

Evaluation report:

The impact of being sentenced with a community sentence treatment requirement (CSTR) on proven reoffending

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1. Summary

1.1 Introduction and Methodology

Community Sentence Treatment Requirements (CSTRs), comprising of Alcohol Treatment requirements (ATRs), Drug Rehabilitation Requirements (DRRs), and Mental Health Treatment Requirements (MHTRs), aim to address health needs of individuals on a community sentence and ultimately reduce reoffending.

While there is existing evidence indicating that in some circumstances alcohol, drug, and mental health treatment can have some positive effects on reoffending outcomes, research related to CSTRs is limited. To expand the evidence, MoJ have been working in partnership with HMPPS, DHSC and NHS England to deliver a programme of analytical work to robustly assess the effectiveness of CSTRs, including the Better Outcomes Through Linked Data (BOLD) programme. The BOLD substance misuse team carried out a project exploring pathways between probation and drug and alcohol treatment services and are undertaking further analysis to continue the investigation of the potential attrition between sentencing and accessing treatment services.

This impact evaluation aimed to compare justice outcomes of those sentenced with a CSTR against two comparison groups: those sentenced to community sentences without a CSTR and those sentenced to short custodial sentences. The analysis explored the rate of successful completion of community sentences and proven reoffending measures¹, including reoffending rate, frequency of reoffending, days to first reoffence, reoffending resulting in custody rate and frequency of reoffending resulting in custody.

There are differences in the characteristics of individuals who are sentenced with each type of CSTR and those who are not. To account for this, a statistical technique called propensity score matching (PSM) was used. This method aimed to create matched control groups of individuals who did not receive a CSTR but were as similar as possible to the groups of individuals who were sentenced to each type of CSTR, so any differences

¹ Proven reoffending refers to offences that are recordable, committed in England or Wales, prosecuted by the police, proven through caution or court conviction and are not breach offences (MoJ, 2023a).

detected between the groups were likely due to whether they received a CSTR sentence or not. While over a hundred variables were included in the analysis, there may be unobserved characteristics not captured, or not captured accurately, in the data available which could influence CSTR sentencing and reoffending outcomes. This is a consideration for any PSM analysis. The analysis also only compared individuals sentenced with and without an ATR, DRR, or MHTR – data were not available on whether they attended, engaged with, or completed treatment. More detail can be found in the methodology section.

This analysis used 2018 sentencing data to allow sufficient time to measure outcomes and to avoid the impact of the COVID-19 pandemic. Recent investments and initiatives have since been implemented to improve and expand the CSTR provision, therefore this evaluation forms a baseline measure of their impact.

1.2 Main findings

Justice outcomes of those sentenced with each type of CSTR and the matched control groups were compared and tested for significance. The matched control groups are referred to as those on a community sentence without a CSTR and those released from a short custodial sentence. These groups are matched to have similar characteristics to each CSTR group, including reported drug misuse, alcohol misuse, and mental health issues. The results were largely positive for ATR and MHTR recipients, with mixed results for DRR recipients. Reoffending rates and other statistically significant results are included in this summary, see section 4 for the full results. Due to rounding, the differences between some figures may appear to not sum exactly.

Successful community sentence completion rate

• The data indicated 67% of ATR recipients, 41% of DRR recipients and 78% of MHTR recipients successfully completed their community sentence. This means they served their sentence term without early termination, for example due to a breach or further offence. It was not possible to accurately match individuals in the treatment groups (ATR, DRR, and MHTR recipients) with individuals who did not receive a CSTR to compare sentence completion outcomes, due to availability issues with the data.

Reoffending outcomes for alcohol treatment requirement (ATR) recipients compared with individuals sentenced without a CSTR

- Reoffending rates were very similar between ATR recipients and recipients of a
 community sentence without a CSTR (42% and 40% respectively) and ATR
 recipients and short custodial sentence recipients (45% for both). There were no
 statistically significant differences, therefore this analysis did not provide evidence
 to indicate that receiving an ATR impacted the reoffending rate compared with
 recipients of community sentences without a CSTR or short custodial sentences.
- ATR recipients, when compared to those on a community sentence without a
 CSTR, took 12.42 more days on average to reoffend (118.93 days for ATR
 recipients and 106.51 days for community sentence recipient on average) and
 were less likely to reoffend and receive a custodial sentence by 4 percentage
 points (33% and 38% of those who reoffended, respectively) these were
 statistically significant results.
- Compared with those released from a short custodial sentence, ATR recipients reoffended slightly less frequently with 0.26 fewer reoffences on average (1.73 reoffences on average for ATR recipients and 1.99 for short custodial sentence recipients) and took 12.07 more days on average to reoffend (118.32 days for ATR recipients and 106.25 for short custodial sentence recipients on average). They were less likely to reoffend and receive a custodial sentence by 5 percentage points (34% of ATR recipients who reoffended and 39% of short custodial sentence recipients who reoffended) and were convicted an average of 0.54 fewer reoffences resulting in a custodial sentence (1.57 reoffences for ATR recipients and 2.12 for short custodial sentence recipients on average) these were statistically significant results.

Reoffending outcomes for drug rehabilitation requirement (DRR) recipients compared with individuals sentenced without a CSTR

 For DRR recipients, there was no statistically significant difference between reoffending rates (63% for both DRR recipients and recipients of a community sentence without a CSTR, 64% for both DRR and short custodial sentence recipients), therefore this analysis did not indicate that receiving a DRR sentence impacted the reoffending rate compared with recipients on a community sentence without a CSTR or short custodial sentences.

- Compared with recipients of a community sentence without a CSTR, DRR
 recipients reoffended slightly more frequently with 0.18 more reoffences on
 average (3.55 reoffences for DRR recipients and 3.37 reoffences for recipients of
 a community sentence without a CSTR, on average), and took on average 4.33
 fewer days to reoffend (86.64 days for DRR recipients and 90.97 days for
 recipients of a community sentence without a CSTR, on average). Although small,
 these were statistically significant differences.
- DRR recipients, when compared with short custodial sentence recipients, reoffended less frequently with 0.38 fewer reoffences on average (3.56 reoffences for DRR recipients and 3.93 reoffences for short custodial sentence recipients, on average) and took 12.28 fewer days on average to reoffend (86.66 days for DRR recipients and 98.93 days for short custodial sentence recipients, on average). They were less likely to reoffend and receive a custodial sentence by 6 percentage points (47% of DRR recipients and 53% of short custodial sentence recipients), and were convicted of fewer reoffences resulting in a custodial sentence with 0.58 fewer reoffences on average (3.20 reoffences for DRR recipients and 3.78 reoffences for short custodial sentence recipients, on average) these were statistically significant results.
- These results could be due to multiple reasons, including delay or difficulty in accessing treatment, and increased supervision by the Probation Service of DRR sentences compared with community sentences potentially providing more opportunities for reoffences to be detected. These are discussed further in the discussion and conclusion section.

Reoffending outcomes for mental health treatment requirement (MHTR) recipients compared with individuals sentenced without a CSTR

 This analysis indicates MHTR recipients had a lower reoffending rate than those on a community sentence without a CSTR by 8 percentage points (27% for MHTR recipients and 34% for recipients of a community sentence without a CSTR) and short custodial sentence recipients by 9 percentage points (27% MHTR recipients and 36% short custodial sentence recipients). These were statistically significant differences.

• Compared with short custodial sentence recipients, MHTR recipients reoffended less frequently with 0.53 fewer reoffences on average (1.01 reoffences for MHTR recipients and 1.54 reoffences for short custodial sentence recipients, on average), were less likely to reoffend and receive a custodial sentence by 17 percentage points (28% of MHTR recipients and 45% of short custodial sentence recipients) and were convicted of fewer reoffences resulting in custodial sentence with 0.69 fewer reoffences on average (1.39 reoffences resulting in a custodial sentence for MHTR recipients and 2.08 reoffences for short custodial sentence recipients, on average) – statistically significant results.

1.3 Conclusion

These findings indicate being sentenced with an ATR, DRR, or MHTR had a positive effect on reoffending outcomes compared with short custodial sentences, which is in line with previous research findings. However, the results report mixed effects of CSTRs on reoffending outcomes compared with community sentences without CSTRs. Further research would be needed to understand the reasons behind these findings. There are some key considerations when considering the implications of the results:

- As CSTRs may involve closer and more intensive supervision from probation and clinical staff than those on a community sentence without a CSTR, some of which receive little formal oversight, it may be that reoffences are more likely to be detected for those sentenced with a CSTR. This may diminish the ability to detect reoffending benefits of CSTRs, if present.
- Delay in accessing or commencing treatment may also influence reoffending outcomes, as previous research has demonstrated engagement in drug and alcohol misuse treatment can reduce reoffending (see section 2.2) and an analysis of pathways into treatment for ATR and DRR recipients found there can be long delays before attending treatment.

 Only reoffending within one year of sentence (or release for short custodial sentence recipients) was included and the effects on offending behaviour of CSTR sentencing may take longer to become apparent. CSTR sentencing and treatment may also have impacts that were not measured in this analysis, for example on health, employability, and social support.

Overall, the findings of this impact evaluation demonstrate why additional CSTR investment and development in CSTRs has been pursued in recent years, and therefore it is recommended this analysis is repeated in 2026/27 to assess whether the impact of CSTR sentencing has changed over time.

The data used have limitations and there are caveats that should be considered, for example the quality or type of treatment received by those sentenced with a CSTR is not consistent – see sections 3.4 and 3.5 for more information.

2. Introduction

2.1 Community Sentence Treatment Requirements (CSTRs)

The link between alcohol and drug misuse, mental health and offending behaviour is complex. Evidence suggests that problematic alcohol and drug use and mental health issues are prevalent amongst those committing criminal offences (Ministry of Justice, 2019, HM Inspectorate of Probation (HMIP), 2021a, HMIP, 2021b).

The Criminal Justice Act (2003) introduced treatment requirement options for community sentences in England and Wales, which require recipients to attend treatment for alcohol or drug misuse and/or mental health issues. This report refers to them collectively as Community Sentence Treatment Requirements (CSTRs). There are three types of CSTR in legislation: Alcohol Treatment requirements (ATRs), Drug Rehabilitation Requirements (DRRs), and Mental Health Treatment Requirements (MHTRs). They can be included as a requirement of a community order or a suspended sentence order.

Community sentences with CSTRs were introduced to facilitate the access to community-based treatment provided by Local Authorities, reducing health and social inequalities. As a sentencing option, CSTRs aim to address the root causes of offending behaviour and improve health outcomes. CSTRs offer a diversion away from short custodial sentences, aid rehabilitation and ultimately aim to reduce reoffending. A logic model was constructed across the Health and Justice Partnership that invest in and support the delivery of CSTRs to represent the Theory of Change that underpins a CSTR, see appendix A.

To be eligible for a CSTR, the individual being sentenced must be dependent on alcohol for an ATR, have a dependency or a propensity to use illegal drugs for a DRR, or have a mental health issue for an MHTR. Additionally, the court must also be satisfied that the individual being sentenced requires and would benefit from treatment, can access treatment, consents to treatment, and is willing to comply.

CSTRs can be sentenced alongside other requirements, such as unpaid work, as well as dual CSTRs where individuals are sentenced to an MHTR in addition to an ATR or DRR.

The length of the CSTR should reflect the treatment need and be agreed with the treatment providers. CSTRs can last for a maximum of three years, although some may not last the full duration of the community sentence, and for some individuals the treatment may continue after the duration of their CSTR has finished.

The Probation Service is responsible for treatment referrals, monitoring compliance, and, for DRRs, can provide reports on progress to the courts, whilst the delivery of the treatment element of CSTRs is the responsibility of community healthcare treatment providers. The content of CSTRs differs by what is appropriate for the individual as well as by what local services are available. Therefore, CSTRs cover a broad range of interventions, for example, talking therapies, psychosocial support, medication, or inpatient treatment.

Whilst ATRs, DRRs, and MHTRs have been available to courts as sentencing options for offences committed since April 2005², there have been more recent initiatives to increase community sentence treatment provision.

The Smarter Approach to Sentencing White Paper (MoJ, 2020) announced the intention to evaluate the impact of CSTRs, whilst expanding the availability and usage of CSTRs. A range of initiatives were put in place to support the uplift, including encouraging courts to use the NHS Liaison and Diversion service, who assist with detecting treatment needs and ensuring the right information is available to courts ahead of sentencing for CSTRs to be considered. Furthermore, NHS England are funding the incremental roll out of primary care MHTRs, which began in 2017, in addition to the existing secondary care MHTRs.

Primary care MHTRs³ provide individualised psychological interventions to address underlying mental health needs. For individuals who present with more complex mental health issues and require specialist support, a secondary care MHTR would be

They were introduced in the Criminal Justice Act (2003) and became available as a sentencing option in 2005 with a commencement order (Criminal Justice Act, Commencement No. 8, 2005).

Primary care MHTRs are delivered by dedicated mental health teams who are integrated into local court processes and provide psychological interventions for lower-level mental health issues (NHS England).

considered⁴ (Institute for Public Safety and Justice, 2022). Alongside this roll out of specially commissioned services, the programme also introduced a CSTR protocol, aiming to increase awareness and partnership working (Department of Health and Social Care (DHSC), 2019).

The 2021 joint thematic inspection of community-based drug treatment with people on probation highlighted the importance of partnership working and evidence-based recovery interventions to improve outcomes (HMIP, 2021a). The independent review of drugs by Dame Carol Black (Black, 2021) also recommended cross-departmental work to improve treatment pathways from criminal justice settings, with a focus on "maximising the use of CSTRs". In response, the 10-year Drug Strategy (HM Government, 2022) was published, with funding allocated for the Ministry of Justice (MoJ) to deliver an increase in the use of DRRs in community sentencing. This includes increasing probation's ability to drug test those on DRRs, which will ensure probation can more effectively monitor compliance and drug test more consistently, aiming to build sentencer confidence. To compliment this, the Department of Health and Social Care (DHSC) have invested £532 million to increase substance misuse treatment provision in local authorities, including recruiting dedicated criminal justice focused staff who will work across police custody, courts, probation, and prisons to improve criminal justice treatment pathways.

2.2 Existing Evidence

There is existing evidence that alcohol and drug misuse, and mental health issues are commonly associated with offending behaviour – HMPPS caseload data suggest that 34% of those with a community sentence had a drugs misuse criminogenic need, 20% had an alcohol misuse criminogenic need and 11% had a mental health issue in 2018⁵. For those with a custodial sentence, 45% had a drug need, 17% had an alcohol need and 12% had a mental health issue (MoJ, 2019).

Individuals are referred to secondary care services when their primary care professional is unable to resolve their issues. Secondary care MHTRs are used when an individual's mental health condition reaches a clinical threshold for secondary care and may include treatment at hospital, psychological wellbeing services or community mental health teams.

⁵ On 30 June 2018, for those with a complete (Layer 3) Offender Assessment System (OASys) record.

Addressing treatment needs of individuals in the Criminal Justice System (CJS) is a key component of MoJ's departmental priority of reducing reoffending. CSTRs included within a community sentence offer an alternative sentencing option to short custodial sentences for individuals who are suitable for treatment. Previous evaluations have found that community sentences are associated with lower rates of reoffending (Mews, Hillier, McHugh and Coxon, 2015) and are more effective in addressing offending behaviour (Hetherington, Victor and Park, 2019) compared to short custodial sentences.

Evidence suggests that community sentences are particularly effective at reducing reoffending for repeat offending individuals over short custodial sentences, with reoffending rates more than a third higher where those who prolifically offended were sentenced to short custodial sentences rather than a community order (Hillier & Mews, 2018).

Theft offences are the most common type of offence of prolific offending individuals (MoJ, 2023b) and half of all acquisitive crime has been found to be linked to addiction (Black, 2020, Home Office, 2013), whilst mental health has also been found to be significantly associated with offending and prolific offending (Rodriguez, Keene and Li, 2009). Together this evidence suggests that community sentences may be more effective than custody for those with drug, alcohol, and mental health issues that prolifically offend.

Whilst this existing research indicates that community sentences reduce reoffending, it does not differentiate between community sentences with and without CSTRs. This impact analysis compares sentences including a CSTR with other alternative sentence types (community sentences without a CSTR and short custodial sentences of 2 years or less) to fill this gap in the literature.

Existing evidence for alcohol treatment in the CJS

Since 2017, there have been between 5,000 to 6,000 ATRs sentenced under community orders and suspended sentence orders annually, except for 2020 when sentencing was impacted by the COVID-19 pandemic and the number of ATRs fell to around 3,800 (MoJ & HM Prison and Probation Service (HMPPS), 2023).

There is little evidence on treating alcohol dependency and the influence it has on reoffending outcomes, specifically following a community sentence with an ATR. Whilst

prison interventions aimed to address alcohol dependency have been found to deliver mixed results, they do demonstrate the potential to impact on alcohol usage, yet the evidence that they reduce reoffending is limited (de Andrade, Ritchie, Rowlands, Mann and Hides, 2018; Newbury-Birch et al., 2018; Sondhi, Leidi and Best, 2021).

Regarding community-based treatment, there are some small-scale outcome studies that suggest that ATRs generate positive change, with reductions of alcohol consumption following treatment (Ashby, Horrocks and Kelly, 2011; Harkins, Morleo and Cook, 2011). However, these studies were conducted over ten years ago, they did not include comparison groups, and reoffending measures are not considered valid as sufficient time had not lapsed to accurately measure reoffending rates.

Despite this, experimental statistics linking health and justice data suggested that those in treatment for alcohol misuse only, showed reductions in number of reoffences and reoffending in the two years following the start of treatment (59% and 49% respectively) (MoJ & Public Health England (PHE), 2017), although this analysis did not compare outcomes against other sentencing options. In addition, a previous MoJ study reported equivalent reoffending outcomes when ATRs were used for those with alcohol misuse issues compared to matched groups with other sentencing disposals (Hillier & Mews, 2018). Similarly, one study comparing reoffending of those sentenced with an ATR against a statistically matched control group found no differences in the time taken to reoffend or the number of proven reoffences committed (McSweeney, 2015). Although, this study was conducted with a relatively small, historical ATR cohort.

Existing evidence for drug treatment in the CJS

Just under 6,000 DRRs were sentenced in 2022 under community orders and suspended sentence orders. The volume has halved over the last 10 years, although this trend is consistent with the number of community sentences (MoJ & HMPPS, 2023).

Existing evidence of DRR outcomes is limited. Although specialist drug treatment in prisons is generally associated with reductions in the risk of reoffending (Perry et al., 2009; PHE, 2017), a systematic review of literature related to community supervision and treatment for substance misuse concluded that despite clear benefits (improved health and reduced reoffending), further research and investment is needed to support

commissioning to reflect the profile of needs of people on probation (Sirdifield, Brooker and Marples, 2020).

A study published in 2017 found that in the two years post drug treatment, 44% of opiate users who completed drug treatment did not reoffend compared to 20% of opiate users who dropped out of drug treatment (PHE & MoJ, 2017). However, due to methodology limitations, results are considered indicative, and differences could be due to the differences between those who completed treatment and those who dropped out, as no statistical matching took place.

Comparing against a matched control group, previous Justice Data Lab (JDL) analyses explored the impact on reoffending of local DRR services (MoJ, 2016a; MoJ, 2016b). Results were limited due to small sample sizes and non-significant findings.

Existing evidence for mental health treatment in the CJS

The number of MHTRs has rapidly increased over the last couple of years, with just over 2,000 sentenced in 2022 under community orders and suspended sentence orders, up from around 1,300 in 2021 (MoJ & HMPPS, 2023). This increase was anticipated as a result of the roll out of the primary care MHTR, which has been iteratively expanding since 2017 to enable the population of England to have access to the service by 2024 (DHSC, 2019; NHS, 2019).

There is some evidence surrounding MHTR outcomes, however, studies should be treated with caution as some results could be explained by other differences between groups, and studies are limited in sample size or by data reliability. For example, an early evaluation of clinical outcomes of primary care MHTRs indicated significant improvements on measures of depression and anxiety, yet only examined a single cohort pre and post their MHTR (Long, Dolley and Hollin, 2018).

According to an MoJ study published in 2018, secondary care MHTRs were associated with significant reductions in reoffending where they were used, compared with similar cases where they were not (Hillier & Mews, 2018). Over a one-year follow-up period, there was a reduction of around 3.5 to 5 percentage points in the incidence of reoffending where such requirements were used as part of a community sentence.

NHS-E have commissioned a multi-site evaluation to be carried out by the University of Northampton. Final analysis is expected to report in Autumn 2025, although preliminary findings have identified mental health benefits for individuals who completed primary care MHTRs, reporting improvements post treatment on measures of global distress, anxiety, and depression (Callender, Sanna and Cahalin, 2023).

Previous analysis of proven re-offending rates of individuals who had received MHTRs found no evidence of either an increase or decrease in proven reoffending rates following treatment, likely due to the small sample size (MoJ, 2017).

Wider analytical work: Better Outcomes through Linked Data (BOLD) programme
This impact evaluation forms part of a larger programme of analytical work assessing
CSTRs and outcomes, including analysis from the Better Outcomes through Linked Data
(BOLD) programme.

The BOLD programme, led by MoJ, aims to improve the connectedness of government data, and ultimately enable better quality evidence on government interventions. The BOLD substance misuse team carried out a project exploring pathways between probation and drug and alcohol treatment services. Results indicated that of the 48% of ATR recipients who were identified in the treatment services data, 48% had completed their treatment, 22% were still in treatment and 29% had dropped out, and frequency of alcohol use had decreased (OHID & MoJ, 2023).

For those sentenced to a DRR, results indicated that of the just over a third (35%) of individuals who were identified in the treatment services data, 20% had completed their treatment, 33% were still in treatment and 46% had dropped out, and frequency of drug use decreased for all drug types except cannabis. However, due to dataset limitations, there may be ATR and DRR recipients who attended treatment but were not able to be confidently identified and linked in the treatment services data (OHID & MoJ, 2023).

To continue the investigation of the potential attrition between sentencing and accessing treatment services, BOLD are undertaking further analysis. Future projects will further

⁶ Percentages have been rounded to the nearest whole number and may not sum to exactly 100 due to rounding.

examine the existing findings of the first BOLD project whilst taking account of the findings from this impact evaluation. Together these analysis projects will build understanding of CSTR sentencing, delivery and impacts across Health and Justice to inform future policy decisions.

2.3 Research Aim

MoJ have been working in partnership with HMPPS, DHSC, and NHS England to assess whether CSTRs are meeting their aims and having the impact anticipated. Whilst there is some existing evidence on CSTR outcomes, overall research is limited and excludes reoffending analysis on the same scale as this impact evaluation.

The aim of this analysis was to estimate the impact of being sentenced with an ATR, DRR, or MHTR on two Justice outcomes:

- Successful community sentence (community orders and suspended sentence orders combined) completion,
- Proven reoffending outcomes one year after sentencing, including reoffending rate, frequency of reoffending, days to first reoffence, and rate and frequency of reoffences resulting in custodial sentences.

To understand the impact of increased investment on the effectiveness of these requirements, the impact prior to this investment needs to first be assessed. This analysis examined data from 2018 prior to probation unification and the increased CSTR investment. It also allowed a full year for reoffending before the COVID-19 pandemic and lockdown measures that influenced incidence and patterns of crime (Office for National Statistics, 2021). Therefore, it provides a baseline measure of the impact of CSTR sentencing, which will enable the impact of the increased investment to be examined in the future.

3. Methodology

There are differences in the characteristics of individuals who are sentenced with each type of CSTR (the treatment groups) and those who are not (see appendix C). Therefore, if these groups were compared directly, it would not be clear whether any differences in sentence completion or proven reoffending were due to being sentenced with a CSTR, or due to another characteristic that was more, or less, common in CSTR recipients.

3.1 Propensity score matching

To compare outcomes, a comparison group of individuals with similar characteristics but sentenced without a CSTR was required. As CSTRs have been available since 2005, require consent, and could not be feasibly or ethically allocated at random due to judicial independence, approaches to measure impact such as randomised control trial, interrupted time series or difference in differences, would not be feasible. In a similar approach to previous MoJ analyses (Eaton & Mews, 2019; Gray, Finn, Gent and Huttlestone, 2023), propensity score matching (PSM) was used. PSM is a statistical technique which, in this analysis, aimed to create matched control groups as similar as possible to the groups of individuals sentenced to each type of CSTR, so that any differences between the groups' outcomes were due to the CSTR sentence. Individuals with the same characteristics may receive differing sentences due to outside factors such as the availability of assessors or treatment places, or judicial discretion.

Based on a standard MoJ methodology, propensity scores were derived for each individual reflecting the likelihood of receiving a CSTR, given the recorded characteristics. Individuals in each treatment group (ATR, DRR, and MHTR) were then matched to individuals with similar propensity scores who were not sentenced with a CSTR.

Analysis was conducted independently for each of the ATR, DRR, and MHTR groups and comparison groups (short custodial sentence/community sentence without a CSTR) combinations. This was so the impact of each type of CSTR compared to the other sentencing options could be detected.

The methodology was based on a standard approach used by MoJ (MoJ, 2013) and methodological decisions were cleared through an analytical working group and a policy and operational working group, including colleagues from HMPPS, DHSC, OHID, and NHS-E. Reporting followed departmental and Government Social Research procedures and received clearance from senior colleagues.

3.2 Sample and dataset

Treatment and comparison groups

The treatment groups consisted of all individuals who were sentenced to an ATR, DRR, or MHTR in 2018. The comparison groups⁷ consisted of two main groups:

- community sentence without a CSTR comparison group individuals who were sentenced to a community order or suspended sentence order without any CSTR, in 2018. Community order and suspended sentence order recipients were included as a combined group and were not analysed separately.
- short custodial sentence comparison group individuals who were released from a short custodial sentence of two years or less, in 2018.

Where possible, subgroup analysis was conducted to look at the outcomes for males, females, individuals living in England and individuals living in Wales – results are included in appendix B.

Data sources

Existing data were accessed in line with the HM Inspectorate of Probation Privacy Notice (April 2023).

Details of all individuals sentenced with an ATR, DRR, or MHTR⁸ in 2018 were drawn from National Delius (nDelius), the Probation Service's case management system. Dual

To maximise the size of the comparison groups, the same sample was used for matching. Each group was filtered to the relevant need (drug needs for DRR comparisons, alcohol needs for ATR comparisons, mental health issues for MHTR comparisons) and propensity scores used offending risk based on specific needs so individuals could appear in multiple groups but would need to be closely matched to the treatment group. If individuals were included in any of the treatment groups, they were not included in any of the comparison groups.

⁸ It was not possible to tell from the data whether MHTR recipients received primary or secondary care MHTRs, and primary care MHTRs had not been rolled out to the majority of England in 2018.

CSTRs, where individuals are sentenced to an MHTR in addition to an ATR or DRR, were excluded so it was clear in the analysis which CSTR type was having any impact (138 cases dropped).

The nDelius data were linked with the Police National Computer (PNC), to investigate reoffending outcomes and offending history, and with the Offender Assessment System (OASys)⁹ data, to include criminogenic needs and other characteristics. A comparison group was drawn of individuals who had received a community sentence without a CSTR in 2018 or had been released in 2018 from a short custodial sentence of two years or less. Information on characteristics, history, previous offences, reoffending, and various risk factors were included in the final dataset. Individuals with a history of sexual offences were excluded as their reoffending behaviour differs to other crimes (MoJ, 2018).

Size of treatment and comparison groups before matching

Using OASys records, scores were calculated to indicate drug misuse and alcohol misuse needs and mental health issues for each individual (see appendix D for calculation details). Only individuals with relevant needs/issues recorded were selected for analysis for both the treatment and comparison groups, i.e. an alcohol misuse need for ATR analyses, a drug misuse need for DRR analyses, and a mental health issue for MHTR analyses.

Before filtering to those with a relevant need and matching, 39% of ATR recipients, 62% of DRR recipients and 26% of MHTR recipients were proven to have reoffended within one year of sentencing.

⁹ The most complete OASys record from 6 months either side of the sentence date was selected.

Table 1: Number of people in treatment groups before matching

	Treatment groups		
	ATR	DRR	MHTR
Unique CSTR recipients available for analysis excluding dual CSTRs	5,141	7,795	571
After excluding CSTR recipients who could not be identified on the PNC or had previously been convicted of sexual offences	4,441	6,389	485
After excluding CSTR recipients who did not have an OASys record or recorded relevant 10 alcohol, drug, or mental health issue	3,088	4,383	337
Percentage of CSTR recipients included in analyses ¹¹	60%	56%	59%

Table 2: Number of people in the comparison groups before matching

	Comparison groups			
	Recipients of a community sentence without a CSTR			
All individuals in dataset	98,471	28,853		
All individuals with an OASys record	86,743	26,997		
Percentage included in analyses	88%	94%		

3.3 Analysis

After data cleaning, logistic regression models were developed that predicted the likelihood of being sentenced with an ATR, DRR, or MHTR.

To be included in the model, variables generally needed to be related to the likelihood of receiving treatment or of reoffending. Over 100 variables were included in the initial models, which were then simplified using Backwards Stepwise Elimination – where the least significant variable was dropped and the model run again, then this process repeated until the model stopped improving. Propensity scores were then calculated.

Relevant needs are drug needs for DRRs, alcohol needs for ATRs and mental health issues for MHTRs. Individuals with a relevant need of any severity were included, and individuals without a relevant need were excluded.

¹¹ These inclusion rates fall within the normal range for this type of analysis on this cohort.

Each individual in the treatment group was matched with all individuals in the comparison group who had a propensity score within a certain range of the treated individual's propensity score – a one-to-many approach¹². This resulted in a larger matched control group than treatment group, and individuals in the matched control group could be matched with multiple individuals in the treatment group. This was accounted for by weighting each individual in the matched control group. Using this method meant matched individuals had very similar characteristics, despite having different sentences.

The models and matching were checked for quality. This included reviewing the variables included in the models and their p-values and estimated coefficients, visually checking histograms of logit propensity scores, and calculating the receiver operating characteristic statistic to check it was above 0.7. To check the quality of the control group matching, mean standard differences and matching rates were calculated for each combination of CSTR type and matched control group, for each outcome.¹³ Each variable was checked to ensure the treatment and matched control group were closely matched.

A statistical test¹⁴ (Welch's t-test) was then used to identify statistically significant differences in outcomes between treatment and matched control groups. The analysis aimed to look at the following outcomes:

Successful completion of community sentence rate – whether those on a community sentence successfully completed their sentence, i.e. without failing to comply or being convicted of a further offence. This outcome could not be reliably compared across groups with and without a CSTR as, due to restrictions on data access and linking to successful completion data, it was not possible to include enough variables to produce a reliable and accurate model to calculate propensity

The range, or caliper, starts at 0.1 standard deviations above or below the logit propensity score. The groups were matched and the mean absolute standardised difference (MASD) for the characteristics was calculated – this shows how similar the characteristics of the two groups are. The caliper was then reduced, and the groups were matched and MASD was calculated again. This process was repeated to find a caliper that resulted in a high proportion of the treatment group being matched in the matched control group, while making sure the characteristics of groups were closely matched.

Checked all standardised mean differences were within the -10% to 10% range with the vast majority between -5% and 5%. Matching rates were high – for most models, over 98% of the treatment group was matched, with one exception where 89% of the treatment group were matched to ensure the matched control group was as similar as possible to the treatment group. See appendix F for more details.

Welch's t-test was used to test for significance at the 0.05 level. The outcomes and statistical tests were decided before analysis began and no corrections for multiple comparisons have been applied.

scores and construct well-matched control groups. Sentence completion outcomes are therefore not included in the report. Future analysis could explore other ways to link these data.

- 2. **Reoffending rate** whether individuals were proven to have reoffended within one year of sentence date or release date for short custodial sentence recipients.
- 3. **Frequency of reoffending** the number of incidences of proven reoffending in one year after sentencing or release.
- 4. **Days to first reoffence** the number of days between sentencing or release from custody and the first proven reoffence, for those who had reoffended within one year of sentencing or release.
- 5. **Reoffending resulting in custody rate** whether individuals were proven to have reoffended and received a custodial sentence within one year of sentencing or release.
- 6. **Frequency of reoffending resulting in custody** the number of incidences of proven reoffending that resulted in custody, within one year of sentencing or release, for those who had reoffended within one year.

Cohen's d was also calculated to help interpret the effect size. Typically, a Cohen's d statistic of 0.2 is considered a small effect size, 0.5 is considered a medium effect size and 0.8 is considered a large effect size (Cohen, 1988).

For the matched control groups for reoffending outcomes, mean standard differences were low and matching rate was high, which indicated well balanced, representative groups.

The methodological approach, analysis, and results were quality assured by internal analysts, who had not worked on the project previously.

3.4 Data limitations

This impact evaluation is limited by the data recorded and available for the analysis, for example:

- Over a hundred variables were used in this analysis (see appendix E). Whilst the
 data that are recorded are used by probation staff and judges to inform their
 decision making, they may also have more information on the context of the
 offending behaviour which is not available in the data. There may be unobserved
 characteristics that are not captured, or not captured accurately, in the data
 available, which could influence the decision to sentence with an ATR, DRR, or
 MHTR and also influence reoffending behaviour. This is a consideration for any
 PSM analysis.
- Whilst the data do not include a variable on whether individuals were suitable for a CSTR, the analysis did include variables relating to eligibility, such as severity of alcohol and drug misuse and mental health issues, whether these issues were linked to offending behaviour and whether the individual was motivated to address their issues. However, it is not possible from these data alone to concretely identify which individuals were suitable for a CSTR.
- Variables that indicated drug misuse, alcohol misuse, and mental health issues
 were crucial for the analysis so only those with OASys records where the relevant
 questions were completed were included. Those who are higher risk or have
 offended more frequently may be more likely to receive a more complete OASys
 assessment so the sample may be biased.

3.5 Caveats

This impact evaluation has several caveats that should be considered along with the findings, including:

• This analysis compared the outcomes of those sentenced with and without an ATR, DRR, or MHTR – it was an 'intention to treat' impact analysis. Sentencing does not guarantee the individuals accessed treatment and data were not available on whether individuals attended, engaged with, or completed the relevant treatment. Health data were unable to be linked due to data sharing restrictions and nDelius data were not specific enough to indicate whether individuals attended treatment. Likewise, data were not available to confirm those

individuals not sentenced with a CSTR were not receiving treatment for these issues. This is a limitation of any 'intention to treat' impact analysis.

- The alcohol, drug, and mental health treatment received as a result of a CSTR varies considerably based on a variety of factors including delivery location, quality of the treatment, and individual experience and these factors may influence reoffending outcomes. As this analysis assessed the impact of sentencing, these factors were not taken into account.
- Individuals were selected on the first sentence in 2018. It is not uncommon for
 those who received a CSTR and then reoffended to be sentenced with a CSTR
 again 16% of CSTR recipients from 2018 to 2022 received multiple sentences
 with a CSTR. These individuals are only included in the analysis on their first
 offence in 2018. Individuals could also have received a CSTR before 2018.
- Individuals who received a custodial sentence or were recalled to custody would
 not have the same opportunity to reoffend while in custody as those not in
 custody. This could affect the frequency of reoffending outcome however, as a
 small proportion of individuals received a custodial sentence, this is unlikely to
 have had much effect on the results.
- This analysis provides a baseline and may not be representative of CSTR
 recipients in 2024 as there have been considerable changes since 2018, for
 example MHTR availability has increased considerably, Probation Service has
 been unified, and treatment services have received additional funding. This
 analysis however acts as a baseline for future analysis and an assessment
 of change.

4. Results

Results are reported for each CSTR type individually, results from subgroup analysis are included in appendix B and group characteristics before matching are included in appendix C. In this section, reoffending refers to proven reoffending – offences that are recordable, committed in England or Wales, prosecuted by the police, proven through caution or court conviction and are not breach offences (MoJ, 2023a).

After undertaking propensity score matching, there was very little difference between characteristics of the treatment and matched control groups. The matched control groups are referred to as those on a community sentence without a CSTR and those released from a short custodial sentence. These groups are matched to have similar characteristics to each CSTR group, including reported drug misuse, alcohol misuse, and mental health issues.

4.1 Outcomes for Alcohol Treatment Requirement (ATR) recipients compared with matched individuals sentenced without a CSTR

Averages for each reoffending outcome measure and matched control group are included in Table 3 and Table 4.

Successful community sentence completion

For all ATR recipients sentenced in 2018, just over two thirds (67%) successfully completed their community sentence, 16% were convicted of a further offence before the end of their sentence¹⁵, 10% failed to comply with conditions and 3% did not complete for other reasons. Community sentence termination data for 5% of ATR recipients were not available.

This does not match the reoffending rate as individuals may have completed their sentence or failed to comply with their sentence before reoffending.

Due to data issues, it was not possible to create robust models and well-matched control groups to compare successful community sentence completion rate with ATR recipients – see the methodology section for more detail.

Reoffending Outcomes

Proven reoffending

Reoffending rates were very similar between ATR recipients and recipients of a community sentence without a CSTR (42% and 40% respectively) and ATR recipients and short custodial sentence recipients (45% for both) and there were no statistically significant differences. This means this analysis does not provide evidence to suggest sentencing with an ATR increased or decreased the reoffending rate. This could be due to multiple reasons, for example any effect size being small or hard to detect in analysis, or due to ATRs sentenced in 2018 not having an impact on reoffending rates.

Frequency and time to proven reoffence (individuals who reoffended only)

ATR recipients were convicted of fewer reoffences than those on a short custodial sentence, indicating they reoffended slightly less frequently than individuals released from a short custodial sentence in 2018 – a statistically significant difference (1.73 and 1.99 respectively, 0.26 fewer reoffences on average). This analysis does not provide evidence to suggest sentencing with an ATR increased or decreased the frequency of reoffences compared with recipients of a community sentence without a CSTR.

Previous research explored time taken to reoffend following an ATR found no significant difference, although it reviewed data from 2005 to 2008, had a small sample size, and did not include matching to different sentence types (McSweeney, 2015). In this analysis, when compared with both recipients of community sentences without a CSTR and short custodial sentences, ATR recipients who reoffended took on average around 12 days longer to reoffend. On average, ATR recipients took just under 17 weeks to reoffend compared with just over 15 weeks for both matched control groups. Compared with both matched control groups, a higher proportion of ATR recipients took 12 weeks or longer to reoffend (Figure 1).

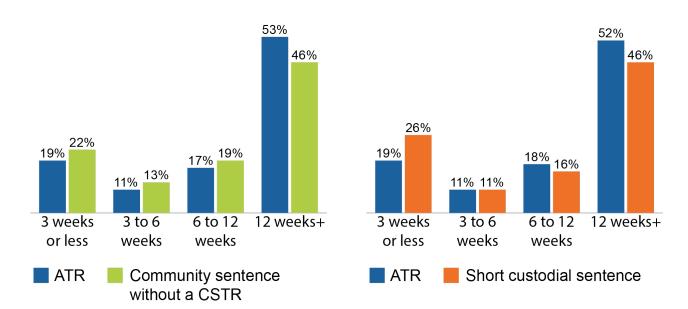


Figure 1: Time to first reoffence for ATR recipients compared to respective matched control groups (individuals who reoffended only)

Figures for ATR recipients may differ when comparing groups for community sentences without a CSTR and short custodial sentences. This is because distinct PSM models were conducted for each matched control group. Therefore, the match rate of the treatment group – and in turn the individuals they were matched to in the matched control group – will differ for each analysis.

Proven reoffending resulting in a custodial sentence (individuals who reoffended only)

ATR recipients were less likely to reoffend and receive a custodial sentence than both recipients of community sentences without a CSTR (33% and 38% of those who reoffended, respectively) and short custodial sentences (34% and 39% of those who reoffended, respectively) – statistically significant results. This could indicate ATR recipients were less likely to be convicted of reoffences serious enough to receive a prison sentence. Results also indicate that, compared with short custodial sentence recipients, ATR recipients were convicted of fewer reoffences resulting in a custodial sentence (1.57 and 2.12 respectively, 0.54 fewer reoffences on average). The analysis does not provide evidence that receiving an ATR sentence increased or decreased the frequency of reoffending resulting in a custodial sentence, when compared with recipients of a community sentence without a CSTR (1.53 and 1.64 average reoffences respectively).

Table 3: Reoffending outcomes for ATR recipients compared with recipients of a community sentence without a CSTR

	Community sentence with an ATR (CI)	sentence without a	Difference [†]	p-value	Standardised effect size (Cohen's d)
Proven reoffending rate	42%	40%	2%	0.07	-0.066
Proven reoffending resulting in a custodial sentence rate	33%*	38%*	-4%*	<0.01	-0.138
Average number of proven reoffences	1.59 (0.11)	1.49 (0.05)	0.10	0.10	-0.081
Average number of days to first proven reoffence	118.93* (5.49)	106.51* (2.38)	12.42*	<0.01	0.103
Average number of proven reoffences resulting in a custodial sentence	1.53 (0.14)	1.64 (0.06)	-0.11	0.15	-0.125

ATR recipients n=3,064; recipients of a community sentence without a CSTR n=14,528

Table 4: Reoffending outcomes for ATR recipients compared with short custodial sentence recipients

	Community sentence with an ATR (CI)	Short custodial sentence without a CSTR (CI)	Difference [†]	p-value	Standardised effect size (Cohen's d)
Proven reoffending rate	45%	45%	<1%	0.75	-0.546
Proven reoffending resulting in a custodial sentence rate	34%*	39%*	-5%*	<0.01	-0.536
Average number of proven reoffences	1.73* (0.12)	1.99* (0.09)	-0.26*	<0.01	-0.506
Average number of days to first proven reoffence	118.32* (5.57)	106.25* (3.02)	12.07*	<0.01	0.577
Average number of proven reoffences resulting in a custodial sentence	1.57* (0.14)	2.12* (0.09)	-0.54*	<0.01	-0.507

ATR recipients n=2,741; short custodial sentence recipients n=6,478

Bold text and * denotes a statistically significant difference. Differences may not sum due to rounding. Percentages are rounded to the nearest whole number, p-values are rounded to 2 decimal places and all other values are rounded to 2 decimal places. The confidence interval¹⁶ (CI) is included in brackets.

[†]A negative difference indicates a positive result for ATR recipients, except for average days to first proven reoffences, where a positive number is positive as it indicates ATR recipients took a higher number of days before reoffending on average.

Averages may differ when comparing groups for community sentences without a CSTR and short custodial sentences. This is because distinct PSM models were conducted for each matched control group. Therefore, the match rate of the treatment group – and in

sentence without a CSTR or short custodial sentence.

The average given is the mean for the group included in the research. The confidence interval provides a range of plus or minus from the group mean (average) that, in 95% of research samples, contains the true population mean i.e. the mean of the entire population who have an ATR, DRR, MTHR, community

turn the individuals they were matched to in the matched control group – will differ for each analysis.

4.2 Outcomes for Drug Rehabilitation Requirement (DRR) recipients compared with individuals sentenced without a CSTR

Averages for each reoffending outcome measure and matched control group are included in Table 5 and Table 6.

Successful community sentence completion

For all DRR recipients sentenced in 2018, 41% successfully completed their community sentence, 30% were convicted of a further offence before the end of their sentence¹⁷, 22% failed to comply with conditions and 2% did not complete for other reasons. Community sentence termination data for 5% of DRR recipients were not available. This completion rate is in line with other analysis of DRR completion rates (HMIP & Care Quality Commission, 2021).

Due to data issues, it was not possible to create robust models and well-matched control groups to compare successful community sentence completion rate with DRR recipients – see the methodology section for more detail.

Reoffending outcomes

Proven reoffending

Reoffending rates were similar between DRR recipients and each of the matched control groups (63% for both DRR recipients and recipients of a community sentence without a CSTR, 64% for both DRR and short custodial sentence recipients) and there were no statistically significant differences. This means this analysis does not provide evidence to suggest sentencing with a DRR increased or decreased the reoffending rate. This could be due to multiple reasons, for example the size of any impact being small or hard to detect in analysis, or DRRs sentenced in 2018 may not have had an impact on reoffending rates.

¹⁷ This does not match the reoffending rate as individuals may have completed their sentence or failed to comply with their sentence before reoffending.

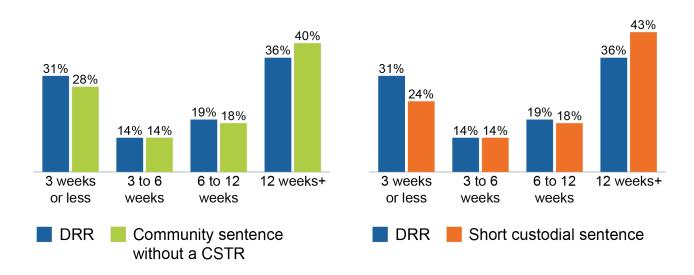
This is in line with previous analysis conducted by JDL with smaller sample sizes (MoJ, 2016a).

Frequency and time to proven reoffence (individuals who reoffended only)

Findings on frequency of reoffending were mixed. On average, DRR recipients were convicted of slightly more reoffences than those on a community sentence without a CSTR (3.55 and 3.37 average reoffences respectively) but fewer offences than short custodial sentence recipients (3.56 and 3.93 average reoffences respectively). This indicates DRR recipients reoffended slightly more frequently than recipients of a community sentence without a CSTR (0.18 more reoffences) but less frequently than those released from a short custodial sentence in 2018 (0.38 fewer reoffences). Although small, this was a statistically significant difference for both comparisons.

On average, DRR recipients took around 12 weeks to reoffend compared with community sentence recipients, who took an average of 13 weeks to reoffend. DRR recipients took an average of around 12 weeks to reoffend compared with around 14 weeks for short custodial sentence recipients. Compared with both recipients of community sentences without a CSTR and short custodial sentences, DRR recipients took fewer days on average to reoffend (4.33 fewer days than community sentence without a CSTR, 12.28 fewer days than short custodial sentence recipients). A higher proportion of DRR recipients reoffended within 3 weeks of their sentence date compared with both matched control groups (Figure 2).

Figure 2: Time to first reoffence for DRR recipients compared to respective matched control groups (individuals who reoffended only)



Figures for DRR recipients may differ when comparing groups for community sentences without a CSTR and short custodial sentences. This is because distinct PSM models were conducted for each matched control group. Therefore, the match rate of the treatment group – and in turn the individuals they were matched to in the matched control group – will differ for each analysis.

Proven reoffending resulting in a custodial sentence (individuals who reoffended only)

DRR recipients were less likely to reoffend and receive a custodial sentence than short custodial sentence recipients (47% and 53% of those who reoffended, respectively) – a statistically significant result. Results also indicate that, compared with short custodial sentence recipients, DRR recipients were convicted of fewer reoffences resulting in a custodial sentence (3.20 and 3.78 respectively, 0.58 fewer average reoffences). This could indicate DRR recipients were less likely to be convicted of reoffences serious enough to receive a prison sentence.

This analysis does not provide evidence to suggest sentencing with a DRR increases or decreases the rate or average frequency of reoffences resulting in a custodial sentence compared with those on a community sentence without a CSTR (47% and 49% of those who reoffended, respectively; 3.19 and 3.02 respectively) – results were not statistically significant.

Table 5: Reoffending outcomes for DRR recipients compared with recipients of a community sentence without a CSTR

	Community sentence with a DRR (CI)	sentence	Difference [†]	p-value	Standardised effect size (Cohen's d)
Proven reoffending rate	63%	63%	<1%	0.52	0.230
Proven reoffending resulting in a custodial sentence rate	47%	49%	-2%	0.07	0.126
Average number of proven reoffences	3.55* (0.15)	3.37* (0.07)	0.18*	0.04	0.272
Average number of days to first proven reoffence	86.64* (3.37)	90.97* (1.76)	-4.33*	0.03	-0.256
Average number of proven reoffences resulting in a custodial sentence	3.19 (0.16)	3.02 (0.08)	0.17	0.06	0.242

DRR recipients n=4,368; recipients of a community sentence without a CSTR n=19,676

Table 6: Reoffending outcomes for DRR recipients compared with short custodial sentence recipients

	Community sentence with a DRR (CI)	Short custodial sentence without a CSTR (CI)	Difference [†]	p-value	Standardised effect size (Cohen's d)
Proven reoffending rate	64%	64%	<1%	0.34	-0.147
Proven reoffending resulting in a custodial sentence rate	47%*	53%*	-6%*	<0.01	-0.234
Average number of proven reoffences	3.56* (0.15)	3.93* (0.09)	-0.38*	<0.01	-0.154
Average number of days to first proven reoffence	86.66* (3.37)	98.93* (1.86)	-12.28*	<0.01	0.114
Average number of proven reoffences resulting in a custodial sentence	3.20* (0.16)	3.78* (0.10)	-0.58*	<0.01	-0.188

DRR recipients n=4,357; short custodial sentence recipients n=14,065

Bold text and * denotes a statistically significant difference. Differences may not sum due to rounding. Percentages are rounded to the nearest whole number, p-values are rounded to 2 decimal places and all other values are rounded to 2 decimal places. The confidence interval (CI) is included in brackets.

[†]A negative difference indicates a positive result for DRR recipients, except for average days to first proven reoffences, where a negative number is negative as it indicates DRR recipients took a lower number of days before reoffending on average.

Averages may differ when comparing groups for community sentences without a CSTR and short custodial sentences. This is because distinct PSM models were conducted for each matched control group. Therefore, the match rate of the treatment group – and in turn the individuals they were matched to in the matched control group – will differ for each analysis.

4.3 Outcomes for Mental Health Treatment Requirement (MHTR) recipients compared with individuals sentenced without a CSTR

Averages for each reoffending outcome measure and matched control group are included in Table 7 and Table 8.

Successful community sentence completion

For MHTR recipients, 78% successfully completed their community sentence, 8% were convicted of a further offence before the end of their sentence¹⁸, 8% failed to comply with conditions and 2% did not complete for other reasons. Community sentence termination data for 5% of MHTR recipients were not available.

Due to data issues, it was not possible to create robust models and well-matched control groups to compare successful community sentence completion rate with MHTR recipients – see the methodology section for more detail.

Reoffending outcomes

Proven reoffending

MHTR recipients had a lower rate of reoffending than both recipients of a community sentence without a CSTR (27% and 34% respectively) and short custodial sentence recipients (27% and 36% respectively), indicating that MHTR recipients were less likely to reoffend than individuals without a CSTR. These results were statistically significant, and this is in line with previous research (MoJ, 2017).

Frequency and time to proven reoffence (individuals who reoffended only)

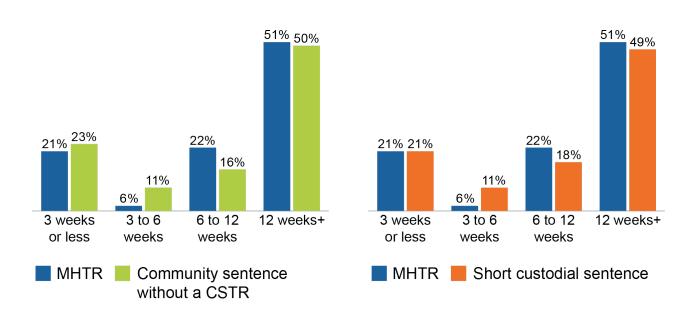
On average, MHTR recipients were convicted of fewer reoffences than short custodial sentence recipients, indicating MHTR recipients reoffended less frequently than those released from a short custodial sentence in 2018 (1.01 and 1.54 respectively, 0.53 fewer average reoffences). However, this analysis does not provide evidence that being sentenced with an MHTR increases or decreases the frequency of reoffending compared with recipients of a community sentence without a CSTR (1.00 and 1.28 average

¹⁸ This does not match the reoffending rate as individuals may have completed their sentence or failed to comply with their sentence before reoffending.

reoffences respectively), or the time taken to reoffend compared with either of the matched control groups (120.43 average days for MHTR recipients and 111.32 average days for recipients of a community sentence without a CSTR; 120.43 average days for MHTR recipients and 111.97 average days for short custodial sentence recipients). The results were not statistically significant. This could be due to the low sample size for MHTR recipients making any differences more difficult to detect in the analysis or may indicate sentences with an MHTR do not affect time taken to reoffend compared with sentences without a CSTR, or frequency of reoffending compared with community sentences without a CSTR.

Compared with both community and short custodial sentence recipients, a lower proportion of MHTR recipients reoffended within 6 weeks of their sentence date, and a higher proportion reoffended more than 6 weeks after their sentence date (Figure 3).

Figure 3: Time to first reoffence for MHTR recipients compared to respective matched control groups (individuals who reoffended only)



Figures for MHTR recipients may differ when comparing groups for community sentences without a CSTR and short custodial sentences. This is because distinct PSM models were conducted for each matched control group. Therefore, the match rate of the treatment group – and in turn the individuals they were matched to in the matched control group – will differ for each analysis.

Proven reoffending resulting in a custodial sentence (individuals who reoffended only) MHTR recipients were less likely to reoffend and receive a custodial sentence and were convicted of fewer reoffences resulting in custodial sentence on average than short custodial sentence recipients (28% and 45% of those who reoffended, respectively; 1.39 and 2.08 respectively). These results were statistically significant. This analysis doesn't provide evidence to suggest sentencing with an MHTR increased or decreased the rate of frequency of reoffending resulting in a custodial sentence compared with those on a community sentence without a CSTR (28% and 32% of those who reoffended, respectively; 1.39 and 1.61 respectively) – results were not statistically significant.

Table 7: Reoffending outcomes for MHTR recipients compared with recipients of a community sentence without a CSTR

	Community sentence with an MHTR (CI)	Community sentence without a CSTR (CI)	Difference [†]	p-value	Standardised effect size (Cohen's d)
Proven reoffending rate	27%*	34%*	-8%*	<0.01	-0.272
Proven reoffending resulting in a custodial sentence rate	28%	32%	-4%	0.36	-0.245
Average number of proven reoffences	1.00 (0.31)	1.28 (0.03)	-0.28	0.08	-0.200
Average number of days to first proven reoffence	120.43 (22.74)	111.32 (1.81)	9.11	0.43	0.277
Average number of proven reoffences resulting in a custodial sentence	1.39 (0.47)	1.61 (0.06)	-0.22	0.36	-0.192

MHTR recipients n=336; recipients of a community sentence without a CSTR n=29,374.

Table 8: Reoffending outcomes for MHTR recipients compared with short custodial sentence recipients

	Community sentence with an MHTR (CI)	Short custodial sentence without a CSTR (CI)	Difference [†]	p-value	Standardised effect size (Cohen's d)
Proven reoffending rate	27%*	36%*	-9%*	<0.01	-0.812
Proven reoffending resulting in a custodial sentence rate	28%*	45%*	-17%*	<0.01	-0.623
Average number of proven reoffences	1.01* (0.32)	1.54* (0.06)	-0.53*	<0.01	-0.545
Average number of days to first proven reoffence	120.43 (22.74)	111.97 (2.48)	8.46	0.46	0.772
Average number of proven reoffences resulting in a custodial sentence	1.39* (0.47)	2.08* (0.08)	-0.69*	<0.01	-0.499

MHTR recipients n=332; short custodial sentence recipients n=10,343.

Bold text and * denotes a statistically significant difference. Differences may not sum due to rounding. Percentages are rounded to the nearest whole number, p-values are rounded to 2 decimal places and all other values are rounded to 2 decimal places. The confidence interval (CI) is included in brackets.

[†]A negative difference indicates a positive result for MHTR recipients, except for average days to first proven reoffences, where a positive number is positive as it indicates MHTR recipients took a higher number of days before reoffending on average.

Averages may differ when comparing groups for community sentences without a CSTR and short custodial sentences. This is because distinct PSM models were conducted for each matched control group. Therefore, the match rate of the treatment group – and in turn the individuals they were matched to in the matched control group – will differ for each analysis.

5. Discussion and conclusion

The findings of this impact evaluation indicate that being sentenced with an ATR, DRR, or MHTR in 2018 had a positive effect on reoffending outcomes compared with short custodial sentences, which is in line with previous research findings. However, the results report mixed effects of being sentenced with a CSTR on reoffending outcomes compared with community sentences without a CSTR.

While ATRs and MHTRs did appear to have some positive effects on reoffending outcomes compared to community sentences without a CSTR, many outcomes showed non-significant results and effect sizes on some reoffending outcomes were small. The results of this analysis indicated DRR recipients reoffended more frequently and took fewer days to reoffend on average compared to recipients of community sentences without CSTRs.

Compared with community sentences without a CSTR, some of which receive very little formal supervision, community sentences with a CSTR may involve closer and more intensive supervision from probation and clinical staff, including review courts for sentences with a DRR. Therefore, it may be that reoffences are more likely to be detected and convicted for those with a CSTR.

Additionally, drug and alcohol misuse, and mental health issues are often long-term, and maintaining engagement in treatment can be challenging compared to other interventions, which means CSTRs may take more than the one year looked at in this analysis to impact offending behaviour. While there is evidence of early impacts on drug and alcohol misuse from treatment (Donmall, Jones, Davies & Barnard, 2009, MoJ, 2021), initial impacts may be more subtle or present in other important outcomes associated with rehabilitation not included in this analysis, for example health, employability, and social support (Wood et al., 2015). The delay to accessing treatment may also affect how soon impacts can be measured.

It is important to note that CSTRs are not delivered in a standardised way – individual experience differs, and the type and quality of treatment received varies geographically.

This means that CSTRs may be more effective for some individuals than others and as this analysis averages the outcomes, it may be masking potentially positive impacts for some individuals. Further sub-group analysis would be required to investigate the most effective approaches for CSTRs.

Whilst previous research has shown engaging in treatment for alcohol or drug misuse reduced instances of reoffending (MoJ & PHE, 2017), more recent research suggests that not all ATR and DRR recipients may be attending treatment, and those who do may often experience a long delay before commencing their treatment following sentencing (OHID & MoJ, 2023). We also know that dropouts are relatively common for all adults who enter alcohol or drug misuse treatment (PHE, 2019) and this analysis suggested that two thirds of ATR recipients and less than half of DRR recipients successfully completed their sentence. These potential delays accessing treatment or incompletion may be influencing reoffending rates, although data on engagement and completion of treatment was not available for this analysis. The BOLD programme is continuing to explore the pathway from sentencing into treatment for ATRs and DRRs to assess how engagement with treatment impacts on offending behaviour.

Successful sentence completion was higher for MHTR recipients and individuals who do not successfully complete their treatment could still access treatment outside their sentence and may be sentenced again with a CSTR if they fail to comply or are convicted of a further offence. It's common for ATR and DRR recipients to also have other needs, such as mental health issues, which may influence their recovery. While MHTRs can be sentenced alongside ATRs and DRRs, very few ATRs (1%) or DRRs (1%) sentenced in 2018 received a dual CSTR sentence (these were excluded from analysis), however research indicates over half of all individuals in alcohol or drug misuse treatment in 2018 had a mental health treatment need (PHE, 2019) Error! Bookmark not defined. A fifth (19%) of MHTR recipients in 2018 received a dual CSTR (these were excluded from analysis).

For many of the reoffending outcomes in this analysis, there were no statistically significant differences. This was particularly evident for analyses of MHTR recipients and the matched control groups. The sample for MHTR recipients was relatively small (n=337) compared to the ATR and DRR treatment groups, this could mean the analysis had low

power and may only have detected large differences between groups. Although this analysis did not provide evidence of MHTRs reducing most reoffending outcomes when compared with those on a community sentence without a CSTR, other research has indicated MHTRs can improve other outcomes such as measure of mental health of recipients (Callender et al., 2023).

Overall, the findings of this impact evaluation demonstrate why additional CSTR investment and development has been pursued in recent years, particularly the funding allocated in the 10-year Drug Strategy and the roll out of primary care MHTRs. This impact evaluation is one part of a wider programme of analytical work to investigate the effectiveness of CSTRs – see section 2.2 for further details. By continually measuring the impact of CSTRs, understanding of how to establish an effective treatment pathway in the CJS will be developed and evidence will be collated on what works to successfully address the profile of individual needs in the offending population (Sirdifield et al., 2020). Therefore, it is recommended this analysis is repeated in 2026/27 to assess whether the impact of CSTR sentencing has changed over time following the increased investment.

Glossary

Comparison groups – this refers to all individuals who received a community sentence without a CSTR in 2018 or were released from a short custodial sentence in 2018, before matching and weighting with the treatment groups.

CSTR recipients – individuals with a community order or suspended sentence order that includes either an Alcohol Treatment Requirement (ATR), Drug Rehabilitation Requirement (DRR) or Mental Health Treatment Requirement (MHTR), who were sentenced in 2018. Individuals with dual CSTRs were excluded from the analysis.

Individuals who reoffended – individuals who were proven to have committed a further offence within one year after sentencing or release.

Matched control groups – this refers to the comparison groups after they had been matched and weighted with the treatment group.

No significant difference – This means that, based on this analysis, it is not possible to say for sure whether CSTR sentencing had any effect (either positive or negative) on the outcome. There is a greater than 5% possibility that any differences between the groups were due to chance. A non-significant result might happen because there are not many people in the treatment group, the impact on the outcome is small and difficult to detect, or there is no impact on the outcome.

Recipients of a community sentence without a CSTR – individuals sentenced to a community order or suspended sentence order, excluding those with any type of CSTR, in 2018. Only individuals with relevant needs/issues recorded were selected for matching i.e. an alcohol misuse need for ATR analyses, a drug misuse need for DRR analyses and a mental health issue for MHTR analyses.

Reoffending – <u>proven</u> reoffending one year after sentencing for individuals with community sentences (including CSTRs) or one year after release for individuals with short custodial sentences. Any further offence committed within one year of sentencing or release, that is detected and convicted i.e., proven.

Short custodial sentence recipients – individuals who were sentenced to a custodial sentence of two years or less, who were released in 2018. Only individuals with relevant needs/issues recorded were selected for matching i.e. an alcohol misuse need for ATR analyses, a drug misuse need for DRR analyses and a mental health issue for MHTR analyses.

Significant difference – This means the difference between groups is statistically very unlikely to be due to chance. The significance level used in this analysis is 5%, meaning there is a 95% likelihood that the difference in sentence completion or proven reoffending is not due to chance.

References

Ashby, J., Horrocks, C. & Kelly, N. (2011) *Delivering the Alcohol Treatment Requirements:*Assessing the outcomes and impact of coercive treatment for alcohol misuse. Probation Journal, 58(1), 52-67.

Black, C. (2021) *Independent review of drugs by Professor Dame Carol Black.* Home Office and Department of Health and Social Care.

https://www.gov.uk/government/collections/independent-review-of-drugs-by-professor-dame-carol-black.

Black, C. (2020) *Review of drugs: evidence pack*. Home Office and Department of Health and Social Care.

https://assets.publishing.service.gov.uk/media/5eafffedd3bf7f65363e4fda/Review_of_Drug s_Evidence_Pack.pdf

Callender, M., Sanna, G. & Cahalin, K. (2023) Community Sentence Treatment Requirement Multisite Report July 2020 – January 2023. Institute for Public Safety, Crime and Justice.

Cohen, J. (1988) Statistical Power Analysis for the Behavioural Sciences. Routledge. ISBN 978-1-134-74270-7.

Criminal Justice Act 2003, c. 4:207-212.

https://www.legislation.gov.uk/ukpga/2003/44/contents/enacted

Criminal Justice Act 2003 (Commencement No.8 and Transitional and Saving Provisions)

Order 2005. https://www.legislation.gov.uk/uksi/2005/950/contents/made

de Andrade, D., Ritchie, J., Rowlands, M., Mann, E. & Hides, L. (2018) *Substance Use and Recidivism Outcomes for Prison-Based Drug and Alcohol Interventions*, Epidemiologic Reviews, 40(1), 121–133.

Department of Health and Social Care. (2019) Community Sentence Treatment Requirements Protocol Process Evaluation Report.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810010/cstr-process-evaluation-report.pdf.

Donmall, M., Jones, A., Davies, L. & Barnard, M. (2009) Summary of key findings from the Drug Treatment Outcomes Research Study. Home Office

Eaton, G. & Mews, A. (2019) The impact of short custodial sentences, community orders and suspended sentence orders on reoffending. Ministry of Justice.

Gray, K., Finn, R., Gent, J. & Huttlestone, K. (2023) *The impact of oral and fast delivery pre-sentence reports (PSRs) on the completion of court orders.* Ministry of Justice.

Harkins, C., Morleo, M. & Cook, P. (2011) Evaluation of the use of Alcohol Treatment Requirements and Alcohol Activity Requirements for offenders in Cheshire. Liverpool: Centre for Public Health, Liverpool John Moores University.

Hetherington, G., Victor, K. & Park, A. (2019) *Problem Solving Justice - The Economic Impact of Enhanced Combination Orders (ECOs)*. Ulster: Ulster University Economic Policy Centre.

Hillier, J. & Mews, A. (2018) Do offender characteristics affect the impact of short custodial sentences and court orders on reoffending? London: Ministry of Justice.

HM Government. (2022) From harm to hope: A 10-year drugs plan to cut crime and save lives. https://www.gov.uk/government/publications/from-harm-to-hope-a-10-year-drugs-plan-to-cut-crime-and-save-lives/from-harm-to-hope-a-10-year-drugs-plan-to-cut-crime-and-save-lives.

HM Inspectorate of Probation and Care Quality Commission. (2021) *A joint thematic inspection of community-based drug treatment and recovery work with people on probation*. https://www.justiceinspectorates.gov.uk/hmiprobation/wp-content/uploads/sites/5/2021/08/Drug-treatment-recovery-thematic-v1.0-1.pdf

HM Inspectorate of Probation. (2021a) *Specific areas of delivery: Substance misuse*. https://www.justiceinspectorates.gov.uk/hmiprobation/research/the-evidence-base-probation/specific-areas-of-delivery/substance-misuse/

HM Inspectorate of Probation. (2021b) *Specific areas of delivery: Mental Health*. https://www.justiceinspectorates.gov.uk/hmiprobation/research/the-evidence-base-probation/specific-areas-of-delivery/mental-health/

HM Inspectorate of Probation. (2023) Privacy Notice.

https://www.justiceinspectorates.gov.uk/hmiprobation/privacy-notice/

Home Office. (2013) Understanding organised crime: estimating the scale and the social and economic costs Research Report 73.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/246390/horr73.pdf.

Home Office. (2022) Offence Group Classifications: June 2022.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1118266/offence-group-classification-june-2022.xlsx

Institute for Public Safety and Justice. (2022) *Primary Care Mental Health Treatment Requirement (MHTR) Practitioner Manual*.

https://pure.northampton.ac.uk/ws/portalfiles/portal/32475412/Primary Care Mental Healt h Treatment Requirement MHTR Practitioner Manual.pdf.

Long, C., Dolley, O. & Hollin, C. (2018) *The use of the mental health treatment requirement (MHTR): clinical outcomes at one year of a collaboration*. Journal of Criminal Psychology, 8(3), 215–233.

McSweeney, T. (2015) Calling time on 'alcohol-related' crime? Examining the impact of court-mandated alcohol treatment on offending using propensity score matching.

Criminology & Criminal Justice, 15(4), 464–483.

Mews, A., Hillier, J., McHugh, M. & Coxon, C. (2015) *The impact of short custodial sentences, community orders and suspended sentence orders on re-offending.* London: Ministry of Justice.

Ministry of Justice and HM Prison and Probation Service. (2023) *Offender management statistics quarterly*. https://www.gov.uk/government/collections/offender-management-statistics-quarterly.

Ministry of Justice. (2013) Justice Data Lab: Methodology Paper.

https://assets.publishing.service.gov.uk/media/5a7df20aed915d74e33ef0b1/justice-data-lab-methodology.pdf

Ministry of Justice. (2016a) *Justice Data Lab Re-offending analysis: Brighton Oasis Project*– *Drug Rehabilitation Requirement.*

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/528215/brighton-oasis.pdf.

Ministry of Justice. (2016b) Justice Data Lab re-offending analysis: Leeds Drug
Intervention Programme/ Integrated Offender Management programme run by Developing
Initiatives for Support in the Community (DISC Leeds DIP/IOM project.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/522591/developing-initiatives-for_support-in-the-community.pdf.

Ministry of Justice. (2017) *Justice Data Lab re-offending behaviour after participation in the St Andrew's Healthcare psychological treatment programme.*

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment data/file/597020/milton-keynes-report.pdf.

Ministry of Justice. (2018) Justice Data Lab: User Guidance.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/794249/User Journey Document Update PDF.pdf.

Ministry of Justice. (2019) *Identified needs of offenders in custody and the community from OASys.* https://www.gov.uk/government/statistics/identified-needs-of-offenders-in-custody-and-the-community-from-oasys.

Ministry of Justice. (2020) A Smarter Approach to Sentencing.

https://www.gov.uk/government/publications/a-smarter-approach-to-sentencing.

Ministry of Justice. (2022) Offence Group Classification: June 2022.

https://www.gov.uk/government/statistics/criminal-justice-system-statistics-quarterly-june-2022

Ministry of Justice. (2023a) *Proven reoffending statistics: July to September 2021*https://www.gov.uk/government/statistics/proven-reoffending-statistics-july-to-september-2021/proven-reoffending-statistics-july-to-september-2021

Ministry of Justice. (2023b) *Characteristics of Prolific Offenders*, 2000-2021. https://www.gov.uk/government/statistics/characteristics-of-prolific-offenders-2000-2021.

Ministry of Justice and Public Health England. (2017) *The impact of community-based drug and alcohol treatment on re-offending.*

https://www.gov.uk/government/publications/the-effect-of-drug-and-alcohol-treatment-on-re-offending.

Newbury-Birch, D., Ferguson, J., Landale, S., Giles, E., McGeechan, G., Gill, C., Stockdale, K. & Holloway, A. (2018) *A Systematic Review of the Efficacy of Alcohol Interventions for Incarcerated People*. Alcohol and Alcoholism, 53(4), 412–425.

NHS England. *Mental Health Treatment Requirements (MHTRs)*. https://www.england.nhs.uk/commissioning/health-just/mental-health-treatment-requirements/

National Health Service. (2019) *NHS Mental Health Implementation Plan 2019/20 – 2023/24*. https://www.longtermplan.nhs.uk/wp-content/uploads/2019/07/nhs-mental-health-implementation-plan-2019-20-2023-24.pdf.

Office for Health Improvement and Disparities and Ministry of Justice. (2023) *Pathways* between probation and addiction treatment in England.

https://www.gov.uk/government/statistics/pathways-between-probation-and-addiction-treatment-in-england

Office for National Statistics. (2021) *Crime in England and Wales: year ending June 2021*. https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/bulletins/crimeinenglandandwales/yearendingjune2021

Perry, A., Darwin, Z., Godfrey, C., McDougall, C., Lunn, J., Glanville, J. & Coulton, S. (2009) The effectiveness of interventions for drug-using offenders in the courts, secure establishments and the community: a systematic review. Substance Use & Misuse, 44(3), 374–400.

Public Health England. (2017) An evidence review of the outcomes that can be expected of drug misuse treatment in England. London: Public Health England.

Public Health England. (2019) *Adult substance misuse treatment statistics 2018 to 2019.* https://www.gov.uk/government/statistics/substance-misuse-treatment-for-adults-statistics-2018-to-2019

Rodriguez, J., Keene, J. & Li, X. (2006) A pilot study of assessed need and service use of offenders and frequent offenders with mental health problems. Journal of Mental Health, 15(4), 411–421.

Sirdifield, C., Brooker, C. & Marples, R. (2020) *Substance misuse and community supervision: A systematic review of the literature.* Forensic Science International. Mind and Law, 1:100031.

Sondhi, A., Leidi, A. & Best, B. (2021) *Estimating a treatment effect on reoffending by people in prison with an alcohol use disorder: a national matched propensity score analysis*. Journal of Offender Rehabilitation, 60(3), 179–195.

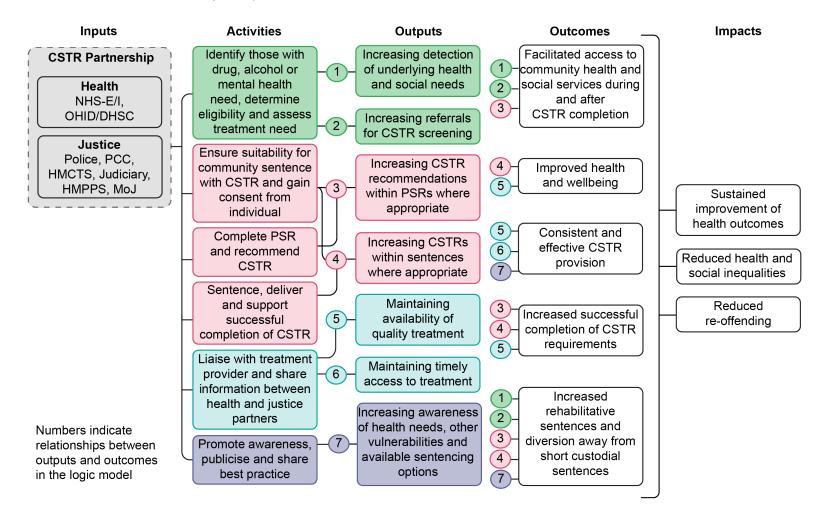
Wood, M., Cattell, J., Hales, G., Lord, C., Kenny, T. & Capes, T. (2015) *Re-offending by offenders on Community Orders: Results from the Offender Management Community Cohort Study.* London: Ministry of Justice.

Appendix A

Community Sentence Treatment Requirement (CSTR) Logic Model

Context

Community Sentence Treatment Requirements (CSTRs) are a sentencing option to treat mental health, drug and alcohol needs related to offending behaviour. CSTRs offer a diversion away from short custodial sentences and promote rehabilitation, supported by collaboration between health and justice partners.



Appendix B Subgroup analyses results

Groups were filtered to only those individuals with certain characteristics, then, where possible, analysis was run on each group individually. The sub-groups were:

- Male individuals only
- Female individuals only
- Those living in England at sentencing only
- Those living in Wales at sentencing only

The results are included in the tables below. Only results where robust, well-matched control groups were able to be constructed are included.

Averages may differ when comparing groups for community sentences without a CSTR and short custodial sentences. This is because distinct PSM models were conducted for each matched control group. Therefore, the match rate of the treatment group – and in turn the individuals they are matched to in the matched control group – will differ for each analysis.

The average given is the mean for the group included in the research. The confidence interval provides a range of plus or minus from the group mean, that there is 95% certainty the population mean falls into i.e. the mean of the wider population who have an ATR, DRR, MTHR, community sentence without a CSTR or short custodial sentence.

Male individuals only

Table 9: Reoffending outcomes for ATR recipients compared with those sentenced without a CSTR for male individuals only

		Matched control group									
	Commur	nity sentence	without a C	STR	Short custo	dial senter	nce without a	a CSTR			
	Community sentence with an ATR (CI)	sentence without a		p-value	Community sentence with an ATR (CI)	Short custodial sentence without a CSTR (CI)		p-value			
Proven reoffending rate	43% (2%)	42% (1%)	1%	0.20	44% (2%)	44% (1%)	<1%	0.50			
Average number of proven reoffences	1.61 (0.12)	1.58 (0.05)	0.03	0.60	1.66 (0.12)*	1.92 (0.09)*	-0.26*	<0.01*			
Average number of days to first proven reoffence	120.01 (6.02)*	105.60 (2.53)*	14.40*	<0.01*	119.70 (6.04)*	106.71 (2.91)*	12.99*	<0.01*			
Proven reoffending resulting in a custodial sentence rate	35% (3%)*	39% (1%)*	-4%*	0.01*	35% (3%)*	40% (1%)*		<0.01*			
Average number of proven reoffences resulting in a custodial sentence	1.54 (0.15)*	1.74 (0.07)*	-0.20*	0.01*	1.54 (0.15)*	2.13 (0.09)*		<0.01*			

[†] A positive absolute difference indicates a positive result for ATR recipients, except for average days to first proven reoffences, where a negative number is positive as it indicates ATR recipients took a higher number of days before reoffending on average.

Table 10: Reoffending outcomes for DRR recipients compared with those sentenced without a CSTR for male individuals only

		Matched control group								
	Commur	nity sentence	without a C	STR	Short custo	odial senten	ce without a	CSTR		
	Community sentence with a DRR (CI)	sentence without a	Absolute difference [†]	p-value	Community sentence with a DRR (CI)	Short custodial sentence without a CSTR (CI)		p-value		
Proven reoffending rate	63% (2%)	62% (1%)	1%	0.41	64% (2%)	65% (1%)	-1%	0.27		
Average number of proven reoffences	3.48 (0.17)	3.31 (0.07)	0.16	0.08	3.51 (0.17)*	3.89 (0.10)*	-0.38*	<0.01*		
Average number of days to first proven reoffence	86.66 (3.82)*	91.05 (1.94)*	-4.39*	0.04*	86.43 (3.81)*	101.16 (2.06)*		<0.01*		
Proven reoffending resulting in a custodial sentence rate	48% (2%)*	51% (1%)*	-3%*	0.02*	48% (2%)*	53% (1%)*	-5%*	<0.01*		
Average number of proven reoffences resulting in a custodial sentence	3.18 (0.18)	3.05 (0.09)	0.13	0.19	3.19 (0.18)*	3.75 (0.10)*	-0.56*	<0.01*		

[†] A positive absolute difference indicates a positive result for DRR recipients, except for average days to first proven reoffences, where a positive number is negative as it indicates DRR recipients took a lower number of days before reoffending on average.

Table 11: Reoffending outcomes for MHTR recipients compared with those sentenced without a CSTR for male individuals only

		Matched control group							
	Commur	nity sentence	without a C	STR	Short custo	odial senten	ce without a	CSTR	
	Community sentence with an MHTR (CI)	sentence without a	Absolute difference [†]		Community sentence with an MHTR (CI)	Short custodial sentence without a CSTR (CI)	Absolute difference [†]		
Proven reoffending rate	28% (6%)*	36% (1%)*	-9%*	<0.01*	28% (6%)*	38% (1%)*	-11%*	<0.01*	
Average number of proven reoffences	0.87 (0.23)*	1.31 (0.04)*	-0.44*	<0.01*	0.90 (0.24)*	1.57 (0.08)*	-0.67*	<0.01*	
Average number of days to first proven reoffence	128.94 (27.31)	113.10 (2.01)	15.84	0.25	127.14 (27.58)	116.2 (3.23)	10.52	0.45	
Proven reoffending resulting in a custodial sentence rate	31% (11%)	34% (1%)	-3%	0.57	31% (12%)*	46% (2%)*	-16%*	0.01*	
Average number of proven reoffences resulting in a custodial sentence	1.32 (0.46)	1.70 (0.07)	-0.37	0.11	1.37 (0.47)*	2.09 (0.10)*	-0.72*	<0.01*	

[†] A positive absolute difference indicates a positive result for MHTR recipients, except for average days to first proven reoffences, where a negative number is positive as it indicates MHTR recipients took a higher number of days before reoffending on average.

Female individuals only

Table 12: Reoffending outcomes for ATR recipients compared with those sentenced without a CSTR for female individuals only

			Mat	ched co	ntrol group			
	Commur	nity sentence	without a C	STR	Short custo	odial senten	ce without a	CSTR
	Community sentence with an ATR (CI)	sentence without a	Absolute difference†		Community sentence with an ATR (CI)	Short custodial sentence without a CSTR (CI)		p-value
Proven reoffending rate	35% (4%)	31% (2%)	4%	0.12	-	-	-	-
Average number of proven reoffences	1.50 (0.29)*	1.12 (0.12)*	0.38*	0.02*	-	-	-	-
Average number of days to first proven reoffence	112.41 (13.61)	111.37 (7.72)	1.04	0.90	-	-	-	-
Proven reoffending resulting in a custodial sentence rate	26% (6%)	25% (3%)	1%	0.85	-	-	-	-
Average number of proven reoffences resulting in a custodial sentence	1.50 (0.40)	1.10 (0.21)	0.40	0.09	-	-	-	-

[†]A positive absolute difference indicates a positive result for ATR recipients, except for average days to first proven reoffences, where a negative number is positive as it indicates ATR recipients took a higher number of days before reoffending on average.

Table 13: Reoffending outcomes for DRR recipients compared with those sentenced without a CSTR for female individuals only

		Matched control group								
	Commur	nity sentence	without a C	STR	Short custo	odial senten	ce without a	CSTR		
	Community sentence with a DRR (CI)	sentence without a	Absolute difference [†]	p-value	Community sentence with a DRR (CI)	Short custodial sentence without a CSTR (CI)		p-value		
Proven reoffending rate	65% (3%)	63% (2%)	1%	0.44	67% (3%)	65% (3%)	1%	0.50		
Average number of proven reoffences	3.79 (0.34)	3.49 (0.19)	0.29	0.14	3.93 (0.37)	4.03 (0.29)	-0.11	0.66		
Average number of days to first proven reoffence	86.67 (7.25)	91.22 (4.76)	-4.55	0.30	86.26 (7.87)*	98.71 (6.10)*	-12.45*	0.01*		
Proven reoffending resulting in a custodial sentence rate	43% (4%)	42% (3%)	2%	0.47	46% (4%)	49% (3%)	-4%	0.20		
Average number of proven reoffences resulting in a custodial sentence	3.20 (0.36)	2.84 (0.22)	0.36	0.10	3.30 (0.39)	3.64 (0.30)	-0.35	0.17		

Bold text and * denotes a statistically significant difference. Differences may not sum due to rounding. Percentages are rounded to the nearest whole number, p-values are rounded to 2 decimal places and all other values are rounded to 2 decimal places. The confidence interval (CI) is included in brackets.

[†]A positive absolute difference indicates a positive result for DRR recipients, except for average days to first proven reoffences, where a positive number is negative as it indicates DRR recipients took a lower number of days before reoffending on average.

Individuals living in England at sentencing only

Table 14: Reoffending outcomes for ATR recipients compared with those sentenced without a CSTR for individuals living in England at sentencing

			Mat	tched co	ntrol group				
	Commur	nity sentence	without a C	STR	Short custodial sentence without a CSTR				
	Community sentence with an ATR (CI)	sentence without a			Community sentence with an ATR (CI)	Short custodial sentence without a CSTR (CI)	Absolute difference [†]	p-value	
Proven reoffending rate	41% (2%)	40% (1%)	1%	0.17	-	-	-	-	
Average number of proven reoffences	1.59 (0.12)		0.09	0.16	-	-	-	-	
Average number of days to first proven reoffence	118.97 (5.71)*	105.65 (2.46)*	13.31*	<0.01*	-	-	-	-	
Proven reoffending resulting in a custodial sentence rate	33% (3%)*	37% (1%)*	-4%*	<0.01*	-	-	-	-	
Average number of proven reoffences resulting in a custodial sentence	1.50 (0.14)	1.63 (0.07)	-0.12	0.13	-	-	-	-	

Bold text and * denotes a statistically significant difference. Differences may not sum due to rounding. Percentages are rounded to the nearest whole number, p-values are rounded to 2 decimal places and all other values are rounded to 2 decimal places. The confidence interval (CI) is included in brackets.

[†]A positive absolute difference indicates a positive result for ATR recipients, except for average days to first proven reoffences, where a negative number is positive as it indicates ATR recipients took a higher number of days before reoffending on average.

Table 15: Reoffending outcomes for DRR recipients compared with those sentenced without a CSTR for individuals living in England at sentencing

			Mat	ched co	ntrol group			
	Commur	nity sentence	without a C	STR	Short custo	odial senten	ce without a	CSTR
	Community sentence with a DRR (CI)	without a	Absolute difference [†]	p-value	Community sentence with a DRR (CI)	Short custodial sentence without a CSTR (CI)		p-value
Proven reoffending rate	64% (1%)	63% (1%)	1%	0.31	64% (1%)	65% (1%)		0.10
Average number of proven reoffences	3.61 (0.16)*	3.39 (0.07)*	0.22*	0.01*	3.57 (0.16)*	4.01 (0.10)*	-0.44*	<0.01*
Average number of days to first proven reoffence	86.85 (3.53)*	91.16 (1.84)*	-4.31*	0.03*	87.31 (3.53)*	96.48 (1.90)*		<0.01*
Proven reoffending resulting in a custodial sentence rate	47% (2%)	49% (1%)		0.10	47% (2%)*	52% (1%)*		<0.01*
Average number of proven reoffences resulting in a custodial sentence	3.23 (0.17)*	3.03 (0.08)*	0.21*	0.03*	3.19 (0.17)*	3.78 (0.10)*		<0.01*

Bold text and * denotes a statistically significant difference. Differences may not sum due to rounding. Percentages are rounded to the nearest whole number, p-values are rounded to 2 decimal places and all other values are rounded to 2 decimal places. The confidence interval (CI) is included in brackets.

[†]A positive absolute difference indicates a positive result for DRR recipients, except for average days to first proven reoffences, where a positive number is negative as it indicates DRR recipients took a lower number of days before reoffending on average.

Table 16: Reoffending outcomes for MHTR recipients compared with those sentenced without a CSTR for individuals living in England at sentencing

			Mat	tched co	ntrol group			
	Commur	nity sentence	without a C	STR	Short custo	odial senten	ce without a	CSTR
	Community sentence with an MHTR (CI)	sentence without a	Absolute difference [†]	p-value	Community sentence with an MHTR (CI)	Short custodial sentence without a CSTR (CI)	Absolute difference [†]	p-value
Proven reoffending rate	27% (5%)*	34% (1%)*	-7%*	<0.01*	-	-	-	-
Average number of proven reoffences	0.99 (0.32)	1.30 (0.04)	-0.31	0.06	-	-	-	-
Average number of days to first proven reoffence	120.32 (22.94)	112.30 (1.91)	8.02	0.49	-	-	-	-
Proven reoffending resulting in a custodial sentence rate	28% (10%)	32% (1%)	-3%	0.51	-	-	-	-
Average number of proven reoffences resulting in a custodial sentence	1.39 (0.47)	1.63 (0.07)	-0.24	0.32	-	-	-	-

[†]A positive absolute difference indicates a positive result for MHTR recipients, except for average days to first proven reoffences, where a negative number is positive as it indicates MHTR recipients took a higher number of days before reoffending on average.

Individuals living in Wales at sentencing only

Using the data available, it was not possible to construct control groups matched well enough to reliably and robustly compare reoffending outcomes for individuals living in Wales at sentencing.

Appendix C

Characteristics of individuals who were sentenced with each type of CSTR (the treatment groups) and those who were not (the comparison groups)

Before carrying out the matching methodology, the demographics of individuals with an OASys record, sentenced without a CSTR and with each type of CSTR were compared. Results are detailed below – after matching these characteristics were very similar for ATR, DRR, and MHTR recipient groups and the respective matched control groups.

ATR recipient demographics before matching

A fifth of ATR recipients were female, a higher proportion than for recipients of a community sentence without a CSTR or a short custodial sentence. ATR recipients were also more likely to have a white ethnic background and be aged 40 or over than individuals without a CSTR (Figure 4).

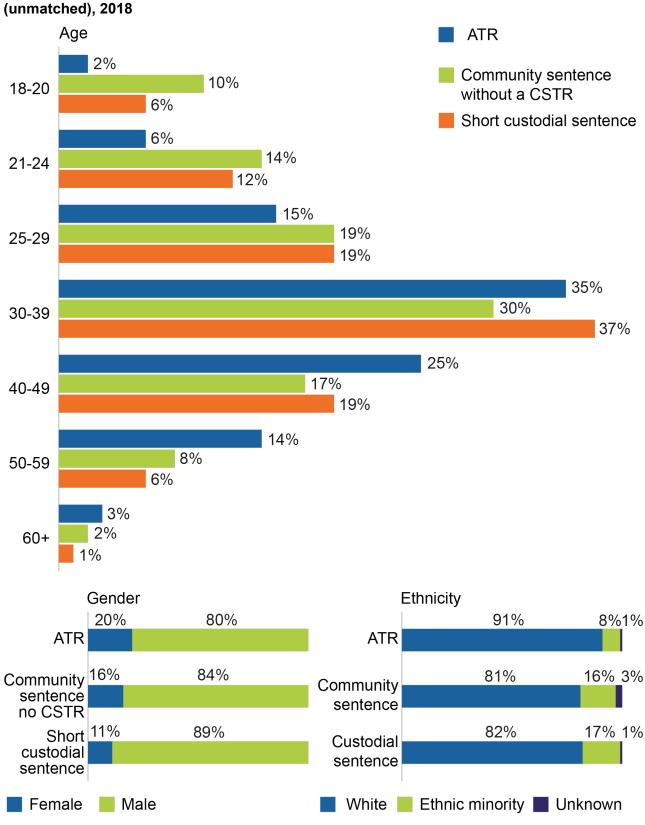


Figure 4: Age, gender, and ethnicity for ATR recipients and comparison groups (unmatched), 2018

As would be expected, ATR recipients were much more likely to have a recorded alcohol misuse need than those sentenced without a CSTR. They were also more likely to have a mental health issue (Figure 5).

Substance misuse needs and mental health issues

70%

Alcohol misuse need

28%

27%

Drug misuse need

23%

60%

Mental health issue

32%

51%

ATR Community sentence without a CSTR Short custodial sentence

Figure 5: Substance misuse needs and mental health issues for ATR recipients and comparison groups (unmatched), 2018

Offence characteristics before matching

The most common offence group ¹⁹ for ATR recipients and community sentence without a CSTR recipients was summary offences excluding motoring (41% for ATR recipients, 30% of recipients of a community sentence without a CSTR and 16% of short custodial sentence recipients). Theft offences was the most common offence group for short custodial sentence recipients (32%, 13% for ATR and 16% for recipients of a community sentence without a CSTR).

¹⁹ Home office offence groups (Home Office, 2022)

DRR recipient demographics before matching

Around a fifth of DRR recipients were female, a higher proportion than for recipients of a community sentence without a CSTR or a short custodial sentence. DRR recipients were also more likely to have a white ethnic background and be aged 30 to 49 than individuals without a CSTR (Figure 6).

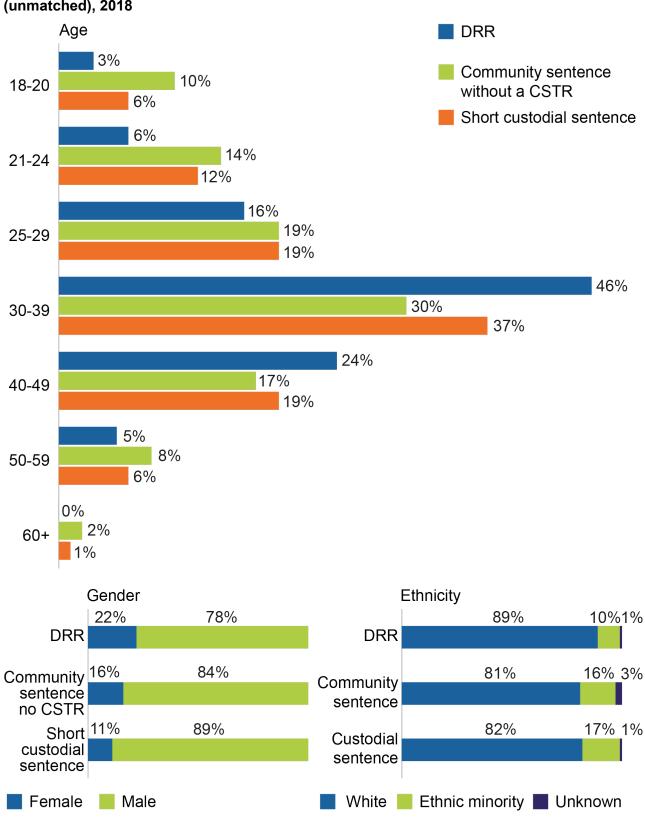


Figure 6: Age, gender, and ethnicity for DRR recipients and comparison groups (unmatched), 2018

As would be expected, DRR recipients were much more likely to have a recorded drug misuse need than those sentenced without a CSTR. They were also more likely to have a mental health issue (Figure 7).

Substance misuse needs and mental health issues

16%

Alcohol misuse need

15%

28%

70%

Drug misuse need

23%

54%

Mental health issue

32%

Figure 7: Substance misuse needs and mental health issues for DRR recipients and comparison groups (unmatched), 2018

Offence characteristics before matching

DRR Community sentence without a CSTR

The most common offence group²⁰ for DRR recipients and short custodial sentence recipients was theft offences (59% for DRR recipients, 32% of short custodial sentence recipients and 16% of recipients of a community sentence without a CSTR). Summary offence excluding motoring was the most common offence group for recipients of a community sentence without a CSTR (30% compared to 27% for DRR and 16% for short custodial sentence recipients).

Short custodial sentence

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²⁰ Home office offence groups (Home Office, 2022)

MHTR recipient demographics before matching

Almost a third of MHTR recipients were female, a higher proportion than for recipients of a community sentence without a CSTR or a short custodial sentence. This is likely because certain areas were only commissioned to deliver primary care MHTRs to female individuals during 2018. MHTR recipients were also less likely to have a white ethnic background than individuals without a CSTR (Figure 8).

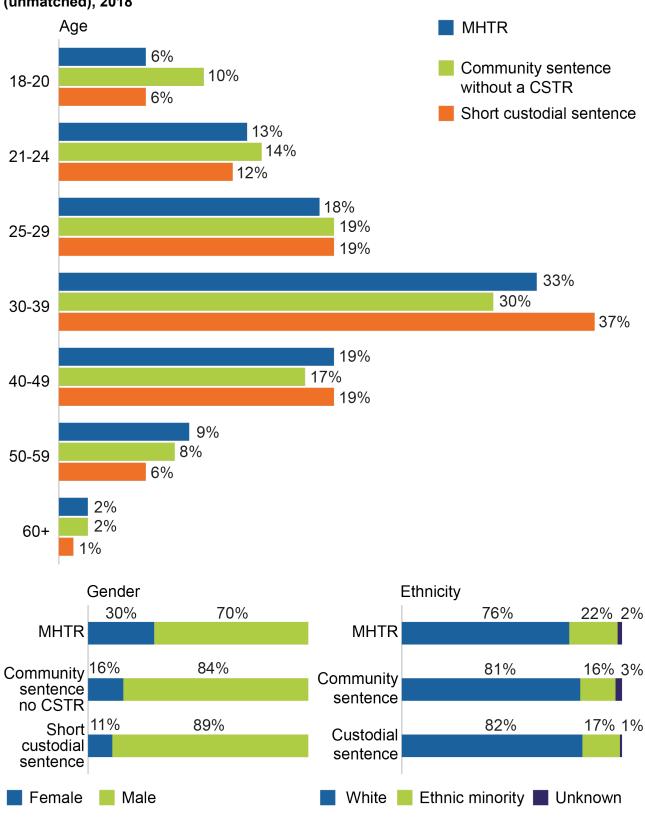
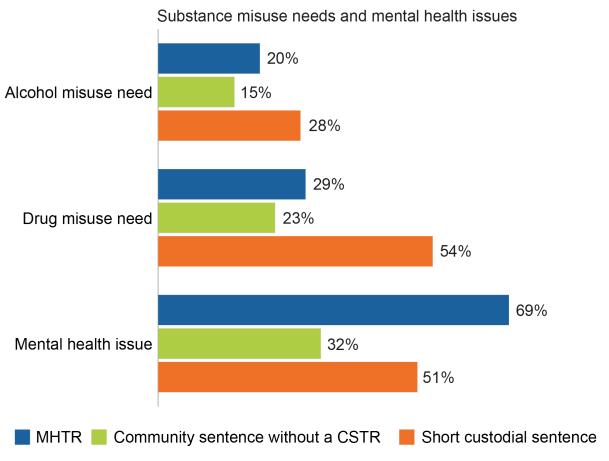


Figure 8: Age, gender, and ethnicity for MHTR recipients and comparison groups (unmatched), 2018

As would be expected, MHTR recipients were much more likely to have a recorded mental health issue than those sentenced without a CSTR (Figure 9).

Figure 9: Substance misuse needs and mental health issues for MHTR recipients and comparison groups (unmatched), 2018



Offence characteristics before matching

The most common offence group²¹ for MHTR recipients and for recipients of a community sentence without a CSTR was summary offences excluding motoring (27% for MHTR recipients, 30% recipients of a community sentence without a CSTR and 16% of short custodial sentence recipients). Theft offences was the most common offence group for short custodial sentence recipients (30%, 12% for MHTR and 16% for recipients of a community sentence without a CSTR).

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²¹ Home office offence groups (Home Office, 2022)

Comparison group matching

Using the statistical technique propensity score matching, CSTR recipients were matched with individuals who had similar characteristics (such as demographics, drug and alcohol needs, and mental health issues – around 100 characteristics, see appendix E) but were not sentenced with a CSTR – see section 3.1 for more detail. After undertaking propensity score matching and weighting, there was very little difference between most characteristics, for example, before matching 22% of the DRR recipient group were female, compared with 16% of recipients of community sentences without a CSTR and 11% of short custodial sentence recipients. After matching DRR recipients with recipients of community sentences without a CSTR, 22% of matched DRR recipients were female and 22% of the matched community sentence without a CSTR comparison group were female. Likewise, after matching DRR recipients with short custodial sentence recipients, the matched groups were both 21% female.

Appendix D Need score calculations

Drugs and alcohol misuse needs, and mental health issues were calculated using questions from OASys. Each question is scored from 0 to 2 with some being 0,1 or 2 and others 0 or 2. An individual is classed as having a need when they reach the cut off. These cut offs were decided based on published analysis (MoJ, 2022), existing calculations used within MoJ and discussions with internal analysts.

	Questions	Score boundaries	
Drug need	Type of drug	2+ = need	
	Frequency of use	8+ = severe need	
	Ever injected drugs		
	Motivated to tackle misuse		
	Main activities involve drugs		
Alcohol need	Current use a problem	4+ = need	
	Binging or excessive drinking	7+ = severe need	
	Level of misuse in the past		
	Motivated to tackle misuse		
Mental health issue	Current psychological problems	1+ = issue	
	Current psychiatric problems	2+ = severe issue	

Appendix E

Variables used in propensity score matching

Demographics

- Gender
- Ethnicity
- Age at sentencing
- Month of sentencing (or release for short custodial sentence recipients)

Index offence

- Offence type (the 13 Home Office offence groups)
- Severity of index offence (ranked 1 to 3 with 3 being the most severe)
- Offending history
- Number of previous offences, in total and broken down by severity and offence group, including sentence breaches
- Copas rate the rate at which an offender has built up convictions
- Number of previous custodial sentences, court orders, court convictions and cautions
- Age at first contact with the criminal justice system

OASys assessment

Number of OASys sections (4 to 12) where issues are linked to risk and linked to offending

- Difficulties coping
- Psychological problems
- Psychiatric problems
- Impulsivity
- Aggressive / controlling behaviour
- Temper control issues
- Ability to recognise problems
- Problem solving skills
- Awareness

- Understanding of consequences
- Understands other people's views
- Pro-criminal attitudes
- Attitudes towards staff
- Attitudes towards community / society
- Understand their motivation for offending
- Motivation to address offending
- General health
- Understands the importance of completing programmes
- Currently of no fixed abode or in transient accommodation
- Suitability of accommodation
- Currently unemployed
- Employment history
- Attitude to employment
- School attendance
- Problems with reading, writing or numeracy
- Learning difficulties
- Any educational or formal professional / vocational qualifications
- Financial situation
- Illegal earnings are a source of income
- Current relationship with close family members
- Experience of childhood
- Current relationship with partner
- Previous experience of close relationships
- Perpetrator of domestic violence / partner abuse
- Victim of domestic violence / partner abuse
- Regular activities encourage offending
- Easily influenced by criminal associates
- Manipulative / predatory lifestyle
- Reckless and risk-taking behaviour
- Drugs ever misused in custody

- Current main drug used
- Level of use of main drug
- Ever injected drugs
- Motivated to tackle drug misuse
- Drug use and obtaining drugs a major activity / occupation
- Current alcohol use a problem
- Binge drinking or excessive use of alcohol in the last 6 months
- Frequency and level of alcohol misuse in the past
- Violent behaviour related to alcohol use at any time
- Motivated to tackle alcohol misuse
- Banded drug need (no need, need, severe need)
- Banded alcohol need (no need, need, severe need)
- Banded mental health issues (no issues, issues, severe issues)

Appendix F Model statistics summary

Weighted mean standardised differences for variables levels included in the models

				Mean standardised differences			
CSTR type	Matched control group	No. of variable levels	Match rate	Min.	Max.	No. variables at -5% to -10%	
ATR	Community sentence without a CSTR	185	99.4%	-2%	1%	0	0
ATR	Short custodial sentence	224	89.1%	-7%	7%	4	5
DRR	Community sentence without a CSTR	170	99.7%	-3%	2%	0	0
DRR	Short custodial sentence	173	99.4%	-5%	4%	0	0
MHTR	Community sentence without a CSTR	168	100%	-4%	4%	0	0
MHTR	Short custodial sentence	163	98.8%	-8%	7%	5	8