Community Accommodation Service Tier 3 (CAS3): Resident Outcomes

Impact Evaluation Report

Katrina Morrison, Nick Heeks, James Teasdale and Annie Sorbie

Ministry of Justice

Analysis exists to improve policy making, decision taking and practice by the Ministry of Justice. It does this by providing robust, timely and relevant data and advice drawn from research and analysis undertaken by the department's analysts and by the wider research community.

Disclaimer

The views expressed are those of the authors and are not necessarily shared by the Ministry of Justice (nor do they represent Government policy).

First published 2025

Acknowledgements

Contents

List of tables

List of figures

1. Executive Summary

1.1 Introduction and Background

From 19 July 2021, HM Prison and Probation Service (HMPPS) launched a new transitional accommodation service, Community Accommodation Service Tier 3 (CAS3), providing up to 12 weeks basic accommodation with basic support for those leaving prison at risk of homelessness.

The service was initially launched in July 2021 across five probation regions (Yorkshire and the Humber; North West; Greater Manchester; Kent, Surrey and Sussex; and East of England). Delivery of CAS3 in Wales, through grant funding arrangements with Welsh Local Authorities, commenced in June 2022, and mobilisation of the service in the remaining six probation regions in England commenced in May 2023. The service completed its rollout to national coverage across all probation regions in December 2023.

People on probation are eligible for CAS3 if they are at risk of homelessness upon release from prison or moving on homeless from Community Accommodation Service Tier 1 (CAS1), or Community Accommodation Service Tier 2 (CAS2).[1]

The aim of CAS3 is to ensure that prison leavers who are subject to probation supervision and at risk of homelessness, have an offer of accommodation from their first night of release into the community, and are supported on a pathway to settled accommodation. CAS3 provides a critical stabilising environment for people on release from prison from which they can address aspects of their behaviour linked to their risk of reoffending.

1.2 Methodology

Our research sets out to compare the reoffending, employment, and accommodation outcomes of a sample of male CAS3 participants with a matched sample of male offenders

---

[1] HMPPS Community Accommodation Service (CAS) currently provides transitional accommodation via three tiers of support, each focused on a different cohort. CAS1 (Approved Premises) is used as a public protection resource to accommodate higher-risk offenders. CAS2 provides accommodation for medium-risk defendants on bail and prisoners eligible for release under home detention curfew.

who had not accessed CAS3.[2] This research follows a 2023 process evaluation of CAS3[3] which highlighted staff perspectives that CAS3 was a positive supportive factor in helping offenders to find employment post release and move on to settled accommodation post-CAS3.

The impact evaluation approach used Propensity Score Matching (PSM). PSM uses individual-level variables and characteristics to match offenders together. Over 100 variables were used to match offenders, reducing the risk of bias and confounding factors, and allowing for a 'like-for-like' comparison. After matching, the two groups were similar across the variables used to match them, meaning robust comparison of their outcomes could be conducted.

The impact evaluation of reoffending outcomes covered men who accessed CAS3 from July 2021 to June 2022 and included analyses of the following three outcomes:

- Reoffending rate

- Number of proven reoffences

- Number of days to first proven reoffence

The impact evaluation of accommodation and employment outcomes covered men who accessed CAS3 from July 2021 to June 2023 and included analyses of the following three outcomes:

- Accommodation status at three months after release from custody

- Employment status at six weeks after release from custody

- Employment status at six months after release from custody

---

[2] Sample sizes were not sufficient, and matching quality was too poor to include an analogous analysis for females.

[3] £50m Reducing Reoffending Package Process Evaluation

1.3   Main Findings and Conclusions

These analyses measures reoffending, accommodation and employment outcomes for men who had accessed CAS3, and for a group of similar male offenders who did not access CAS3.

Reoffending (males)

Results do not show a statistically significant effect on the reoffending rate or number of reoffences for those who accessed CAS3, indicating there was insufficient evidence on whether CAS3 increases or decreases these reoffending outcomes. However, there was a statistically significant result for the time taken to commit their first proven reoffence, as men who accessed CAS3 reoffended earlier than those who did not access it.

Findings regarding the first two reoffending outcomes suggest that either CAS3 has made no impact on reoffending rates and the number of reoffences committed, or the true effects of CAS3 have not been able to be detected through these analyses.

The significant differences observed between the CAS3 and comparison group for the third reoffending outcome may have potentially been caused by the nature of CAS3 making it more likely that reoffences are detected. These findings are discussed in further detail in section 6.

Accommodation and Employment (males)

A statistically significant difference was observed in the overall accommodation outcome categories between the two groups at three months post release with the non-CAS3 group showing a higher rate of settled accommodation compared to the CAS3 group. However, a proportion of the CAS3 group were still residing in CAS3 accommodation at the 3-month measurement point (17%), therefore they were still categorised as being in transient accommodation. This potentially brought down the settled accommodation outcome rate of the CAS3 group.

The analyses of employment status at six weeks and six months post release provided mixed results. At six weeks post release, the CAS3 group had similar employment outcomes to the comparison group with no statistically significant differences observed.

At six months post release, a statistically significant difference was observed in the overall distribution of outcome categories between the two groups. However, this difference is mainly driven by a slightly higher proportion of CAS3 participants being recalled or terminated within six months of release. This increase is largely balanced by a lower proportion of unemployed individuals in the CAS3 group. Therefore, the observed differences are primarily a result of variations in recall and termination[4] rates, rather than meaningful differences in overall employment outcomes between the two cohorts. These findings are discussed in further detail in section 6.

---

[4] "Termination" status can refer to a prison leaver's license being revoked, consecutive/concurrent custody being imposed or if the prison leaver's Post Sentence Supervision (PSS) period has expired.

2.   Introduction

2.1   CAS3 Aims and Objectives

CAS3 was originally introduced across five early adopter probation regions[5] in July 2021 and expanded into Wales in June 2022. It was then rolled out nationally across the rest of England to the remaining six probation regions between May and December 2023.

People on probation are eligible for CAS3 if they are at risk of homelessness upon release from prison, or moving on homeless from Community Accommodation Service Tier 1 (CAS1), or Community Accommodation Service Tier 2 (CAS2).[6] Those who are referred must give consent to be referred into the service and sign an accommodation compact.[7] For more information on CAS3 eligibility criteria, see Appendix A.

The key overarching aim of CAS3 is to provide a critical stabilising environment for people on release from prison from which they can address aspects of their behaviour linked to their risk of reoffending. More broadly, the CAS3 service aims to achieve the following objectives:

- To ensure that prison leavers subject to probation supervision who would otherwise be homeless have access to temporary accommodation for up to 84 nights on release or when moving on from CAS1 and CAS2.

- To support prison leavers on a pathway to move on to settled accommodation within three months of release.

---

[5] East of England, North West, Yorkshire and the Humber, Kent, Surrey and Sussex, and Greater Manchester.

[6] HMPPS Community Accommodation Service (CAS) currently provides transitional accommodation via three tiers of support, each focused on a different cohort. CAS1 (Approved Premises) is used as a public protection resource to accommodate higher-risk offenders. CAS2 provides accommodation for medium-risk defendants on bail and prisoners eligible for release under home detention curfew.

[7] This is an agreement which sets out the responsibilities of the Person on Probation in respecting and maintaining the CAS3 property.

2.2   Referrals and Operational Activities

Referral Processes

Probation practitioners are expected to support all prisoners to make a resettlement plan in the run up to their leaving prison. Those being referred into CAS3 from CAS1 or CAS2 are also expected to be supported by a probation practitioner in making a resettlement plan at least four weeks ahead of their CAS1 or CAS2 leaving date. The aim of a resettlement plan is to support the prison leaver in reintegrating into life in the community and involves future accommodation planning. For those at risk of homelessness this will involve considering all potential housing options before a referral to CAS3.

In England, the Homelessness Reduction Act (2017) places duties on Local Housing Authorities (LHAs) to take reasonable steps to prevent and relieve an eligible applicant's homelessness. Under this Act, where prison and probation staff believe that a prison leaver (or a CAS1/CAS2 leaver) is homeless or threatened with homelessness within the next 56 days, they have a statutory obligation to make a Duty to Refer (DtR)[8] with the individual's consent, to a Local Housing Authority (LHA) of the individual's choosing to prevent them falling into homelessness.

In addition to DtR, where a risk of homelessness has been identified, a probation practitioner must also complete a referral to Commissioned Rehabilitative Services (CRS) prior to any referral to CAS3. The CRS referral can work alongside the DtR process with the aim of securing settled accommodation. As part of the CRS referral, the probation practitioner should request that CRS works with the relevant LHA to ensure appropriate follow up activities are undertaken.

If the DtR and CRS referrals do not lead to the prison leaver securing suitable settled accommodation, then the probation practitioner should identify the prison leaver as eligible for CAS3 and make a referral to the relevant regional probation Homelessness Prevention Team (HPT) to begin the process of sourcing a CAS3 placement for the prison leaver.

In Wales the referral process differs but LHAs are still subject to legislation placing duties on them to support prison leavers at risk of homelessness in the form of the Housing

---

[8] A guide to the duty to refer - GOV.UK

(Wales) Act (2014). In Wales probation practitioners use the Centralised Operational, Resettlement, Referral and Evaluation Hub (CORRE Hub) which provides Local Authority documentation to consider all applications for housing assistance. Where CAS3 is deemed to be the most suitable option and after liaison with the LHA, this can be booked by the HPT.

Operational Activities

CAS3 is delivered through contracted providers in 10 out of 12 Probation regions; in Greater Manchester and Wales, the service is delivered via grant funding arrangements with Local Authorities. The accommodation consists of individual self-contained units, two bed, three bed, or four bed CAS3 properties. Regional HPTs are responsible for offering placements and making bookings for up to 84 nights. These placements are based on an assessment of the prison leaver's individual needs, alongside the availability of suitable bed spaces.

CAS3 provides funding for housing specialists (a custody-based role), to work with key accommodation related partners, including CRS, HPTs and LHAs, to support the Head of Reducing Reoffending to be more strategic in their approach to reducing homelessness on release for prison leavers. CAS3 residents receive a basic package of support from CAS3 support workers once they are residing in the property.

The purpose of the support is to assist the prison leaver in maintaining the temporary accommodation and to provide sign posting to support move on into settled accommodation. The support worker is required to have weekly contact with the prison leaver, a minimum of fortnightly home visits and to provide regular updates to the Probation Practitioner. This support is intended to be complementary to the targeted support delivered by the Probation Practitioner and CRS and must form part of resettlement planning.

2.3   CAS3 Performance to Date

The CAS3 service collects Monitoring Information (MI) to track accommodation referrals, placements and outcomes for residents who move on from the service. This information is collected through referrals submitted by Probation Practitioners, which are then processed

and managed by HPTs. For more information on the operational process of collecting the CAS3 MI, see Appendix A.

As of 31 March 2025, 23,160 offenders have been placed in CAS3 accommodation since the service's inception in July 2021.[9]

In the year from 1 April 2024 to 31 March 2025, 10,020 offenders were placed in CAS3 accommodation. Of these, 9,245 (92%) were male residents and 735 (7%) were female residents,[10] with 40 other cases.[11] In the same year, 29% of residents who left the CAS3 service went on to be recalled[12] to prison, or further custody, 26% sourced settled accommodation, 21% moved on to transient accommodation, 12% left the service homeless or rough sleeping, with a final 13% of outcomes either pending a final outcome or unknown.[13]

---

[9] Annex 1 - Community Accommodation Service Tier 3 - summary - GOV.UK

[10] For reference, as of the 31 March 2025, according to the Prison Population statistics, males comprised 95.9% of the adult prison population, and females 4.1%. Population_bulletin_weekly_7_April_2025.ods

[11] For guidance on the recording of cases recorded as "Other" gender see: Annex 2 - Community Accommodation Service Tier 3 - guidance - GOV.UK

[12] Recall is when an offender is taken back to prison after being released on licence or parole for breaking the rules of their probation.

[13] Percentages do not sum to 100% due to rounding.

3.   Existing Evidence

This section provides a summary of current evidence on the implementation of CAS3 to date and evidence of the impacts of programmes aimed at addressing the accommodation need of those leaving prison.

3.1   Evidence on Early CAS3 Implementation

The 2023 process evaluation[14] of CAS3 gave numerous insights into the initial rollout, implementation, and early delivery of the service.

Operationally, staff indicated that effective multi-agency working between stakeholders involved in delivering CAS3 was taking place and that referrals were being made in a timely manner. A survey of HPT staff and Probation Practitioners also showed that awareness of the CAS3 investment package and activities were high.

Challenges with service implementation were also highlighted, including difficulties sourcing suitable CAS3 properties within budget for service users, and problems sourcing move on accommodation after a resident's CAS3 stay. There was also feedback that the administrative tasks associated with referrals were complicated and posed a barrier to staff being able to make referrals effectively. To address this, a digital CAS3 referral system was introduced to help streamline the referral process. More information on the CAS3 digital service is available in Appendix A.

Qualitative findings from interview data showed that CAS3 staff and stakeholders felt CAS3 had provided a stable base for prison leavers to search for longer term accommodation and apply for employment as well as helping to improve residents' motivation to attend support meetings and look after themselves. Further to this, survey data showed that three-fifths of CAS3 staff (63%) felt there had been at least some impact of the service on supporting people on probation to find and secure accommodation.

---

[14] £50m Reducing Reoffending Package Process Evaluation: https://assets.publishing.service.gov.uk/media/645e53636539660011bd3e9f/reducing-reoffending-process-evaluation.pdf

Similarly, people on probation generally gave positive responses when asked to rate to what extent they felt their experience in CAS3 accommodation had supported them for life in the future. Findings showed 87% "strongly agreed" or "agreed" it would help them settle in the community, and 85% "strongly agreed" or "agreed" that it would help them find housing. However, in other areas of need (e.g. education support, employment support, substance treatment in prison and health treatment after leaving prison) the number of people on probation who "strongly agreed" or "agreed" that CAS3 would help them "find work" (76%), "find education and training" (64%) and "access substance misuse and support" (76%) were lower. This feeling was echoed by CAS3 staff of whom around half felt there had been low or no impact of CAS3 on these outcomes.

The process evaluation also indicated that the support worker aspect of CAS3 was very important. Results showed that the more support worker contact a person on probation received, the more likely they were to perceive they had been supported in finding permanent housing, managing money, and gaining treatment for substance misuse.

Overall, the process evaluation of CAS3 indicates that although the provision of accommodation itself may be a supportive factor in helping offenders to move on to source settled accommodation, the picture may be more complex and multifaceted when it comes to addressing other criminogenic needs, including employment.

3.2   Offender Needs

Criminogenic needs are areas of unmet need within an offender's life where provision of support to meet these needs could help to reduce the likelihood of reoffending. Within the Offender Assessment System (OASys)[15] there are eight criminogenic needs measuring factors linked to offending behaviour. These are:

- accommodation

- employability

- relationships

---

[15] OASys is the risk assessment tool utilised by HMPPS to assess the risks and needs of offenders.

- lifestyle and associates

- drug misuse

- alcohol misuse

- thinking & behaviour and,

- attitudes.

CAS3 seeks to primarily address the accommodation criminogenic need with supplementary support around financial literacy, employment, wellbeing, and substance misuse.

Ministry of Justice (MoJ) offender-needs-data[16] shows that accommodation need is high, with 68% of those in custody having an accommodation need as of October 2024. This figure has increased from 58% in 2019. Accommodation need is also commonly accompanied by other needs, with 37% of those in custody having accommodation, employability and substance misuse needs. Addressing reoffending behaviour may therefore require a multifaceted approach that accounts for and responds to multiple offender needs.

Given that offenders often possess multiple other criminogenic needs in addition to their accommodation need, a package of support to address multiple needs may be required by those leaving custody to minimise the risk of them reoffending in the future.

3.3   What Works in Reducing Reoffending

A proven reoffence is defined as any offence committed in a one-year follow-up period that leads to a court conviction, caution, reprimand, or warning in the one-year follow-up - or within a further six-month waiting period to allow the offence to be proven in court.[17]

Current evidence from proven reoffending statistics shows that adult offenders released from custody between July and September 2023, with an accommodation status of rough

---

[16] Identified needs of offenders, custody and community, 31 October 2024 - GOV.UK

[17] "4. How is proven reoffending measured?" : Proven reoffending statistics: July to September 2023 (Revised) - GOV.UK

sleeping on release, had the highest rate of reoffending at 72%. This was followed by homeless, not rough sleeping with a reoffending rate of 66%.[18] Those released into settled accommodation had a reoffending rate of 36% and those released into Bail/Probation accommodation had a reoffending rate of 37%. This indicates that there is a relationship between rough sleeping and homelessness and a prison leaver's risk of reoffending.

However, it cannot be concluded from these statistics alone that rough sleeping or homelessness causes reoffending. This is because they do not control for individual differences between prison leavers or the presence of other criminogenic needs between those released rough sleeping or homeless, and those released into accommodation. It may be unobserved individual differences or other criminogenic needs that are driving these reoffending rates and happen to place the prison leavers at higher risk of being released rough sleeping/homeless. As outlined in Section 3.2, offenders are likely to have multiple needs alongside accommodation, and it may be a more complex picture involving these multiple needs that is driving the disparities in reoffending rates.

The findings of a recent Rapid Evidence Assessment (REA) of what works to reduce reoffending indicate that approaches which address multiple offender needs have the highest success rates in reducing reoffending. Studies in this REA included a meta-analysis, robust primary evaluations and evidence from the Justice Data Lab (JDL).[19] It outlines that there is good evidence for interventions, which aim to support offenders into stable accommodation contributing to reducing reoffending – provided they are delivered alongside individualised support that addresses other offender needs such as substance misuse, relationships and employability.[20] This indicates that the provision of accommodation alone is not sufficient to reduce reoffending behaviours and instead a package of support which can address multiple criminogenic needs is required.

Further evidence of the importance of wider wraparound support has been provided by the process evaluation of the Offender Accommodation Pilot (OAP). The OAP aimed to reduce

---

[18] "11. Reoffending by accommodation status on release from custody": Proven reoffending statistics: July to September 2023 (Revised) - GOV.UK

[19] The Justice Data Lab (JDL) is a team of analysts based in MoJ who conduct analyses comparing outcomes of offenders who have received interventions to those who have not received interventions. More information on the JDL's work is available here: Accessing the Justice Data Lab service - GOV.UK

[20] Reducing Reoffending - A Synthesis of Evidence on Effectiveness of Interventions

homelessness and reoffending among adult male prison leavers by offering stable accommodation on release from prison for those on sentences of less than 36 months, alongside tailored wraparound support, for a period of two years.[21] One-to-one caseworker support which was "tailored and consistent" was viewed by staff and prison leavers as a key success of the programme and an important factor in engaging some prison leavers in the pilot and steering them away from reoffending.[22] Other perceived outcomes for some prison leavers included improvements to physical health, relationships and a readiness to seek employment. However, for those with entrenched crime and substance misuse lifestyles, provider staff reported how it was challenging to break the cycle of reoffending.[23]

However, there are still notable gaps in the evidence base regarding the impact of accommodation interventions. For example, there is still further research required to understand if the length of time spent in the accommodation post release impacts outcomes for offenders.[24] Furthermore, questions remain around the kind of offenders that accommodation interventions may work best for.

---

[21] Offender accommodation pilot process evaluation report
[22] 4. Support Provision. Offender accommodation pilot process evaluation report – Pg. 15
[23] 1. Summary. Offender accommodation pilot process evaluation report – Pg.2
[24] Reducing Reoffending - A Synthesis of Evidence on Effectiveness of Interventions - Pg.26

4. Methodological Approach

The impact evaluation aimed to compare the reoffending, employment, and accommodation outcomes of a sample of male CAS3 participants with a matched sample of male offenders who had not accessed CAS3.

4.1 Propensity Score Matching

This was conducted by the Justice Data Lab (JDL) using propensity score matching (PSM). PSM was used to control for differences between the offender group who accessed CAS3 (termed "the CAS3 group") and a matched offender group who did not (termed "the comparison group"). By matching the offenders on their propensity scores,[25] different characteristics between the groups were controlled for, allowing for greater validity in attributing differences in outcomes to CAS3 itself, rather than confounding factors.

4.2 Constructing CAS3 and Comparison Groups for PSM

Matching Variables

All findings in this evaluation relate to male offenders only. Exploratory work was undertaken to assess the feasibility of conducting the same analyses for female offenders, however sample sizes for the pre-matched treatment and offenders however were low, and the PSM models which were run for females resulted in poor matching quality.

Offenders who had been referred into CAS3 from CAS1 and CAS2 were excluded. Excluding referrals from CAS1 and CAS2 meant that all individuals in the CAS3 group had their outcomes measured after only accessing the CAS3 service and no confounding effects were potentially introduced to the analyses by residents' previous stays in CAS1 or

---

[25] The propensity score reflects the likelihood that an offender received the intervention, given the recorded characteristics. It is a value between 0 and 1 and is calculated using a logistic regression model used to predict likelihood of an individual accessing CAS3. CAS3 group members were matched to similar non CAS3 offenders, where their propensity scores were within a certain tolerance level (calliper). A full list of matching variables used in the PSM models are available in Appendix B.

CAS2. Furthermore, as only offenders with custody disposals are eligible for CAS3, only they have been included in these analyses.

The CAS3 group was matched to the comparison group based on a variety of different variables[26] including:

- Demographics

- Offence related details

- OASys characteristics (which assess risk of reoffending and level of offender need)

- Geospatial variables

To form a valid comparison group, it was important to identify prison leavers who faced a similar risk of homelessness upon release as those supported by the CAS3 service, but who had not accessed it. Prison leavers housed in CAS3 accommodation on release from prison can be identified easily from the CAS3 MI data collected by the CAS3 service. However, as the CAS3 MI data only includes those who have accessed the service it cannot be used to source a comparison group of non-CAS3 service users. Therefore, to identify those at risk of homelessness upon release in the comparison group, this evaluation required a common data source providing homelessness risk data for all individuals across the two groups.

DtR data was used to help identify individuals at risk of homelessness for the comparison group. DtR records are generated when prison leavers are formally referred to an LHA under statutory obligations, indicating that the individual lacks secure accommodation and may require homelessness support. As such, the presence of a DtR flag indicates homelessness risk.

DtR data is available for both the CAS3 and comparison group, but it is poorly populated.[27] Therefore, additional matching criteria were needed to accurately identify comparator

---

[26] A full list of matching variables is available in Appendix B.

[27] 28% of those with a CAS3 accommodation status at release in the raw evaluation data were identified in the DtR data with a referral date prior or up to 31 days after release from custody.

individuals at risk of homelessness on release. To mitigate the low DtR data quality, individuals were included in the comparison group if they had either a DtR record, or a significant accommodation need flagged in at least one of the S3Q3 (no fixed abode) and S3Q5 (permanence of accommodation) OASys questions.[28]

The comparison group was sourced from outside the five early adopter regions in which CAS3 was initially rolled out, to mitigate contamination effects. To address the risk of unobserved variables between the regions affecting the results, some regional controls were included in the modelling. This was done at a Police Force Area level.[29]

For further detailed information on the rationale for selection/exclusion and matching used in the construction of the CAS3 and comparison groups, see Appendix C.

The HMPPS Performance Hub, an internal MoJ platform which hosts data from a variety of criminal justice system sources, was used to extract the key raw data for the accommodation and employment outcome measures.[30] Performance Hub data extracts are sourced from the National Delius (nDelius) case management system, which holds all probation information on service users. The Performance Hub was also used to extract data on DtR referrals, although the DtR flag was missing for many records. Variables such as location information, and data on recalls and terminations[31], which were not available on the Performance Hub, were sourced directly from the nDelius database.

Reoffending and Accommodation/Employment Cohorts

The analyses for this impact evaluation were split into two separate male offender cohorts. The reoffending analyses were performed on data from a smaller cohort of offenders (Cohort 1: prison release dates between 1 July 2021 and 30 June 2022) over a shorter

---

[28] Of the OASys questions in Section 3 (Accommodation) of the assessment, S3Q3 and S3Q5 are the most relevant in relation to risk of homelessness. A significant need identified in S3Q3 relates to an offender expected to have no fixed abode or be in transient accommodation on release from custody. A significant need identified in S3Q5 relates to an offender expected to not have anywhere to live after release.

[29] The PFA-based reoffending rates and frequencies are included in the geographic data tool published as part of quarterly proven reoffending statistics (https://www.gov.uk/government/collections/proven-reoffending-statistics)

[30] nDelius has links to Interventions Manager, OASys and the Prison system (P-NOMiS). to record all information with regards to a Service User's Journey through their sentence.).

[31] "Termination" status can refer to a prison leaver's license being revoked, consecutive/concurrent custody being imposed or if the prison leaver's Post Sentence Supervision (PSS) period has expired.

period compared with the employment and accommodation analyses which used a larger cohort over a longer time period (Cohort 2: July 2021 to June 2023).

Two cohorts have been used because the one-year reoffending rate data has a two-year time-lag,[32] which limits the sample size of CAS3 participants that can be drawn on. Splitting the analyses in two allows for a larger sample size for the employment and accommodation metrics. Some observed differences between the cohorts were as follows:

- Cohort 1 only includes first releases,[33] as proven reoffending data is not available for post-recall releases whereas Cohort 2 includes both first releases and post-recall[34] releases from prison.

- Cohort 1 had a lower proportion of individuals with DtR data (approximately 30%) compared to Cohort 2 (36% - 38%).

- In relation to region, a greater proportion of records from the East of England are present in Cohort 1, because this region had the highest proportion of CAS3 placements in the 12 months following the programme rollout.

Sample size breakdowns within the cohorts for the analyses are outlined in Table 1.

Table 1: CAS3 group sizes and comparison group sizes (males).

Cohort	Outcome Measure	CAS3 group sample size	Comparison group sample size
1	Reoffending rate and number of proven reoffences.	489	3,505
1	Number of days to first proven reoffence (reoffenders only).	282	1,979

---

[32] For more information on proven reoffending data timeliness see Principle 3: Timeliness and Punctuality: Quality_statement___proven_reoffending_statistics.pdf

[33] First release relates to the initial release from prison (in relation to the index offence).

[34] Post-recall releases relate to any subsequent releases after having been recalled to prison after the initial release for breaking licence terms.

2	Accommodation status at three months after release from custody.	1,985	8,466
2	Employment status at six weeks after release from custody.	1,994	8,217
2	Employment status at six months after release from custody.	2128	9897

There are differences between the sample sizes within Cohort 1 as the days to proven reoffence sample only includes those who reoffended. Additionally, there are differences in CAS3 and comparison group sample sizes within Cohort 2. Although the Cohort 2 sample sizes were identical pre matching, during the matching process, not all CAS3 group records could be matched to one or more comparison group records. However, 93.0% to 99.7% of the pre-matched CAS3 group were able to be included in these three post-matched groups for the accommodation and employment outcome measures. As such, these three accommodation and employment analyses samples have very similar characteristics.

4.3   Outcome Measures

Reoffending

Cohort 1 analyses measured three reoffending outcome measures between the CAS3 group and comparison group within a one-year period for offenders with prison release dates between 1 July 2021 and 30 June 2022. The cutoff point of June 2022 was chosen because this was the latest point at which proven reoffending data were available at the time the analyses were being conducted.[35] These reoffending analyses only capture proven reoffending in line with the definition stated in section 3.3 and do not include crimes that are committed but not recorded by the police or do not lead to a caution or conviction.

---

[35] For more information on proven reoffending data timeliness see Principle 3: Timeliness and Punctuality: Quality_statement___proven_reoffending_statistics.pdf

For details of sensitivity analyses which were performed as part of this evaluation see Appendix F. To measure reoffending from the earliest point that an individual is at risk of reoffending, the prison leaver's release date is used. This is referred to as the "index date".

The specific reoffending outcome measures included are:

- The proportion of those who commit a proven reoffence in a one-year period.

- The number of proven reoffences in a one-year period.

- The average time to first proven reoffence for those who did reoffend.

The MoJ is provided with regular extracts from the Home Office's Police National Computer (PNC) database, which includes detailed information on offenders' criminal histories. The proven reoffending database is also used to capture data on whether an offender has committed a proven reoffence in the 12 months following release from prison. In combination, the PNC and proven reoffending data has provided the core data required for these reoffending analyses.

Accommodation and Employment

Cohort 2 analyses looked at offender employment and accommodation outcomes over a longer period, compared to the reoffending analysis, from July 2021 to June 2023. A cutoff point of June 2023 was chosen because it coincides with the approximate timing when CAS3 was fully rolled out to all remaining probation regions in England. The rationale for this was to avoid any contamination effects, given that the CAS3 group was sourced exclusively from in-scope regions, and the comparison group was sourced exclusively from out-of-scope regions.

Accommodation

The specific outcome measure for the accommodation analysis was the accommodation status of the offenders at three months post release. The variables used within PSM which

directly related to accommodation status prior to or on the index date,[36] and are available for both the CAS3 group and comparison group were as follows:

- DtR data.

- Accommodation-need variables in the individual's OASys assessment.

- Accommodation status at index date.

- Accommodation status at disposal date.

Further information on accommodation status categorisation is available in Appendix G.

The CAS3 MI also contains information on accommodation outcome at the point that CAS3 residents leave the service, but there is no comparable data on accommodation outcome at the same time point for the matched comparison group who did not access CAS3. Therefore, accommodation outcome at 3-months for both groups, sourced from the HMPPS Performance Hub was used to ensure consistency and comparability between the two groups.

Employment
The specific outcome measures for the employment analyses were the employment statuses of both groups at six weeks and six months post release. The only available data on employment outcomes for this evaluation were the employment statuses at six weeks and at six months after release from prison recorded in the Performance Hub. As with the data used for accommodation status, these are snapshots at specific points in time after release, not longitudinal data tracking the employment status over a period. Further information on employment status categorisation is available in Appendix G.

---

[36] The index date is defined as the prison leaver's release date for the purposes of this evaluation.

5.   Findings

5.1   Reoffending Outcomes

Tables 2 to 4 below show the one-year measures for proven reoffending for both the treatment and the comparison group. Rates are expressed as percentages and frequencies expressed per person. The estimated differences shown are the 95% confidence intervals for the differences between the relevant treatment and comparison group measures.

Standardised effect sizes are also included, suggesting that any treatment effects observed (should they exist) are generally small. More detail is provided in the Effect Sizes section in Appendix H.

The one-year proven reoffending rate for the CAS3 participant group was slightly lower (58%) than the non-CAS3 group (60%). This difference was not statistically significant at the 95% confidence level[37] (see Table 2).

Table 2: Proportion of males who committed a proven general reoffence in a one-year period (reoffending rate) after support from CAS3, compared with a matched comparison group.

CAS3 group rate (%) (n=489)	Comparison group rate (%) (n=3505)	Estimated difference (% points)	Standardised effect size (Cohen's d)	Statistically significant difference?	p-value
57.7 (53.3 to 62.1)	60.2 (58.6 to 61.8)	-2.5 (-7.1 to 2.1)	-0.05	No	0.29

---

[37] The difference in reoffending outcomes between the treatment and comparison groups is compared via statistical significance testing (using a two-sample weighted Welch's t-test), which returns a 'p' value. In this report, the results are examined using the standard 0.05 significance level. If less than 0.05, the difference between the two groups is considered statistically significant and unlikely to be due to chance.

There was also no statistically significant difference in the number of proven reoffences between the two groups. The difference in the mean number of proven reoffences was 0.3 (see Table 3).

Table 3: Frequency of proven general reoffences committed in a one-year period by men who received support from CAS3, compared with a matched comparison group.

CAS3 group frequency (n=489)	Comparison group frequency (n=3505)	Estimated difference	Standardised effect size (Cohen's d)	Statistically significant difference?	p-value
3.7 (3.2 to 4.2)	3.4 (3.2 to 3.6)	0.29 (-0.16 to 0.87)	0.05	No	0.28

However, for those with a proven reoffence in a one-year period, CAS3 participants were found to commit their first proven reoffence earlier (96 days after prison discharge) than those who were not in CAS3 (111 days after prison discharge). This is a statistically significant result (see Table 4) and potential reasons for this are discussed in Section 6.

Table 4: Average number of days to first proven general reoffence in a one-year period for men who received support from CAS3, compared with a matched comparison group (reoffenders only).

CAS3 group days (n=282)	Comparison group days (n=1979)	Estimated difference (days)	Standardised effect size (Cohen's d)	Statistically significant difference?	p-value
96 (86 to 107)	111 (107 to 116)	-15 (-27 to -3)	-0.16	Yes	0.01

5.2 Accommodation Outcomes

A weighted Chi Square test[38] was performed which showed a statistically significant difference in the overall distribution of accommodation outcome categories when comparing the CAS3 group with the comparison group.[39]

As shown in Figure 1, 22% of the CAS3 cohort were reported to be in settled accommodation at three months post release compared to 30% of the comparison group. However, 17% of the CAS3 group were still residing in a CAS3 property at the 3-month measurement point. Therefore, these individuals were recorded as being in transient accommodation at the time of the analysis. This reduces the proportion of CAS3 participants who could be in settled accommodation relative to the comparison group.

---

[38] A Chi Square test (adjusted to allow for PSM weights) has been used as the analysis involves multinominal categorical variables. The Chi-Square test is a statistical test that can be used to check whether two groups are the same over some categorical characteristic. A p-value of less than 0.05 indicates that the distribution of outcomes of the two groups is statistically different. The Chi-Square test takes the proportions within each category (employed, unemployed etc.) for each group and determines whether this overall distribution across all categories is different in the two groups.

[39] (χ2 = 89.8, degrees of freedom = 4, p-value <0.001)

Figure 1: Accommodation status at three months post release (males)
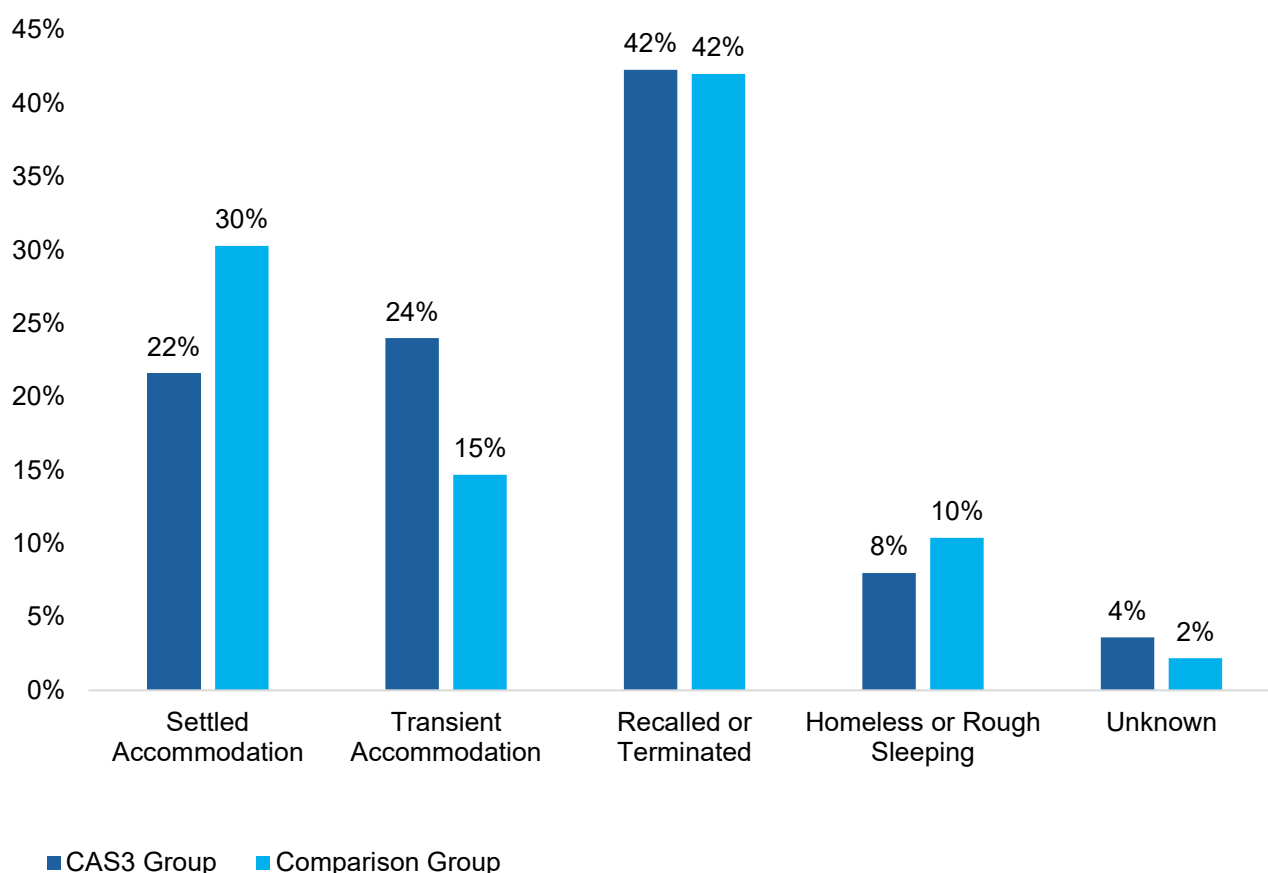
Unweighted Base: 1985 (CAS3 Group), 8466 (comparison group).

Source: HMPPS Performance Hub/nDelius.

5.3   Employment Outcomes

As shown in Figure 2, CAS3 participants were found to have similar employment outcomes to the comparison group at six weeks post release. A weighted Chi Square test was performed which did not provide evidence of a statistically significant difference in the overall distribution of employment outcome categories between the post-matched groups at six weeks after release.[40]

[40] (χ2 = 6.06, degrees of freedom = 4, p-value = 0.195).

Figure 2: Employment outcomes at six weeks post release (males)
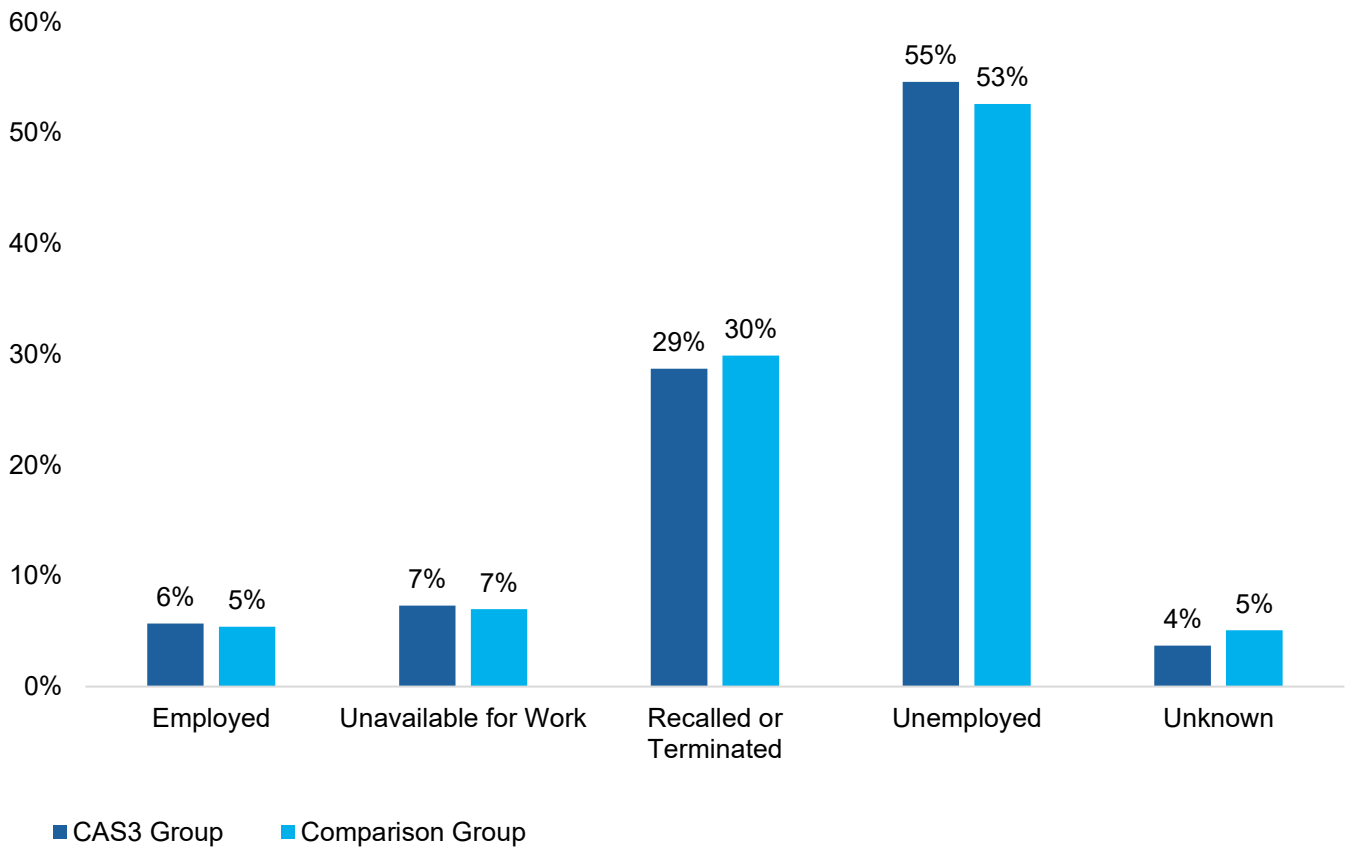
Unweighted Base: 1994 (CAS3 Group), 8217 (comparison group).

Source: HMPPS Performance Hub / nDelius.

However, a weighted Chi Square test showed there was a statistically significant difference between the overall distribution of employment outcomes between the CAS3 and comparison group for employment outcomes at six months post release.[41] (see Figure 3).

---

[41] (χ2 = 15.16, degrees of freedom = 4, p-value = 0.004).

Figure 3: Employment outcomes at six months post release (males)
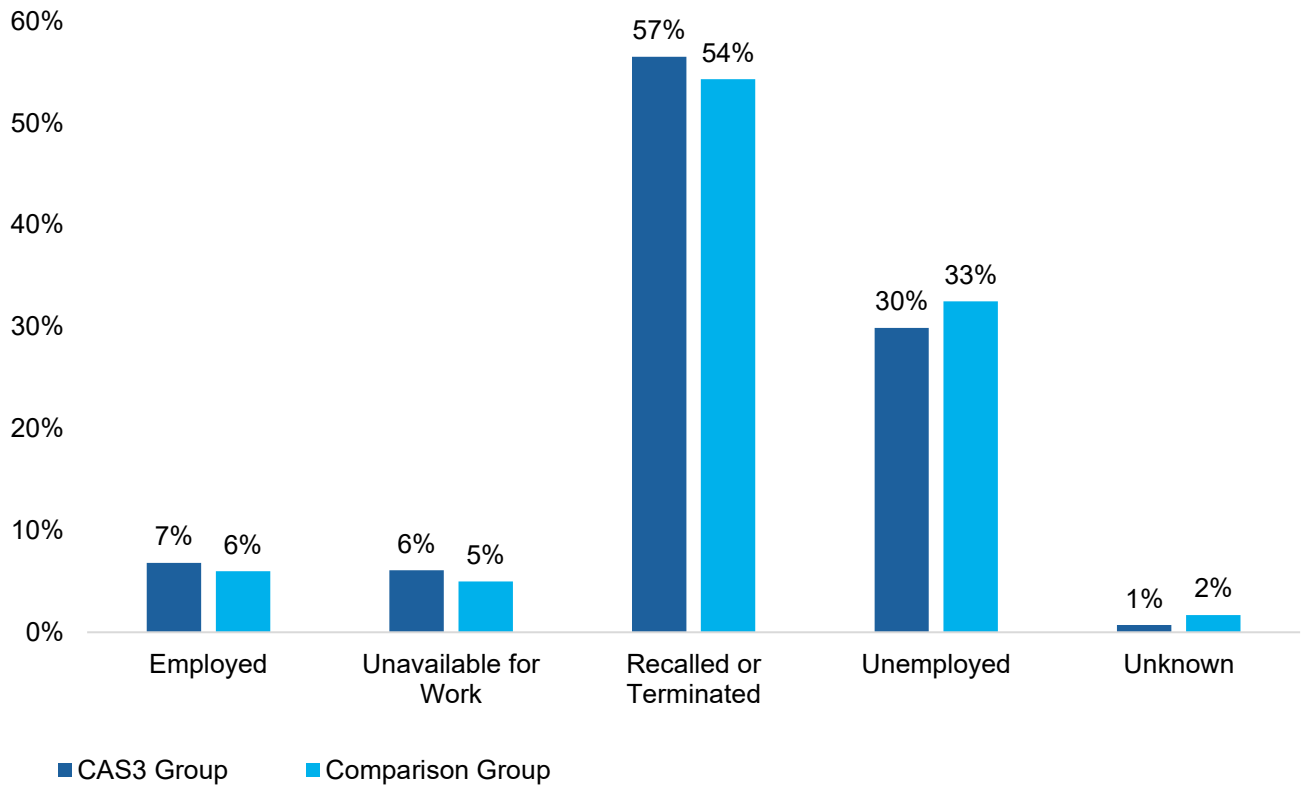
Unweighted Base: CAS3 Group: 2128, Comparison Group: 9897.

Source: HMPPS Performance Hub / nDelius.

For more information on the measurement of the multinomial outcomes observed in the accommodation and employment analyses see Appendix I.

6. Discussion and Methodological Limitations

Although this study adopts a high-quality methodological approach to impact analysis with a large, well-matched sample, as with all research there are important limitations that may have affected the results of the evaluation. This section provides a discussion of the evaluation findings and the limitations that may have affected the results.

6.1 Factors Affecting Overall Results

Early Implementation Issues

The accommodation and employment analyses only include male CAS3 participants from the first 18 months of the CAS3 programme, and the first year of the programme for the reoffending analyses. This was a period of mobilisation and embedding CAS3 processes within the wider offender support system. Where implementation issues occurred, such as insufficient wraparound support and problems sourcing move on accommodation (highlighted in the 2023 process evaluation),[42] CAS3 participants may not have experienced the programme as intended, limiting the positive benefits gained from the programme for early participants.

Data Availability and Quality

Longitudinal data could have allowed for an analysis of accommodation and employment outcomes over a prolonged follow-up period so that the timing of outcomes occurring could be considered. However, longer term accommodation statuses have not been captured within the available MoJ data. Some longitudinal employment data useful to this evaluation could be available in the updated data share between HM Revenue and Customs, and the Department for Work and Pensions, but this was not available at the time of this evaluation.

---

[42] [£50m Reducing Reoffending Package Process Evaluation](#)

Data availability issues were also identified with the DtR data used for constructing the CAS3 and comparison group, as many cases lack a flag for DtR.

Furthermore, as outlined in section 4.3, the reoffending analyses only capture proven reoffending and do not include crimes that are committed but not recorded by the police or do not lead to a caution or conviction. As a result, there may be reoffences that have been committed but are not included in the analyses.

Unobserved Variables

Furthermore, there is a risk of unobserved variables having a confounding impact on the makeup of the CAS3 and treatment groups and biasing findings. While all known observed factors linked to CAS3 placement and reoffending risk have been included, the influence of unrecorded information remains unknown. To mitigate this, a broad set of variables has been incorporated into the regression models to reduce bias and ensure the CAS3, and comparison groups are as similar as possible.

Relative treatment effects

Any treatment effects observed in this analysis are likely to reflect differences relative to other interventions, services or monitoring in place, as opposed to the absence of any treatment at all. It has not been possible to collect full details on other programmes or interventions that individuals in either the treatment or comparison group have participated in for this evaluation. This is another example of an unobserved variable risk as described above.

6.2   Factors Affecting Reoffending Results

Findings showed that there was no statistically significant difference in reoffending rate or number of reoffences between the CAS3 and comparison group. However, men who accessed CAS3 who did reoffend, reoffended earlier than the comparison group. There are numerous factors that may contribute to the lack of significant difference observed in the reoffending rate or frequency between the two cohorts, including supervision effects and the impact of recalls which are explored in more detail below.

Supervision Effects

The presence of CAS3 support workers may have introduced an additional layer of supervision, resulting in earlier identification of reoffending among individuals in the CAS3 group. This could have impacted the results of the reoffending analyses as reoffences in the comparison group may not have been detected or may have been detected at a later point.

Previous research has indicated a potential link between supervision in accommodation programmes and increased detection of reoffending,[43] particularly for low and medium-risk offenders who make up the majority of the CAS3 cohort.

The Effect of Recalls

As outlined in Section 3.3, the reoffending results of this evaluation do not factor in recalls during the reoffending follow-up period. Proven reoffending, by definition, does not include recalls to prison for breaches of licence conditions. Recalls and reoffending are competing risks, as being recalled means that an individual is not at liberty to reoffend. Conversely if someone reoffends, they may not have an opportunity to be recalled. If an individual breaches a licence condition and is recalled to prison during the reoffending follow-up period, their likelihood of reoffending for the remainder of that period is affected - even if they hadn't reoffended prior to the recall. Misconduct in prison is dealt with by an adjudications process[44] and, while it is possible for offences occurring in custody to be convicted, the factors that determine whether a proven reoffence takes place in prison are clearly different to those in the community.

This means that higher recall rates within a group could, in theory, suppress observed reoffending rates - not because the group is less likely to reoffend, but because more individuals are removed from the community before they have the opportunity to do so. In this analysis, while the CAS3 and comparison groups show similar reoffending rates, the CAS3 group had a higher one-year recall rate (51% vs 45%). This could suggest that the

---

[43] Reducing Reoffending - A Synthesis of Evidence on Effectiveness of Interventions
[44] HM Prison and Probation Service: Prisoner Discipline Procedures (Adjudications)
    https://assets.publishing.service.gov.uk/media/664f4730ae748c43d3794155/adjudications-pf.pdf

CAS3 group had less opportunity to reoffend during the follow-up period, potentially influencing the observed reoffending outcomes.

Recalls are also measured in the employment analysis. While a statistically significant difference in the overall distribution of employment outcomes has been observed, it is mainly driven by the CAS3 group having a marginally higher proportion of individuals who were recalled or terminated in the period up to six months after release, which is largely offset by a lower unemployed proportion. As such, the differences observed are mainly because of the effect that slightly different recall and termination rates have had on the proportions in the other categories, as opposed to any material differences in the underlying employment outcomes of these cohorts. When combined with the analysis of employment outcomes at six weeks after release from custody (where no evidence of statistically significant differences was found), the impact of CAS3 on employment outcomes at these snapshot dates is likely to be small.

6.3 Factors Affecting Accommodation and Employment Results

Data Collection Timing

The accommodation and employment outcome measures in these analyses are contingent on data collection timing for the data sources used. In this evaluation, they were collected at six weeks, three months, and at six months. Therefore, they can only measure treatment effects at these specific points in time after release.

In the case of the accommodation outcome, the comparison group were found to have a higher rate of settled accommodation at three months post release than the CAS3 group. However, this has potentially been caused by a proportion of the CAS3 group still residing in CAS3 accommodation at the three month measurement point.

This evaluation uses accommodation status at three months post release as its outcome measure which is static and taken at a set time point for all individuals in the sample. CAS3 MI however, records the accommodation outcome at the point that an individual moves on from CAS3 and the timepoint for the CAS3 MI collection will vary from person to person as it is dependent on how long an individual stays in a CAS3 property. Therefore,

an individual's accommodation outcome post-CAS3 may differ from their accommodation outcome at three months post release

On average, move on outcomes post-CAS3 will be recorded in CAS3 MI, 59 days post release (as this is the average length of stay for a resident in a CAS3 property), but outcomes can be recorded anywhere between 1 and 100+ days post release depending on an individual's length of stay, with a minority of residents (17%) overstaying the 84-night limit. The settled accommodation rate for the CAS3 cohort in this impact evaluation is impacted by the presence of these overstayers in the CAS3 service. These individuals are recorded as still being in CAS3 at the 3-month measurement point used in this impact evaluation. As outlined in Section 5, 17% of the CAS3 cohort were recorded as still residing in a CAS3 property at the 3-month measurement point. Therefore, these individuals are recorded as being in transient accommodation, which reduces the settled accommodation proportion relative to the counterfactual cohort who did not receive CAS3.

Similarly, if an individual ends their CAS3 stay but reaches the end of their period on licence before the 3-month data measurement point, they will be recorded with an accommodation outcome in the CAS3 MI from the point they left the service but as a termination in the impact evaluation as they were no longer on licence at the time of the 3-month measurement point. This drives down the settled accommodation rate at 3-months relative to the move on rate post-CAS3.

The importance of data collection timing is demonstrated by the CAS3 MI (for the 2024/2025 performance year) showing a settled accommodation move on outcome which was higher (26%) than what has been observed in this evaluation. The key difference between these figures stems from differences in the time points at which data is recorded – immediately after a CAS3 stay has finished versus three months post release from prison.

7.   Conclusion

Overall, this evaluation has not provided sufficient evidence to suggest CAS3 does or does not increase or decrease the reoffending rate or frequency for men who access the service. CAS3 service users who reoffend were found to commit their offences sooner on average than non-CAS3 users, however this may be a result of the circumstances of their supervision or early implementation issues experienced in service delivery.

Accommodation and employment outcomes did not show a clear impact of CAS3 on moves into settled accommodation and employment. However, these results need to be considered alongside caveats regarding data collection timing, unobserved treatment effects and data quality.

Although CAS3 does provide supplementary support for residents, further research is needed to understand the form this is taking across the service now it is fully implemented, and the level and format of support that can best help residents. Additionally, the analyses for this evaluation have only included data from a short time-period. Further research including analysis of data spanning a longer period across the implementation of the service may be useful in providing a fuller picture of the impacts of the CAS3 service. Further exploratory work could also be carried out to identify additional sources of accommodation data that could be used for future evaluations of CAS3, for example, including CRS data on accommodation-related referrals.

The findings from previous research on what works for reducing reoffending point to the need for post-custody support to take a holistic approach to supporting prison leaver needs. Therefore, interventions which target accommodation need alone may not be sufficient to drive down reoffending rates and support offenders into employment and settled accommodation.

References

Cordle, R., and Gale, E. (April 2025). *Reducing Reoffending: A Synthesis of Evidence on Effectiveness of Interventions.* Ministry of Justice Analytical Series. Available at: [Reducing Reoffending - A Synthesis of Evidence on Effectiveness of Interventions](#)

Greevy, H., Johnson, C., Howell, S., Goldwyn Simpkins, H., Mealings, G., Whitfield, K., Coleman, C., Newman, J., and Bates, A. (May 2023). *£50m Reducing Reoffending Package Process Evaluation.* Ministry of Justice Analytical Series. Available at: https://assets.publishing.service.gov.uk/media/645e53636539660011bd3e9f/reducing-reoffending-process-evaluation.pdf

HM Prison and Probation Service (HMPPS). (May 2024). *Prisoner Discipline Procedures (Adjudications)*. Available at: [adjudications-pf.pdf](#)

Ministry of Housing, Communities and Local Government. (September 2018). *A guide to the duty to refer.* GOV.UK. Available at: [A guide to the duty to refer - GOV.UK](#)

Ministry of Justice. (April 2025). *Accessing the Justice Data Lab service.* GOV.UK. Available at: [Accessing the Justice Data Lab service - GOV.UK](#)

Ministry of Justice. *Accounting Officer Memorandum: Community Accommodation Services Tier 3 (CAS3) National Roll-Out.* GOV.UK. Available at: [Accounting Officer Memorandum CAS3.](#)

Ministry of Justice. *Proven reoffending statistics.* GOV.UK. Available at: [Proven reoffending statistics - GOV.UK](#)

Ministry of Justice. (June 2025). *Identified needs of offenders, custody and community, 31 October 2024.* GOV.UK. Available at: [Identified needs of offenders, custody and community, 31 October 2024 - GOV.UK](#)

Ministry of Justice. (July 2025). *Offender accommodation outcomes, update to March 2025: Annex 1 – Community Accommodation Service Tier 3 – summary* GOV.UK. Available at: [Annex 1 - Community Accommodation Service Tier 3 - summary - GOV.UK](#)

Ministry of Justice. (September 2023). *Offender accommodation pilot process evaluation report.* GOV.UK. Available at: [Offender accommodation pilot process evaluation report](#)

Ministry of Justice. (April 2025). *Prison population: weekly estate figures 2025, 31 March 2025.* GOV.UK. Available at: [Population_bulletin_weekly_7_April_2025.ods](#)

Ministry of Justice. (September 2025*). Proven reoffending statistics: July to September 2023.* GOV.UK. Available at: [Proven reoffending statistics: July to September 2023 (Revised) - GOV.UK](#)

Ministry of Justice. (July 2025). *Quality Statement – Proven Reoffending Statistics.* GOV.UK. Available at: [Quality_statement___proven_reoffending_statistics.pdf](#)

Ministry of Justice. (May 2025). *Technical Guide - Criminogenic needs of prolific offenders*. GOV.UK. Available at: [Technical Guide - Criminogenic needs of prolific offenders - GOV.UK](#)

Appendix A: Operational Background

This appendix outlines further CAS3 operational information for wider context to the main report.

CAS3 Eligibility Criteria

The CAS3 scheme is open to adult prison leavers, aged 18 or over, who are under the supervision of the probation services; and who are:

- At risk of being released as homeless from prison following a custodial sentence to be supervised by the Probation Service; or

- moving-on as homeless from CAS1 (Approved Premises); or

- moving on as homeless following a period at a CAS2 residence.

And who have:

- given consent to be referred into the service; and

- signed an Accommodation Compact

CAS3 is not available to offenders who fall under the following criteria:

- Prison leavers not released into and supervised by a probation region.

- Persons on probation subject to a Community Order or Suspended Sentence Order only.

- Prison leavers where consent has been refused and/or there is a refusal to sign an Accommodation Compact.

- Persons who are released after a period on remand, not under the supervision of the probation service as HMPPS have no statutory responsibility.

- Prison leavers who after their release, later become homeless.

- Prison leavers at the point of release on Home Detention Curfew (HDC).

- Persons released from custody at Sentence Expiry date (SED).

- Foreign National Offenders (FNOs) who are not eligible for publicly funded benefits (colloquially known as 'no recourse to public funds' (NRPFs)).

Manual and Digital CAS3 Monitoring Information (MI) Processes

Between Autumn 2023 and Summer 2024 a transition took place across Probation Regions between manual processes for the referral and booking of CAS3 placements, and a digital service. The referral process for Wales sits outside the CAS3 digital service until a CAS3 placement is booked. In Wales the Centralised Operational, Resettlement, Referral and Evaluation Hub (CORRE Hub) uses Local Authority (LA) agreed documentation to consider all applications for housing assistance.

Where CAS3 is deemed to be the most suitable option and after liaison with the LHA, this can be booked by the HPT and is entered on the digital service at this point. In England, the Probation Practitioner makes a referral for CAS3 via the digital service and HPTs process all referrals via the digital service.

Appendix B: Variables used for PSM

The tables below outline the variables used in the construction of the PSM models and their data sources. Variables marked with (*) are not included in the headline models but were used in sensitivity analyses. Further detail on variables (and categories within variables) is included in the standardised differences included within the "data tables" file.

Variable	Data Source
Ethnicity (self-reported)	Proven Reoffending database
Nationality	Proven Reoffending database
Age at index date	Proven Reoffending database
Index Disposal/Sentence type	Proven Reoffending database
Primary index offence group	Proven Reoffending database
Index offence severity	Proven Reoffending database
Index offence custodial sentence length	Proven Reoffending database
Reoffending cohort year (year of index date)	Proven Reoffending database
Age at first contact with the Criminal Justice System	PNC
Number of previous prison events	PNC
Number of previous convictions	PNC

Number of previous court orders	PNC
Number of previous offences	PNC
Number of previous indictable only offences	PNC
Number of previous triable either way offences	PNC
Number of previous summary offences	PNC
Number of previous violent offences	PNC
Number of previous robbery offences	PNC
Number of previous public order offences	PNC
Number of previous domestic burglary offences	PNC
Number of previous other burglary offences	PNC
Number of previous theft offences	PNC
Number of previous handling offences	PNC
Number of previous fraud or forgery offences	PNC
Number of previous theft of vehicles offences	PNC
Number of previous drink driving offences	PNC
Number of previous criminal damage offences	PNC
Number of previous drug import/export/production/supply offences	PNC
Number of previous drug possession or supply offences	PNC
Number of previous sexual offences	PNC

Number of previous breach offences	PNC
Copas rate (logarithmic rate of convictions and cautions over time)	PNC
Employment status at index date	HMPPS Performance Hub and Delius data
First release of post-recall release	HMPPS Performance Hub and Delius data
First release to current release period	HMPPS Performance Hub and Delius data
Employment status at conviction/disposal date *	HMPPS Performance Hub and Delius data
Accommodation status at conviction/disposal date *	HMPPS Performance Hub and Delius data
Remaining licence/probation period at release *	HMPPS Performance Hub and Delius data
Duty to refer record included in the data (in the period prior to or up to 30 days after the index date)	HMPPS Performance Hub
Offender Group Reconviction Scale (OGRS3) score (2yr, banded)	OASys
OASys Violence Predictor (OVP) score (2yr, banded)	OASys
Does the offender have problems with being in no fixed abode or in transient accommodation?	OASys
Does the offender currently have problems with the suitability of accommodation?	OASys
Does the offender currently have problems with a permanent place of accommodation?	OASys

Does the offender currently have problems with the suitability of the location of accommodation?	OASys
Does the offender have accommodation issues that are linked to their risk of serious harm, risks to the individual, and other risks?	OASys
Does the offender have accommodation issues that are linked to their offending behaviour?	OASys
Does the offender have problems with being unemployed or being unemployed upon release?	OASys
Has the offender had problems associated with their employment history?	OASys
Does the offender have problems with either reading, writing, or numeracy?	OASys
Does the offender have problems with work-related skills?	OASys
Does the offender have any educational qualifications?	OASys
Does the offender have issues with attitudes to employment?	OASys
Has the offender had learning difficulties or behavioural problems related to education?	OASys
Does the offender have attitude issues related to education?	OASys
Does the offender have employment and/or education issues that are linked to their risks of serious harm, risks to the individual, and other risks?	OASys
Does the offender have employment and/or education issues that are linked to their offending behaviour?	OASys
Does the offender currently have any problems with their financial situation?	OASys

Does the offender have financial management issues that are linked to their risks of serious harm, risks to the individual, and other risks?	OASys
Does the offender currently have problems having a relationship with their close family members?	OASys
Does the offender have issues with childhood experiences?	OASys
What is the current relationship status of the offender?	OASys
Does the offender currently have issues with the relationship with their partner?	OASys
Does the offender currently have issues with activities that encourage offending?	OASys
Does the offender have lifestyle and associates issues that are linked to their offending behaviour?	OASys
Does the offender have lifestyle and associates issues that are linked to their risks of serious harm, risks to the individual, and other risks?	OASys
Has the offender ever misused drugs?	OASys
Does the offender have issues with the level of drug use?	OASys
Does the offender have issues with motivation to tackle drug misuse?	OASys
Does the offender have issues with drug use and obtaining drugs being a major activity?	OASys
Does the offender have issues with drug misuse that are linked to their risk of serious harm, risks to the individual, and other risks?	OASys

Does the offender have issues with drug misuse that are linked to their offending behaviour	OASys
Does the offender currently have problems with alcohol misuse?	OASys
Is there evidence of the offender binge drinking or of excessive alcohol consumption within the last six months?	OASys
Is there evidence of the offender having had problems associated with alcohol in the past?	OASys
Does the offender have issues with violence linked to alcohol consumption?	OASys
Does the offender have issues with motivation to tackle alcohol misuse?	OASys
Does the offender have issues with alcohol misuse that are linked to their risk of serious harm, risks to the individual, and other risks?	OASys
Does the offender have issues with alcohol misuse that are linked to their offending behaviour	OASys
Does the offender have problems with coping with everyday life?	OASys
Does the offender have psychological problems, including depression?	OASys
Does the offender have problems with their attitude towards themselves?	OASys
Does the offender have issues with interpersonal skills?	OASys
Does the offender have issues with their ability to recognise problems?	OASys

Does the offender have issues with dealing with problems (problem-solving skills)?	OASys
Does the offender have attitudes that are linked to their risks of serious harm, risks to the individual, and other risks?	OASys
Does the offender have attitude issues that are linked to their offending behaviour?	OASys
Are there any health concerns in relation to the offender?	OASys
Are there any vulnerability issues in relation to the offender?	OASys
Are there any breach of trust concerns in relation to the offender?	OASys

The below table outlines variables used in the PSM modelling specifically to control for regional variation (at a Police Force Area level). Variables marked with a (*) were not included in the headline models but were used in sensitivity analyses.

Variable	Data Source
Police Force Area 5-yr average reoffending rate (banded)	Delius
Police Force Area 5-yr average reoffending frequency per offender (banded)	Delius
Median house price *	Delius
Proportion of overcrowded households *	Delius
Households that are deprived in three or more measures of deprivation *	Delius
Population density *	Delius

Net annual earnings before housing costs *	Delius
Claimants of JSA as a proportion of working age population *	Delius
Proportion of households with no access to central heating *	Delius
Classification of an area as urban or rural *	Delius
The number of public houses / bars / nightclubs per hectare *	Delius
The number of retail buildings (other than public house / bar / nightclub / restaurant / cafeteria) per hectare *	Delius
Proportion of working age population *	Delius
Proportion of population with level 1 and entry level qualifications or no qualifications *	Delius
Proportion of households with access to two or more vans or cars*	Delius
Proportion of households with no access to a car or van *	Delius

Selecting OASys Assessments and Variables

The Offender Assessment System (OASys) is a key data source, which provides standardised assessments of offenders' risks and needs, together with actuarial methods of predicting reoffending risk. OASys assessments for offenders can happen at various points during their interaction with the criminal justice system and, for the purposes of this PSM analysis, the aim was to identify the most recent and complete assessment prior to treatment (so that it best reflects offenders' risks and needs in both the treatment and comparison groups at this point).

The OASys assessment chosen for this evaluation was the most recent assessment in the period from 18 months prior to release date up to one month after release date, so long as it is not earlier than six months before the disposal date. This approach resulted in identifying an OASys assessment for a very high proportion (98%) of the treatment group, with the variables within the assessments being very well populated.

Where no OASys data was identified for individual records, these were excluded from the main analyses on the basis that insufficient accommodation-related information was available (see Appendix C for construction of CAS3 and comparison groups).

The OASys variables included as inputs to the regression models for the PSM analyses in this evaluation were selected with reference to the type of programme (CAS3 being an intervention aimed at those at risk of homelessness), with a total of 51 variables selected.

Appendix C: Construction of the CAS3 and Comparison Group

Summary

The treatment group comprised of male individuals who were placed in CAS3 accommodation at release from prison, and who met various criteria described below. The comparison group comprised male individuals who met the same criteria as the treatment group without having been placed in CAS3 accommodation, but with additional constraints to ensure that they were suitable for treatment. These criteria were selected with reference to both the programme eligibility criteria and the available data being used to source the treatment and comparison group records.

Exclusions Applied to Both the Treatment and Comparison Groups

The table below sets out those records that were excluded from both groups, together with the rationale for doing so.

Exclusion	Rationale
All records where no OASys assessment data were available	Given that only a small number of accommodation-related variables were included in this evaluation, OASys data was a key source for identifying risks and needs in relation to accommodation. Where no OASys data was identified for individual records, these were excluded on the basis that insufficient accommodation-related information was available. OASys assessments were identified for more than 98% of the treatment group, so the effect of this exclusion was small.
Those released from custody at sentence expiry date	This is listed in the operational guidance as an exclusion
Those with arson convictions	It would be very unlikely for those with arson convictions to be allowed to be placed in CAS3

Those aged under 18 years or over 80 years at the index date	Those placed into CAS3 accommodation must be at least 18 years old (programme eligibility criteria). A tiny number of records aged over 80 were excluded.
Anyone with a sexual index offence or previous sexual offences	These records are excluded from JDL analyses as standard practice[45], on the basis that these offenders have different criminogenic risks and needs, and reoffending patterns.
Any duplicate records, or those with key missing or ambiguous data (for example, geographical/regional information), were excluded	This is standard JDL practice

Exclusions Applied to the Comparison Group Only

Based on details from the operational guidance, together with detailed consultation with the CAS1 & 3 Analysis Team, all records with the following accommodation statuses at release from prison (the index date) were excluded from the comparison group:

- CAS3 (cannot be included in the comparison group as these form the treatment group)

- Approved Premises (CAS1)

- CAS2 Premises

- Immigration Detention

---

[45] Exceptions would include impact evaluations of interventions aimed primarily at sexual offenders or where a significant proportion of a treatment group have committed previous sexual offences

- HOIE Sections 4 or 10 (Home Office accommodation provided for immigration cases)

Except for CAS3 (where, by definition, records cannot be assigned to the comparison group), the rationale for excluding prison leavers with these accommodation statuses is that it is extremely unlikely that they would have been suitable/eligible for CAS3 at release.

A small number of records where the accommodation status is missing, ambiguous or awaiting assessment were also excluded (as there is no way of determining whether these cases are suitable or not).

All potential comparison group records from in-scope CAS3 regions (determined based on region at release date and whether that region was in-scope at this date) were also removed from the comparison group.

Additional Filters Applied to Both Groups

Given the small number of accommodation-related variables available for this evaluation, there is a risk that, without further filters being applied, the post-matched comparison group will not have accurately identified those at risk of being homeless on release. To mitigate this risk, further constraints were applied prior to the PSM process.

Only those records with either a DtR record OR a significant need in at least one of the S3Q3 (no fixed abode) and S3Q5 (permanence of accommodation) OASys questions[46] were retained.

Initial analysis on the relative reoffending rates within the post-matched groups based on running the PSM process with and without this filter suggested a significant imbalance between the filtered and non-filtered groups[47]. Based on this finding, it was decided to

---

[46] Of the OASys questions in Section 3 (Accommodation) of the assessment, S3Q3 and S3Q5 are the most relevant in relation to risk of homelessness. A significant need identified in S3Q3 relates to an offender expected to have no fixed abode or be in transient accommodation on release from custody. A significant need identified in S3Q5 relates to an offender expected to not have anywhere to live after release.

[47] This analysis was conducted 'blind', in the sense that only the relative levels of reoffending rates within each post-matched group were considered (i.e., comparing the relative reoffending rates of the pre-filtered and post-filtered groups), without knowledge of the absolute level or direction of any differences in the reoffending rates, and without making any comparisons between the treatment and comparison groups. This was to avoid cherry-picking the approach based on knowing the outcomes. The analysis showed that the filter applied had very little effect on the reoffending rate of the post-matched treatment

proceed with the analysis with the filtered groups only. Approximately 31% of the pre-matched treatment groups for all three outcomes measures (reoffending, accommodation, employment) were excluded because of this filter but, other than differences in relation to variables included in the filter, there were no significant differences identified between the pre-filtered and post-filtered treatment groups in relation to the distribution of the following variables

- Age at release date

- Ethnicity

- Region

- Home Office offence group for index offence

- Previous offences

So, while the treatment group used for this evaluation comprises a subset of the overall cohort of those placed on CAS3 (because of this filter), this subgroup is representative of the overall cohort in relation to the distribution of the variables listed above. The reoffending rates of the pre-filtered and post-filtered groups were also similar.

DtR Data

In theory, CAS3 placements should not be possible without a DtR referral having been made. Analysis of the CAS3 MI data shows a very high proportion (98%) of CAS3 stayers recorded as having had a DtR referral. However, the only source of DtR data made available for both the treatment and comparison groups for this evaluation was from the HMPPS Performance Hub. This showed that the proportion identified as having had a DtR referral is much lower in this data (only 28% of those with a CAS3 accommodation status at release in the raw evaluation data were identified in the DtR data with a referral date prior or up to 31 days after release from custody).

---

group, but a substantial effect on the reoffending rate of the post-matched comparison group, making the groups more balanced.

This is a large inconsistency and, based on analysis carried out, there is significant variation across regions. For example, a much higher proportion of CAS3 stayers in the Kent, Surrey & Sussex region were identified in the DtR data having a referral date prior or up to 31 days after release from custody, compared with much lower rates for Greater Manchester and North West.

Given the filters applied in this evaluation in relation to risks of homelessness (all records must either have a DtR referral or a significant need identified in either of the OASys questions on no fixed abode or permanence of accommodation)[48], the proportion with a DtR referral in the post-matched groups for all outcomes are generally higher than the 28% observed in the CAS3 group in the raw data, so the risks associated with incomplete DtR data have been partially mitigated. However, further investigation is recommended to identify whether more complete/accurate DtR data can be sourced, and if data recording practices could be improved to ensure consistency, completeness and accuracy. Proportions of each cohort with DtR data is available in the table below.

Outcome measure	Weighted sample size (for each group)	Proportion of treatment group with a DtR	Proportion of comparison group with a DtR
Reoffending (over 12 months after release)	489	29.9%	28.0%
Accommodation (at three months after release)	1,985	36.3%	35.1%
Employment (at six weeks after release)	1,994	36.5%	35.1%

---

[48] see section on additional filters applied to both groups above

Employment (at six months after release)	2,128	38.4%	36.3%

Source for DtR data: HMPPS Performance Hub

Regions to Include in the Comparison Group

Rollout of the CAS3 programme was reasonably comprehensive in the five early-adopter regions, with a high proportion of those suitable and eligible for the programme placed in CAS3. According to the CAS3 MI data, approximately 80% of eligible CAS3 referrals that were offered CAS3 accommodation accepted the offer. Two main options were considered when determining how to construct the comparison group which are outlined in the table below.

Description of approach	Key advantage(s) of approach	Key disadvantage(s) of approach	Comments
Include only those eligible referrals who were offered CAS3 accommodation but rejected the offer in the comparison group	They will, by definition, have been eligible for CAS3	There may be a non-random reason why those offered CAS3 accommodation rejected the offer, that is not captured in the variables used in the analysis, leading to biased results (unobserved variable risk)	There is also a risk of contamination effects (namely that those in the comparison group in an in-scope region may be indirectly exposed to treatment effects of the programme, by being in the same region)

Source the comparison group exclusively from out-of-scope regions	Given that treatment was not available in these regions, there should be a sufficient pool of eligible/suitable individuals who would have been placed in CAS3 accommodation had the programme been rolled out in the region at that time.	It may be difficult to successfully identify all those who are eligible/suitable individuals given the data available for analysis (unobserved variable risk). Being sourced from distinct regions than the treatment group introduces risks that regional variation is not properly accounted for in the analysis.	This was the approach recommended by the CAS1&3 analysis team, noting that it is possible to effectively control for regional variation among the groups. This approach was therefore undertaken.

Controls for Regional Variation

For the headline analyses, regional differences in reoffending behaviour were allowed for so that the post-matched groups were well matched. A selection of 14 socio-economic metrics was added to the modelling as part of a suite of sensitivity analyses that were run, as set out in the table in Appendix B. When adding all these metrics, the matching quality worsened significantly, so a more focused list of seven metrics (those with a (*)) was included in additional sensitivities (run for both the reoffending and accommodation outcomes), and the matching quality was very similar to the corresponding headline analyses. The results of these additional sensitivities were similar to the corresponding headline analyses.

Impact of CAS3 Selection Criteria

The criteria used to select the initial five CAS3 regions was not random, which could have adversely affected the outcomes for the CAS3 cohort relative to the control cohort. Selection of the initial regions was based on a combination of number of homeless service users within the region, the current operational state of the probation regions, and alignment with other Government initiatives. This has the potential to affect the results of the impact evaluation as non-CAS3 regions were used as a comparator, and therefore underlying differences in outcomes across regions could skew the results if not controlled for.

The impact of the non-random regional selection criteria is mitigated by the regional controls included in the analysis, but it is nonetheless a potential source of bias in these analyses.

Evaluation Steering Group

A CAS3 Impact Evaluation steering group, comprising analytical, policy and operational staff, was set up to scrutinise and agree key details of the methodology, including the selection of variables to inform the PSM and exclusion criteria applied to the treatment and comparison groups.

Appendix D: Treatment and Comparison Group Flow Diagrams

Reoffending Treatment Group

4203 records extracted from HMPPS Performance Hub (3870 male, 333 female) with prison release dates from July 2021 to June 2023 and accommodation at release description including CAS3

4203

71 (2%) records excluded having either duplicates, ambiguous accommodation at release descriptions, or where programme suitability issues were identified

4132

125 (3%) records excluded because either insufficient or inconsistent regional data was identified

4007

311 (7%) records excluded where index offence could not be unambiguously identified on the PNC

3696

297 (7%) records excluded having either a sexual index offence or previous sexual offences

3399

5 (0%) records excluded having multiple participations for a given sentence; or where age range or custodial sentence length are outside typical ranges

3394

2166 (51%) records excluded where release date is after June 2022

1228

367 (9%) records excluded where the index offence is not included in the proven reoffending data

861

303 (7%) records excluded where significant accommodation related needs could not be identified

558

41 (1%) records excluded for females

517

517 records available for PSM stage of reoffending analysis (13% of the original male records extracted)

Reoffending Comparison Group

127,971 records extracted from the Hub (118193 male, 9777 female, 1 unknown) with prison release dates from July 2021 to June 2023 and accommodation at release description NOT including CAS3

127971

13,356 (10%) records excluded having either duplicates, ambiguous or missing accommodation at release descriptions, or where programme suitability issues were identified

114615

23,085 (18%) records excluded where accommodation status at release would not have been suitable for CAS3 or where status information is insufficient to determine

91530

45,658 (36%) records excluded where individual is in an in-scope region for CAS3 or where insufficient or inconsistent regional data was identified

45872

3731 (3%) records excluded where index offence could not be unambiguously identified on the PNC

42141

55

3389 (3%) records excluded having either a sexual index offence or previous sexual offences

38752

179 (0%) records excluded having multiple records for a given sentence; or where age range or custodial sentence length are outside typical ranges; or if appears in the treatment group

38573

18518 (14%) records excluded where release date is after June 2022

20055

4121 (3%) records excluded where the index offence is not included in the proven reoffending data

15934

11,556 (9%) records excluded where significant accommodation related needs could not be identified

4378

407 (0%) records excluded for females

3971

3971 records available for PSM stage of reoffending analysis (3% of the original male records extracted)

Accommodation and Employment Treatment Group

4203 records extracted from HMPPS Performance Hub (3870 male, 333 female) with prison release dates from July 2021 to June 2023 and accommodation at release description including CAS3

4203

71 (2%) records excluded having either duplicates, ambiguous accommodation at release descriptions, or where programme suitability issues were identified

4132

125 (3%) records excluded because either insufficient or inconsistent regional data was identified

4007

311 (7%) records excluded where index offence could not be unambiguously identified on the PNC

3696

297 (7%) records excluded having either a sexual index offence or previous sexual offences

3399

246 (6%) records excluded having multiple participations for a given sentence; or where age range or custodial sentence length are outside typical ranges

3153

37 (1%) records excluded where the index offence could not be unambiguously identified in the PNC snapshot

3116

814 (19%) records excluded where significant accommodation related needs could not be identified

2302

168 (4%) records excluded for females

2134

2134 records available for PSM stage of accommodation and employment outcome analysis (55% of the original male records extracted)

Accommodation and Employment Comparison Group

127,971 records extracted from the Hub (118193 male, 9777 female, 1 unknown) with prison release dates from July 2021 to June 2023 and accommodation at release description NOT including CAS3

127971

13,356 (10%) records excluded having either duplicates, ambiguous or missing accommodation at release descriptions, or where programme suitability issues were identified

114615

23,085 (18%) records excluded where accommodation status at release would not have been suitable for CAS3 or where status information is insufficient to determine

91530

45,658 (36%) records excluded where individual is in an in-scope region for CAS3 or where insufficient or inconsistent regional data was identified

45872

3731 (3%) records excluded where index offence could not be unambiguously identified on the PNC

42141

3389 (3%) records excluded having either a sexual index offence or previous sexual offences

38752

5072 (4%) records excluded having multiple records for a given sentence; or where age range or custodial sentence length are outside typical ranges; or if appears in the treatment group

33680

615 (0%) records excluded where the index offence could not be unambiguously identified in the PNC snapshot

33065

22118 (17%) records excluded where significant accommodation related needs could not be identified

10947

991 (1%) records excluded for females

9956

9956 records available for PSM stage of accommodation and employment outcome analysis (8% of the original male records extracted)

Notes on chevrons

The final number of records at the bottom of each chevron relates to the number of pre-matched records for the relevant cohort prior to the PSM stage. As noted in the Methodology section of this report, the pre-matched cohorts for all three of the accommodation and employment outcomes are identical, and this cohort differs to the pre-matched cohort for the reoffending analysis as follows:

- the accommodation and employment outcome analyses include both first releases and post-recall releases from prison, whereas the reoffending analysis only includes first releases

- the reoffending analysis includes prison releases over a shorter 12-month treatment window, given the available reoffending data

The number in the post-matched groups is smaller and is dependent on the specific outcome being analysed as outlined in the below table:

Outcome	Treatment group			Comparison group		
	Pre-matched records	Post-matched records	Proportion matched	Pre-matched records	Post-matched records	Proportion matched

Reoffending	517	489	94.6%	3971	3505	88.3%
Accommodation (3 months after release)	2134	1985	93.0%	9956	8466	85.0%
Employment (6 weeks after release)	2134	1994	93.4%	9956	8217	82.5%
Employment (6 months after release)	2134	2128	99.7%	9956	9897	99.4%

More detail on the types of records excluded, as described in the chevrons, is included below:

Exclusion type	Description
Programme suitability issues	A very small proportion (<1%) of potential treatment or comparison group records either had reached their sentence expiry date at release (not eligible for CAS3) or had arson convictions (where suitability concerns would exist), and have been excluded from the analysis
Sexual index or previous offences	As explained in the Methodology section of this document, offenders with sexual offences are excluded from the analysis
Age range	Those aged under 18 years or over 80 years at the index date are excluded
Custodial sentence length	A very small proportion (<0.1%) of potential treatment group records have either an indeterminate sentence for public

	protection (IPP), mandatory life or other life sentence, and are excluded from both treatment and comparison groups
Multiple records/ participations	Only a single record per disposal was retained, as set out in the methodology section of this document.
Insufficient or inconsistent regional data	As set out in the methodology section of this document, to account for any regional variation in reoffending behaviour, the Police Force Area (PFA) in which individuals live has been identified for records in the treatment and comparison groups. Where the PFA cannot be unambiguously be identified, then such records were excluded from the analysis
Significant accommodation related needs	Only those records with either a Duty to Refer record OR a significant need in at least one of the OASys questions S3Q3 (no fixed abode) and S3Q5 (permanence of accommodation) are retained, as detailed in the methodology section of this document

Appendix E: Profile of the Treatment Groups

Reoffending Analysis

Of the 4,203 potential treatment group records extracted from the Hub, data on age, gender, ethnicity and custodial sentence length was readily available for 4,152 (99% of) records. Of these, 517 were included in the pre-matched group for the male reoffending analysis (see Appendix D for details of the various stages where records were excluded). To assess whether these 517 records are representative of the original cohort extracted for analysis, the table below includes basic information for the 4,152 records identified, split into three different groups: males included in the pre-matched group; males not included in the pre-matched group; and females.

Reoffending analysis	Male participants included in pre-matched group (517 records)	Male participants not included in pre-matched group (3,307 records)	Female participants (328 records)
Age band at index date			
18-24	12%	9%	3%
25-29	19%	17%	15%
30-39	41%	39%	52%
40-49	22%	24%	26%
50-59	5%	8%	4%
60+	1%	2%	0%
Unknown	0%	1%	1%
Ethnicity (self-reported)			
White	84%	87%	94%
Black	6%	4%	1%
Asian	3%	4%	1%
Mixed	5%	3%	2%
Other	1%	1%	1%
Unknown	1%	1%	1%
Custodial sentence length of index offence			
Up to 6 months	48%	38%	47%
between 6 and 12 months	11%	13%	14%

12 months to 4 years	28%	35%	32%
4 to 10 years	13%	11%	7%
More than 10 years	0%	2%	0%

There are some differences between males and females. For example, there is a higher proportion of females aged 30-39 than for males in the same age band. The proportion of white females is also higher than for males.

Focusing on males, the distributions of age and ethnicity for those included in the pre-matched group are similar to those excluded from this group. However, males in the pre-matched group have a higher proportion (48%) of short custodial sentences (up to six months) than those not included in this group (38%). The main reason for this is that the pre-matched male cohort for the reoffending analysis does not include post-recall releases (where the proportion of short custodial sentences is lower). As can be seen in appendix 3b below, this difference is much smaller in the accommodation and employment outcomes analyses, where the pre-matched male cohort is not restricted to just those with first releases.

The post-matched treatment group for the reoffending analysis (n=489) also has a very similar distribution to the pre-matched treatment group (n=517) on the above variables. Information on the distributions of variables for the post-matched groups is included within the "data tables" file.

Accommodation and Employment Analysis

Of the 4,203 potential treatment group records extracted from the hub, data on age, gender, ethnicity and custodial sentence length was readily available for 4,152 (99% of) records. Of these, 2134 were included in the pre-matched groups for the male analyses of the accommodation and employment outcomes. To assess whether these 2134 records are representative of the original cohort extracted for analysis, the table below includes basic information for the 4,152 records identified, split into three different groups: males included in the pre-matched group; males not included in the pre-matched group; and females.

Accommodation and Employment outcomes	Male participants included in pre-matched group (2,134 records)	Male participants not included in pre-matched group (1,690 records)	Female participants (328 records)
Age band at index date			
18-24	9%	9%	3%
25-29	18%	16%	15%
30-39	40%	38%	52%
40-49	23%	23%	26%
50-59	7%	8%	4%
60+	1%	4%	0%
Unknown	1%	1%	1%
Ethnicity (self-reported)			
White	88%	86%	94%
Black	5%	4%	1%
Asian	3%	5%	1%
Mixed	4%	3%	2%
Other	0%	1%	1%
Unknown	0%	1%	1%
Custodial sentence length of index offence			
Up to 6 months	40%	39%	47%
between 6 and 12 months	13%	13%	14%
12 months to 4 years	35%	33%	32%
4 to 10 years	12%	11%	7%
More than 10 years	1%	3%	0%

While there are some differences between males and females, based on the above variables, the distribution for males included in the pre-matched group is similar to those males excluded from this group for the accommodation and employment outcomes.

The post-matched male treatment groups for all three accommodation and employment outcomes analyses range from 1985 to 2128 records and all have very similar distributions to the pre-matched treatment group (2134 records) on the above variables. Information on

the distributions of variables for the post-matched groups is included within the "data tables" file.

Appendix F: Sensitivity Analyses

The principal aims of the sensitivity analyses performed in this evaluation are to test whether either of the following lead to materially different results when compared to the main analyses in this evaluation:

1. If **changing some of the assumptions or methods** used will have a material impact on the main (headline) results; or

2. If **changing the make-up of the cohorts** used will have a material impact on the main (or headline) results

In the first category described above, a range of sensitivities were run to test various assumptions, including:

- In relation to controlling for regional variation (spatial confounding), adding a range of socio-economic metrics at a Police Force Area level

- Including some additional input variables to the regression modelling (for example, accommodation status at disposal date, employment status at disposal date, remaining probation period)

- Applying different criteria to identify those at risk of homelessness

- Reducing the number of input variables to the regression modelling (to determine whether a simpler model leads to different results)

- Including squared terms for continuous numerical variables in the regression models

- Applying different criteria for selecting records for those individuals with multiple records

None of these sensitivity analyses led to materially different results when compared to the main analyses reported in this document.

In the second category as described above, a suite of sensitivity analyses was carried out to determine whether the initial phase of programme rollout affected the overall results, as described below.

The treatment window used for this evaluation coincides with the initial programme rollout in the five early adopter regions. As such, a large proportion of the cohorts analysed will have been exposed to any early implementation factors that are short-lived, which may lead to certain treatment effects being observed in relation to features of the programme that disappear once the intervention is fully up and running. Such features could impact treatment effects observed in a positive or negative way. For example, teething issues may lead to worse outcomes if the programme could not be delivered as intended in the initial phase after rollout. Conversely, if for example, the accommodation provided was new or had been refurbished to a high standard prior to the programme rollout, then this might lead to better outcomes, which fade as wear and tear have a negative impact on the quality of the accommodation over time.

Given the shorter treatment window for the reoffending outcome analysis (the first 12 months from initial programme, as opposed to the first 24 months for the accommodation and employment outcomes), it is also possible that early implementation factors have a larger effect on the reoffending analysis.

To investigate whether any short-term implementation factors have affected the cohorts being analysed, various sensitivity analyses have been produced which exclude the initial period after programme rollout. A summary of the results of these sub-analyses is included in the table below.

Outcome measure	Treatment window (and post-matched treatment group sample size (n))	Results (compared with main analysis over full treatment window)	Comments
Reoffending (over 12 months after release)	Prison releases in the 6-month period from January 2022 to June 2022, so excluding the first six months of programme-rollout (n=328).	The overall results were similar to the main reoffending outcome analysis over the longer 12-month treatment window (n=489), but the matching quality was worse. One difference relates to the days to first reoffence metric, where there was no longer a statistically significant difference observed – the worse matching quality and lower sample size may have contributed to this change in result.	No change in the direction of the treatment effects for all three outcome metrics. The results for the reoffending rate and frequency metrics were non-significant, as per the main analysis. The matching quality of some of the accommodation-related variables is questionable. Note: The longer treatment window for the main analysis starts earlier (from July 2021).

Accommodation (at three months after release)	Prison releases in the 12-month period from July 2022 to June 2023, so excluding the first 12 months of programme-rollout (n=1,357).	The overall results and matching quality were very similar to the main accommodation outcome analysis over the longer 24-month treatment window (n=1,985).	The longer treatment window for the main analysis starts earlier (from July 2021).
Employment (at six weeks after release)	Prison releases in the 12-month period from July 2022 to June 2023, so excluding the first 12 months of programme-rollout (n=1,343).	The overall results and matching quality were very similar to the main accommodation outcome analysis over the longer 24-month treatment window (n=1,994).	The longer treatment window for the main analysis starts earlier (from July 2021).
Employment (at six months after release)	Prison releases in the 12-month period from July 2022 to June 2023, so excluding the first 12 months of programme-rollout (n=1,323).	The overall results and matching quality were very similar to the main accommodation outcome analysis over the longer 24-month treatment window (n=2,128).	The longer treatment window for the main analysis starts earlier (from July 2021).

Appendix G: Accommodation and Employment Status Categorisation

Accommodation

For the purposes of this evaluation, an individual's accommodation status at three months has been mapped onto one of five different outcome categories. These are summarised below.

Accommodation outcome category	Most common statuses included within category
Homeless or Rough Sleeping	Homeless – Rough Sleeping Homeless – Shelter/Emergency Hostel/Campsite Homeless – Other Homeless – Squat
Transient accommodation	Friends/Family (transient) Transient/short term accommodation CAS3
Settled accommodation	Friends/Family (settled) Supported Housing Rental accommodation – private rental Rental accommodation – social rental (LA or other)
Recalled or Terminated (on	Recall

or prior to snapshot date)	Termination: revoked (further offence)
	Termination: consecutive/concurrent custody imposed
	Termination: completed – sentence/PSS expiry reached
Unknown	Awaiting Assessment
	<no data>

It should be noted that the category Recalled or Terminated will capture anyone with a recall or termination on or prior to the snapshot date. As such, the actual accommodation status of these individuals at the snapshot date is unknown (as it will not have been recorded in the probation service data being used).

Employment

For the purposes of this evaluation, the employment statuses of individuals at six weeks and six months have been mapped to one of five different outcome categories, as confirmed during the steering groups. These are summarised below.

Employment outcome category	**Most common statuses included within category**
Unemployed	Unemployed (on benefit)
	Unemployed (not on benefit)
	In receipt of state benefit
Unavailable for Work	Unavailable to work - Work Capability Assessment
	Unavailable to work – FNO

	Retired (receiving a pension) Full-time education or training
Employed	Full Time Employed Full Time Self Employed Part Time Employed Temporary/casual work
Recalled or Terminated (on or prior to snapshot date)	Recall Termination: revoked (further offence) Termination: consecutive/concurrent custody imposed Termination: completed – sentence/PSS expiry reached
Unknown	Declined to provide information <no data>

Again, it should be noted that the category Recalled or Terminated will capture anyone with a recall or termination on or prior to the relevant snapshot date. As such, the actual employment status of these individuals at the snapshot dates is unknown (as it will not have been recorded in the probation service data being used).

Appendix H: Effect Sizes

Effect sizes can be considered useful tools when evaluating the strength of a statistical relationship between two groups, or any differences between them. A standardised effect size calibrates the difference between outcomes of the treatment and comparison groups, in terms of the standard deviation. By standardising the measure, the units of measurement are removed, with the aim of making them easier to evaluate and compare (including comparisons with other similar interventions). Cohen's d has been selected as the measure of standardised effect size.

Whether an effect size is categorised as big or small will depend on various factors, including the type of intervention being evaluated.

The effect sizes for all three outcome metrics in the main reoffending analysis are less than 0.2, indicating that any treatment effects observed (should they exist) are likely to be small for this programme.

Appendix I: Accommodation and Employment Analyses: Multinomial Outcomes

In contrast to the reoffending analysis, where the proven reoffending rate is derived from a binary variable indicating whether an individual reoffended during the follow-up period, the accommodation and employment outcome analyses involve multiple possible outcome categories. Consequently, rather than producing a single figure for the proportion of reoffenders as in the reoffending analysis, these analyses present a distribution of possible outcome categories, known as multinomial outcomes.

A different approach is required to interpret the results of analyses on multinomial outcomes, since it would be misleading to focus on a single outcome category in isolation. For example, the proportion of males in the homeless or rough sleeping category in Figure 1 is lower in the treatment group (8.0%) than in the comparison group (10.4%), which in isolation looks to be a good outcome for the treatment group. However, the proportion of males in the settled accommodation category is also lower in the treatment group (21.6%) than in the comparison group (30.3%), which in isolation looks to be a bad outcome for the treatment group.

It is only by considering the overall distribution of categories in this analysis that it is possible to explain these apparently conflicting results, whereby the much higher proportion in the transient accommodation category for the treatment group has led to lower proportions in both the homeless or rough sleeping, and the settled accommodation categories. The key driver of the differences observed between the two groups relates to the proportion in the transient accommodation category, and this should be the primary focus when interpreting the results across all outcome categories for the accommodation outcome analysis.

To assess whether there is a statistically significant difference in the overall distribution of outcome categories in the accommodation and employment analyses, weighted Chi Square (χ^2) tests were performed for each analysis, the results of which are included in the relevant detailed results sections of this report. Further statistical analysis was performed by JDL using multinomial logistic regression models with treatment as the only explanatory variable. This can be used to determine whether there is a statistically significant

difference between the treatment and comparison groups in relation to relative differences in the likelihood of moving from a baseline category (e.g. homeless or rough sleeping) to a different category (e.g. settled accommodation).