDC
Female	7.4%	11%
Mean age at release	27.9	31
Imprisoned for violent offence	25.4%	27.7%
Breached in past	25.2%	12.9%
Mean number previous offences	9.5	5.1
Proportion of sentence served in custody	42%	30.3%
Reoffended within 12 months	51.4%	23.7%
Reoffended within 24 months	68.5%	31.9%
Proportion recalled to custody from HDC	-	10.4%
Sample size	126,906	63,584

NB: Based on prisoners receiving sentences between three months and four years and are thus eligible for HDC release. Recalls are included in reoffending figures for the HDC sample

There was a large difference between the non-HDC and HDC offenders in terms of reoffending 12 and 24 months post release from custody. However, these differences between the offenders were largely attributable to differences in characteristics between the two groups which were controlled for in the reoffending analysis.

5 See Annex C for diagram showing sample attrition.

HDC and recalls

Ten per cent (6,643) of the HDC sample were recalled to prison while they were being electronically monitored. The majority of the recalled offenders, 8%, were recalled for breaching the terms of their curfew while the remaining 2% were returned to prison for committing a further offence while on HDC.

Specific offence types, number of previous offences and previous breaches appeared to be important predictors of HDC non-completion (i.e. recalls to prison).⁶

- Offenders whose current conviction was either burglary or robbery were twice as likely to be recalled compared to prisoners who had committed other types of offences.
- Thirteen per cent of prisoners released on HDC had previously breached licence conditions.⁷ Twenty-three per cent of the offenders who were recalled from HDC had previous breaches compared to only 12% of those who were not recalled.
- HDC released prisoners who were recalled had committed almost twice as many crimes in the past than those who were not returned to prison.

These statistical observations suggest that it is important to better consider these issues in the selection process which determines who is released on HDC.

HDC and impact on reoffending

The Regression Discontinuity Design analysis shown in Table 2 found a lower level of reoffending in the HDC group compared with the non-HDC group: an estimated four percentage points over the 12-month follow-up period (Table 2, Panel A) and 2.6 percentage points over 24 months (Table 2, Panel B). For those on HDC, this included any offences committed during the HDC period in addition to the subsequent 12 and 24 months. However these results were not statistically significant and therefore could have been caused by chance.

Table 2 *RDD Estimates of impact of HDC on recidivism (observable characteristics controlled for through a regression model)*

	Estimates for offenders sentenced to between 3 months and 4 years +/- 4 weeks
Panel A: recidivism within 12 months of release	
Sample size	38,624
Difference in percentage treated between offenders before and after the three-month cut-off	21% (-0.3)
Difference in recidivism between offenders before and after the three-month cut-off	-0.9% (-0.5)
Offender individual characteristics are controlled for?	Yes
Estimated percentage point effect of HDC on recidivism	-4% (-2.3)
Panel B: recidivism within 24 months of release	
Sample size	38,624
Difference in percentage treated between offenders before and after the three-month cut-off	21% (-0.3)
Difference in recidivism between offenders before and after the three-month cut-off	-0.5% (-0.5)
Offender individual characteristics are controlled for?	Yes
Estimated percentage point effect of HDC on recidivism	-2.6% (-2.2)

NB: Counts recidivism for HDC released prisoners from the time they are discharged from prison and includes all recalls as reoffending. Robust standard errors included in brackets.

⁶ See Annex D for table showing sample characteristics for offenders recalled from HDC to custody.

⁷ This includes all breaches recorded on the Police National Computer. However, it does not include breaches for HDC since only first releases from prison are considered here.

Importantly there was no increase in offending for those on HDC even after considering that they were in the community for a longer time period than those who were not released on HDC.

Conclusion

This analysis produced evidence that offenders who receive HDC under the current provision were at least no more likely to engage in criminal behaviour after release when compared to offenders with similar characteristics who were not eligible for early release on HDC.

The analysis suggests that the overall outcomes under HDC – especially when costs are taken into account – are preferable to keeping offenders eligible for the scheme in custody at the end of the custodial element of their sentence. According to the 2006 NAO report on *The Electronic Monitoring of Adult Offenders*, HDC costs £1,300 to monitor an offender who has been released from prison for 90 days compared to £6,500 for the same period in custody.⁸ As this research shows that HDC does not increase the number of offences committed per offender, it does appear to provide better value for money.

However, caution should be taken if considering extending the scheme to offenders that are not currently eligible for it as this analysis did not explore whether offenders who do not currently receive HDC would return similar results in terms of reoffending behaviour.

The findings of this analysis also highlight areas which are likely to be important in the selection of prisoners for HDC to further increase the success of the scheme.

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⁸ For full report see NAO (2006) *The Electronic Monitoring of Adult Offenders*.

Annex A

Table A1 Sentence length, custodial period, and period on HDC

Length of sentence given by the court	Actual time spent in custody ^a	Custodial period to be served if HDC granted	Period on HDC
< 3 months	< 6 weeks	Not eligible	-
3 months	6 weeks	4 weeks	2 weeks
6 months	3 months	6 weeks	6 weeks
12 months	6 months	3 months	3 months
18 months	9 months	4.5 months	4.5 months
2 years	1 year	7.5 months	4.5 months
< 4 years	< 2 years	1 year 7.5 months	4.5 months
> 4 years	> 2 years	Not eligible	-

a Expected time served based on half of the sentence given by the court.

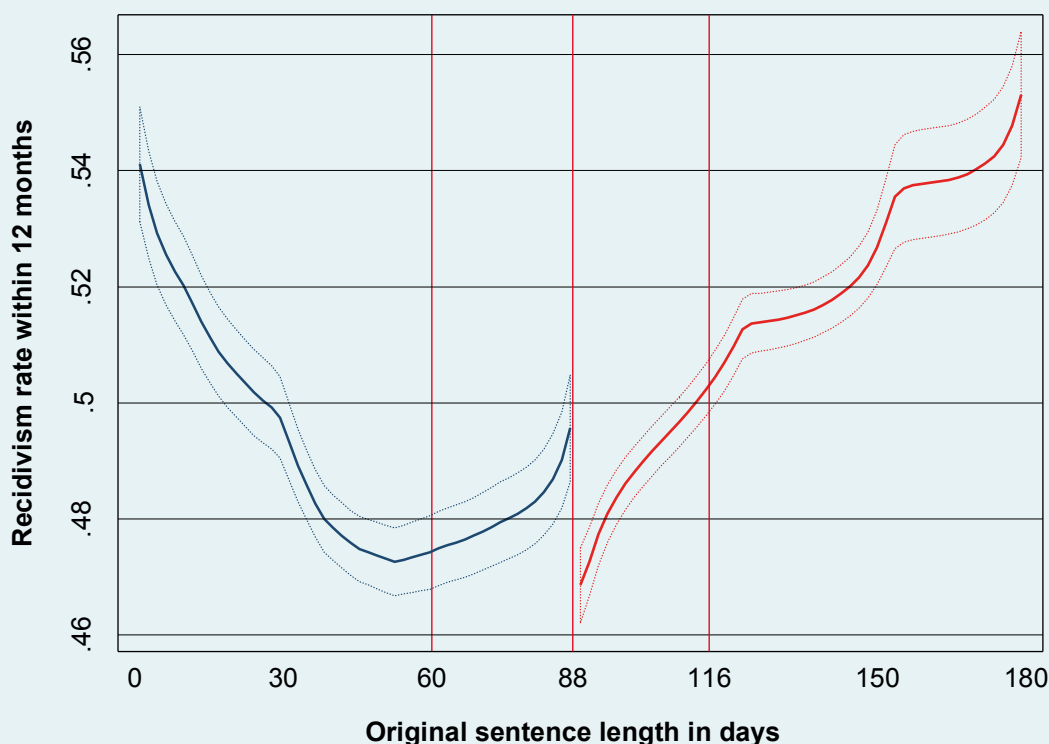
Annex B

Description of Regression Discontinuity Design method

Regression Discontinuity Design uses a pre-defined cut-off point of a quantifiable measure. In this analysis the cut-off point is a sentence length of three months. This is because people cannot be released on HDC unless they have a minimum sentence of three months. RDD is a robust method to evaluate the effectiveness of HDC not only due to this administrative rule but as it also controls for observable characteristics (i.e. age, sex, offence type, sentence length) through a regression model and also unobservable characteristics such as offender/practitioner behaviour. The only 'real' difference between the people sentenced just above and below (+/- four weeks) the three-month threshold is that some have received HDC and some have not. Therefore, if there is a discontinuity in terms of recidivism at the threshold this can be reliably attributed to the impact of HDC.

In a normal graph showing sentence length and reoffending one would expect a continuous line; however, with RDD, where there is a discontinuity, there is a sharp cut in the line:

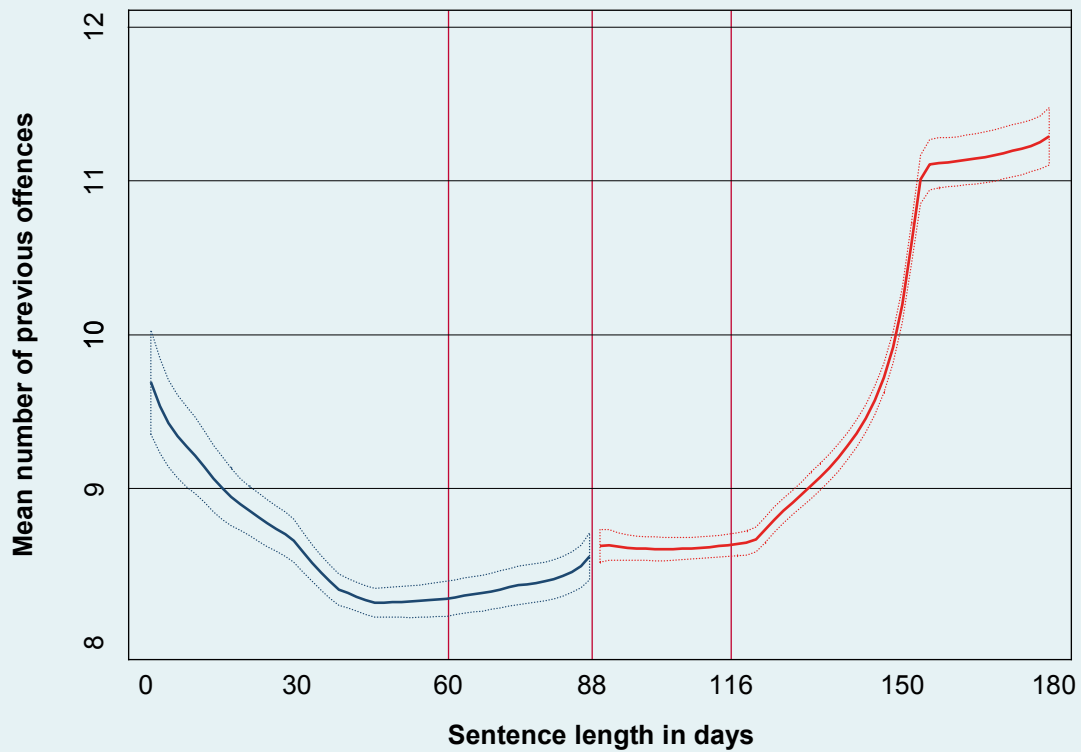
Figure B1 Recidivism rate within 12 months of release



Note: Dotted lines show the confidence intervals.

This cut-off is not seen when controlling for other factors such as number of previous offences where there is a continuous line:

Figure B2 Mean number of previous offences by original sentence length

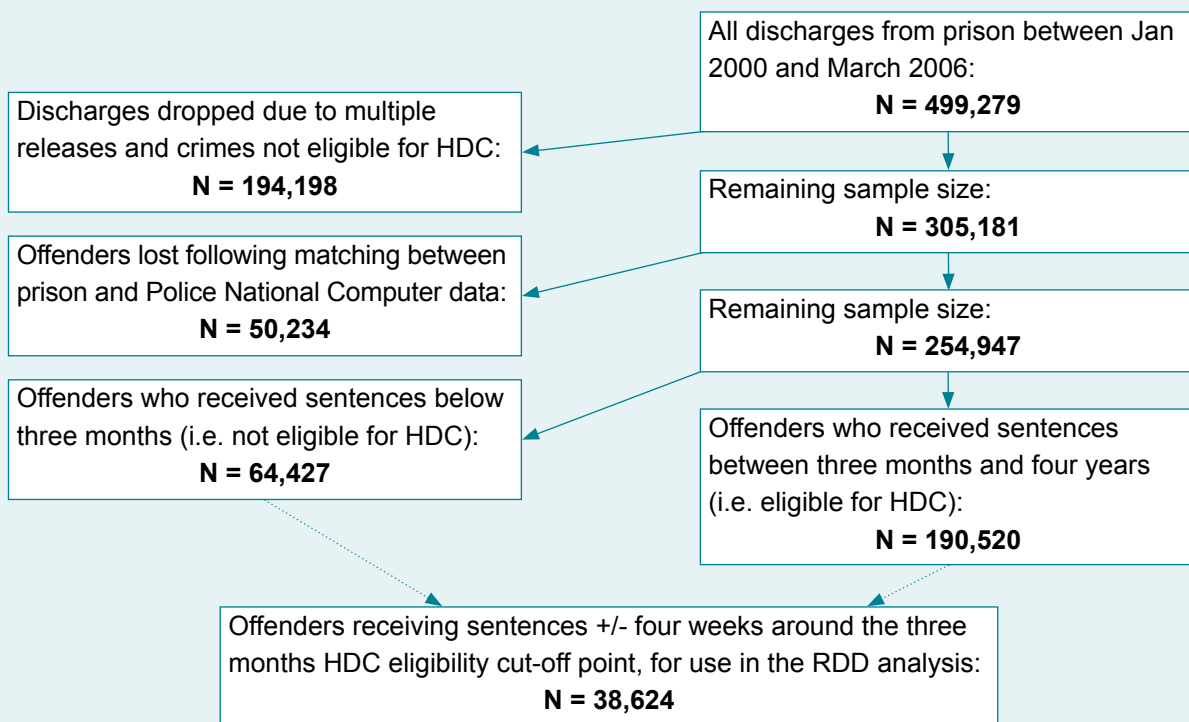


Note: Dotted lines show the confidence intervals.

Approximately a quarter of offenders received HDC if they had been sentenced to between three months and four years. This is the only characteristic that changed with the group.

Annex C

Figure C1: Data used and sample refinement



Annex D

Table D1 *Descriptive characteristics of offenders released on HDC
(including breakdown of recalls)*

	Offenders released on HDC		
	All	Recalled	No recall
Female	11%	14%	10.7%
Mean age at release	31	28.4	31.3
Mean number previous offences	5.1	7.8	4.8
Breached in past ^a	12.9%	22.6%	11.7%
Percentage sentence custodial	30.3%	28.4%	30.5%
Current offence			
Violence against the person	22.2%	18.3%	22.6%
Drug offences	16.7%	13.3%	17.1%
Theft and handling	11.2%	12.2%	11.1%
Fraud and forgery	7.7%	3.6%	8.2%
Burglary	6.6%	13.5%	5.8%
Robbery	5.6%	11.5%	4.8%
Other offences	26.5%	23.5%	26.8%
Sample size	63,617	6,643	56,974

a This includes all breaches of different types of order/sentence but not HDC.