Pathways between probation services and substance misuse treatment services in Wales

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Pathways between probation services and substance misuse treatment services in Wales

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Views expressed in this report are those of the researcher and not necessarily those of the Welsh Government

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Introduction

Background

This report is a joint publication between Public Health Wales, Administrative Data Research (ADR) Wales, the Secure Anonymised Information Linkage (SAIL) Databank and Welsh Government as part of the [Better Outcomes through Linked Data (BOLD) programme](). BOLD is a HM Treasury funded, cross-governmental programme (2021 to 2025) designed to demonstrate how people with complex needs can be better supported by linking and improving the government data held on them in a safe and secure way. The focus of the BOLD pilot in Wales is to describe and explore substance misuse and treatment in Wales.

This report looks at individuals in Wales who have been sentenced to a Community Sentence Treatment Requirement (CSTR), namely an Alcohol Treatment Requirement (ATR) or a Drug Rehabilitation Requirement (DRR). These can be given individually or as part of a wider community order or suspended criminal sentence.

CSTRs were introduced in the [Criminal Justice Act 2003](). The purpose of CSTRs is to reduce drug and alcohol need that are related to their offending behaviour.

Criteria set by the court for sentencing an offender to a CSTR:

- offender is dependent on alcohol or illegal drugs
- offender requires treatment for their alcohol or drug use and would likely benefit from the treatment
- offender can access and attend alcohol or drug treatment
- offender will comply with the treatment

Aims of the study

Overall this study aims at partially replicating the findings of the '[Pathways between probation and addiction treatment in England]'[1] report, undertaken as part of the wider BOLD programme by office for Health Improvement and Disparities and the Ministry of Justice.

The aim of this study was to:

1. investigate the number of individuals successfully transitioning into treatment services and the attrition rate (drop out between sentencing and attending treatment services)
2. explore the length of time taken to transition into treatment services
3. investigate the outcome of these treatment journeys
4. assess whether available socio-demographic or offending related characteristics were associated with a successful transition, quick treatment access and outcome

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[1] (Office for Health Improvement and Disparities, 2023)

All analyses were undertaken in the SAIL databank based at Swansea University, UK. The SAIL databank is a trusted research environment which securely holds a wealth of pseudonymised data sets to be provisioned in anonymised form for linked data research. More information on the SAIL databank, its information governance and application process can be found on the SAIL databanks website.

Methodology

This section gives an overview of the data sets used and how the community sentence treatment requirements cohort and substance misuse treatment cohort were derived and linked.

Study population

A population-scale retrospective electronic cohort study was conducted to investigate the pathways of individuals transitioning being sentenced a community sentence treatment requirement into substance misuse treatment services in Wales.

The population of individuals sentenced to a community sentence treatment requirement for alcohol or drug treatment between 01 January 2014 and 31 December 2019 was established using the nDelius data set. NDelius captures records of individuals recorded in the probation system and is owned by the Ministry of Justice. This extract of nDelius is part of the Ministry of Justice's Data First linking project.

CSTRs can form part of an individual's criminal court sentence and require the individual to attend alcohol treatment or drug rehabilitation services in the community. They have a start date (usually the same as sentence date) and a stipulated timeframe which establishes a window in which they should access services.

To be included in the study individuals must have a record in the nDelius data set with a community sentence treatment requirement for either drug rehabilitation or alcohol treatment. Individuals needed to have an Anonymised Linking Field (ALF) to be able to link to other data sets. Information on the number of CSTRs for individuals without an ALF (excluded from the study) is included in appendix 1. This resulted in a cohort of 4,597 requirements.

A list of valid substance misuse treatment journeys was created using the Welsh National Database for Substance Misuse (WNDSM). For a treatment journey to be included in the study it needed to be related to an individual with an ALF with a linkage matching probability equal or greater than 90% and a valid substance misuse referral ID, which allows linking to different elements of treatment journeys. Journeys were excluded from the analysis if they did not have a referral date or an assessment date. Assessment date was used to identify that someone had started engaging with treatment services. This led to a data set with 195,219 substance misuse referrals. Of these referrals, 53,475 did not engage with treatment services and 16,697 had no date for when the treatment pathway finished.

There are two SAIL databank data sets used in the study. The WNDSM (substance misuse data set) captures data relating to all individuals presenting for substance misuse treatment

in Wales, serving as a source of substance misuse treatment journeys. The nDelius (probation data set) captures data relating to all individuals engaged with probation services in England and Wales, covering community sentence requirements and defining the study population of individuals sentenced to a community sentence treatment requirement.

Data linking

Data linking was used to identify CSTRs related to an individual who also had a substance misuse treatment journey. Due to it being possible for an individual to have multiple substance misuse treatment journeys, analysis was undertaken to evaluate how the timeframes of the CSTR and treatment journey overlap. Each combination was then categorised into 4 groups (Table 1).

Table 1: Categorisation for CSTRs and substance misuse treatment journeys

Prioritisation	Categorisation	Description
1	Already in substance misuse treatment for less than a year on the start date of the CSTR	To be included in this category an individual must be in a treatment journey on the date their CSTR starts. This treatment journey cannot have started more than year before the CSTR start date.
2	Engaged with substance misuse treatment services within the timeframe of the CSTR	To be included in this category the treatment journey must have an assessment date after the start of the CSTR and before it is expected to finish, calculated by using the length of the sentence.
3	Already in substance misuse treatment for more than a year on the start date of the CSTR	To be included in this category an individual must be in a treatment journey on the date their CSTR starts. This treatment journey must have started more than year before their requirement starts.
Outside scope of the study	Had a substance misuse treatment journey outside of the timeframe of the CSTR	To be included in this category the treatment journey either finishes before a CSTR starts or starts after the requirement is expected to finish.

The linking prioritised assigning the most appropriate treatment journey to each CSTR. This was done so the analysis reflects the most likely treatment journey and outcomes which can be attributed to the CSTR.

Match rates after prioritisation are reported in Table 2. Of all individuals with a CSTR, 85% had treatment journeys in the WNDSM. Of the 4,317 that were able to be matched, 509 had treatment journeys with timeframes outside of the timelines of the CSTR. This leaves 3,808 CSTRs with a valid transition into substance misuse treatment journeys. We were unable to match 15% CSTRs to treatment journeys, comprising CSTRs with no treatment episode (6% of all CSTRs) and CSTRs without ALF information (10% of all CSTRs).

Table 2: Linking rates for CSTRs and the most appropriate treatment journey

Transition type	Number of CSTRs	Percentage of all CSTRs
Already in treatment for under 1 year	1,284	25%
Had an assessment within the requirement timeframe	2,487	49%
In treatment for over a year	37	1%
Had a treatment episode outside of requirement timeframes	509	10%
Total matched	**4,317**	**85%**
Number of CSTRs with an ALF but no treatment episode	280	6%
Number of CSTRs with no ALF so unable to be matched	487	10%
Total unmatched	**767**	**15%**
Total CSTRs	**5,084**	**100%**

Variables

The variables created for the purpose of our analysis include:

- age at start date: age difference between date of birth and CSTR start date
- count of treatment episodes: a count of all substance misuse treatment episodes associated with a treatment journey
- transition type: to indicate if someone successfully or unsuccessfully transitioned into treatment services
- transition length: the time between the CSTR start date and assessment date as part of a substance misuse treatment journey, categorised into 3-week intervals
- main substance recorded: the main substance the individual has a problem with, recorded during the standard assessment conducted after entering substance misuse treatment
- treatment outcomes: a derived variable categorising the outcome of an individual's treatment pathway (an overview of the categorisation is included in appendix 2)

Statistical analysis

Descriptive statistics and confidence intervals are used to describe the cohort, their transition into treatment services and their outcomes. Confidence intervals were also used to determine statistically significant differences across groups. Figures were rounded and suppressed in relevant tables to maintain anonymity.

Multilevel logistic regression models were carried out to assess whether socio-demographic characteristics and offender related information were associated with accessing treatment and successful treatment outcomes.

Sociodemographic information included the offender's:

- sex
- age
- ethnicity
- Welsh Index of Multiple Deprivation (WIMD) 2019 quintiles, an area-based measure of relative deprivation ranked from 1 (most deprived) to 5 (least deprived)

Offending related information:

- the year in which the treatment requirement was issued
- the number of court requirements issued
- the length of the order
- whether the order was a community order or a suspended sentence order
- the main offence category
- the main problem substance recorded

Multilevel logistic regression was chosen to account for the hierarchical structure of the data, where individuals are grouped within regions they live in. This helped to understand the effects of individual predictors on treatment uptake while considering the influence of the region. All the variables were entered into each model to determine the probability of treatment access and outcomes. The models produce Adjusted Odds Ratios (AOR) to show how changes in a variable affect an individual's treatment access and outcomes, while controlling for all other variables in the model. Confidence intervals were included to show the range in which we are 95% confident the true value lies within.

Results

Community sentence treatment requirements cohort

A detailed overview of CSTR cohort in Wales across age, sex, type of CSTR and offence type is provided in the tables below.

There were just over 4,500 individuals who were sentenced to a CSTR in Wales from 2014 until 2020 (Table 3). Three-quarters of CSTRs given in Wales were given to males. The majority of CSTRs were given to individuals aged between 25 and 44 (71%) (Table 3).

Table 3: Number of individuals sentenced to a CSTR in Wales, 2014 to 2020

Age band	Male	Female	Total
18 to 24	482	131	613
25 to 34	1,447	514	1,961
35 to 44	991	316	1,307
45 to 54	442	122	564
55 and over	113	39	152
Total	**3,475**	**1,122**	**4,597**

The majority (63%) of CSTRs were drug rehabilitation requirements (Table 4). DRRs and ATRs show different age profiles, 90% of DRRs were given to individuals aged under 45, and 10% to those aged 45 and over. There were no individuals sentenced to a DRR aged 65 or over. Conversely, 25% of individuals sentenced to an ATR were aged 45 and over, showing that ATRs have a larger proportion of sentences in the older age groups (Table 5).

Table 4: Number of individuals sentenced to drug rehabilitation requirements, 2014 to 2020 [note 1]

Age band	Male	Female	Total
18 to 24	320	80	400
25 to 34	980	390	1,362
35 to 44	660	210	863
45 to 54	210	30	245
55 and over	30	[c]	34
Total	**2,189**	**715**	**2,904**

[Note 1] Figures are rounded to the nearest 10

[c] Figures less than 10 have been suppressed for confidentiality

Table 5: Number of individuals sentenced to alcohol treatment requirements in Wales, 2014 to 2020 [note 1]

Age band	Male	Female	Total
18 to 24	160	50	213
25 to 34	470	130	599
35 to 44	340	110	444
45 to 54	230	90	319
55 and over	90	30	118
Total	**1,286**	**407**	**1,693**

[Note 1] Figures are rounded to the nearest 10

The majority of community sentence treatment requirements were given in relation to theft and violence. The prevalence of the types of offence committed varied across DRRs and ATRs, the most notable being the increased likelihood for those sentenced to DRRs to be involved in acquisitive crime (Table 6).

Table 6: Number of CSTRs by offence category [note 1]

Offence category	Drug rehabilitation requirements	Alcohol treatment requirements	All CSTRs
Theft	1,530	290	1,830
Violence	360	690	1,050
Drug or alcohol offences (non-motoring)	480	40	520
Other [note 2]	200	240	440
Driving under influence of either drugs or alcohol or both	110	330	440
Burglary	160	50	210
Motoring (non-substance related)	50	20	70
Sexual offences	[c]	20	30
Criminal damage	[c]	10	20

[Note 1] Figures are rounded to the nearest 10

[Note 2] 'Other' includes miscellaneous crimes against society, public order, fraud or forgery, possession of a weapon

[c] Figures less than 10 have been suppressed for confidentiality

Transition into substance misuse treatment services

The tables below present descriptive statistics of individuals who successfully transitioned into substance misuse treatment services following a CSTR, according to the criteria defined in the method section above.

Overall, 83% of individuals sentenced to a CSTR were already in treatment on the date of the sentencing or started treatment within the timeframe of the CSTR (Table 7). A slightly higher proportion of females (85%) than males (82%) successfully transitioned into treatment services and there was a broad increase in successful transition rates as age increased. Individuals aged 18 to 24 years old had the lowest proportion of individuals transitioning into treatment services (Table 7).

Table 7: Number and percentage of CSTRs transitioning into treatment services by age bands

Age band	Total	Number of successful transitions	Percentage of successful transitions	Lower confidence interval	Upper confidence interval
18 to 24	613	465	76%	72%	80%
25 to 34	1,961	1,612	82%	80%	84%
35 to 44	1,307	1,103	84%	82%	86%
45 to 54	564	493	87%	84%	90%
55 and over	152	135	89%	84%	94%
All ages	**4,597**	**3,808**	**83%**	**82%**	**84%**

There was no difference between successful transition rates for drug rehabilitation requirements and alcohol treatment requirements (both 83%). Generally, for both types of CSTR, successful transition rates increased in the older age groups (Figure 1). Detailed figures for drug rehabilitation requirements and alcohol treatment requirements can be found in appendix 2. For DRR, a higher proportion of individuals aged 55 and over transitioned into treatment services compared to those aged 18 to 24 and 25 to 34.

Figure 1: Percentage of successful transitions from CSTR to treatment in Wales from 2014 to 2020, by CSTR type and age

The majority of community sentence treatment requirements were given to people resident in the most deprived areas of Wales, 2,029 in the most deprived quintile as opposed to 295 in the least deprived quintile. However, there were no significant differences in the percentage of individuals who transitioned into treatment services across different levels of deprivation (Figure 2). The highest percentage of people transferring into treatment services resided in the middle deprivation quintile (86%). 83% of CSTRs transitioning into treatment services lived in the most deprived quintile whilst 80% in the least deprived one.

Figure 2: Percentage of successful transitions from CSTR to treatment in Wales 2014 to 2020, by WIMD quintiles

Successful CSTR transitions into treatment service by alcohol and drug requirements are shown in appendix 3. There was no significant difference between ATR and DRR transition

rates within any deprivation quintile. The highest transition rate was for the middle deprivation quintile for both ATRs and DRRs.

Length of transition between CSTR and engagement with treatment

Around two-thirds (65%) of individuals sentenced to a community sentence treatment requirement were either already in treatment on the date the CSTR was given or engaged with treatment within 3 weeks (Table 8). This was higher in DRRs (68%) than in ATRs (58%) (Table 9).

For both ATRs and DRRs, 5% of transitions into treatment services took longer than 12 weeks (table 9).

Table 8: Time between the date the CSTR was given and engagement with treatment services

Treatment length	Number of community sentence treatment requirements	Percentage of community sentence treatment requirements
Already in treatment	1,321	29%
0 to 3 weeks	1,641	36%
3 to 6 weeks	389	8%
6 to 9 weeks	139	3%
9 to 12 weeks	90	2%
12 or more weeks	228	5%
No transition	789	17%
Total	**4,597**	**100%**

Table 9: Time between the sentence date to drug rehabilitation and alcohol treatment requirements and engagement with treatment services

Treatment length	Number of drug rehabilitation requirements	Percentage of drug rehabilitation requirements	Number of alcohol treatment requirements	Percentage of alcohol treatment requirements
Already in treatment	943	32%	378	22%
0 to 3 weeks	1,031	36%	610	36%
3 to 6 weeks	197	7%	192	11%
6 to 9 weeks	54	2%	85	5%
9 to 12 weeks	37	1%	53	3%
12 or more weeks	144	5%	84	5%
No transition	498	17%	291	17%
Total	**2,904**	**100%**	**1,693**	**100%**

CSTR by main treatment substance

The below table shows the main substance recorded against the CSTR route to enter treatment.

Around three-quarters of all treatment journeys associated with a CSTR reported the main problem substance as either alcohol or opioids. A small proportion of treatment journeys associated with DRRs showed their main substance as alcohol, and similarly a small proportion of treatment journeys associated with ATRs had substances other than alcohol reported as their main problem substance. This could be due to individuals having multiple problem substances recorded in the treatment data set after they have been assessed (Table 10).

Table 10: Main substance recorded for treatment journeys associated with a community sentence treatment requirement, by CSTR type [note 1]

Main substance type	Drug rehabilitation requirements	Alcohol treatment requirements	All community sentence treatment requirements
Alcohol	80	1,300	1,390
Opioid	1,390	40	1,430
Cannabinoids	200	20	220
Stimulant	410	20	430
Other drugs	300	[c]	310
Invalid	30	[c]	40
Unknown	0	[c]	[c]

[Note 1] Figures are rounded to the nearest 10
[c] Figures less than 10 have been suppressed for confidentiality

Outcomes from substance misuse treatment

This section looks at the treatment outcomes as a proportion of the whole CSTR population to gain an understanding of the overall success of CSTRs. Detailed information on how these treatment outcome categories were derived can be found in appendix 4.

Overall, 41% of CSTRs in Wales ended with the individual completing treatment (Table 11). CSTRs with individuals either not starting or not completing treatment were 50% (Table 11). At the end of the study, 7% of CSTRs were still in treatment or had been further referred to another substance misuse treatment service (and successfully engaged with that service) (Table 11).

Detailed figures for DRRs and ATRs are in appendix 5. Around a third of DRRs given in Wales completed treatment with 58% either not starting or not completing treatment. These completion rates are lower than those seen with ATRs where 55% went on to complete treatment and 37% either didn't start or did not complete treatment.

Table 11: Number and percentage of treatment outcome categories of Community Sentence Treatment Requirements

Treatment outcome	Number	Percentage
Deceased	39	1%
Did not complete	1,511	33%
Null outcome	48	1%
Treatment completed	1,894	41%
Treatment ongoing	316	7%
Did not enter treatment	789	17%
Total	**4,597**	**100%**

Characteristics associated with successful transitions to treatment

The following multilevel logistic regression models assess whether particular characteristics of an individual increase or decrease the likelihood of a successful transition to treatment. All individuals were included in the model.

Characteristics associated with successful transition to treatment after an ATR

Figure 3 shows the results from the multilevel logistic regression model for offenders sentenced to an ATR. The figure only displays characteristics that were statistically significant at the 5% significance level.
Those who reported the main problem substance as alcohol were most likely to access treatment. Individuals who reported cannabinoids were 71% less likely to access treatment within the allotted time requirement when compared to alcohol, while stimulant users were 84% less likely (Figure 3).

Those who were sentenced in later years were more likely to access treatment, with those sentenced in 2019 being 3.4 times more likely to access treatment than those in 2014 (Figure 3).

Those with a requirement order length of between 7 and 12 months were 70% more likely to access treatment than those with an order time of 6 months or less (Figure 3).

Figure 3: Socio-demographic and offender characteristics odds ratios related to accessing treatment after an ATR

Reference categories are alcohol as problem substance, 2014 as result year and 0 to 6 months as requirement length.

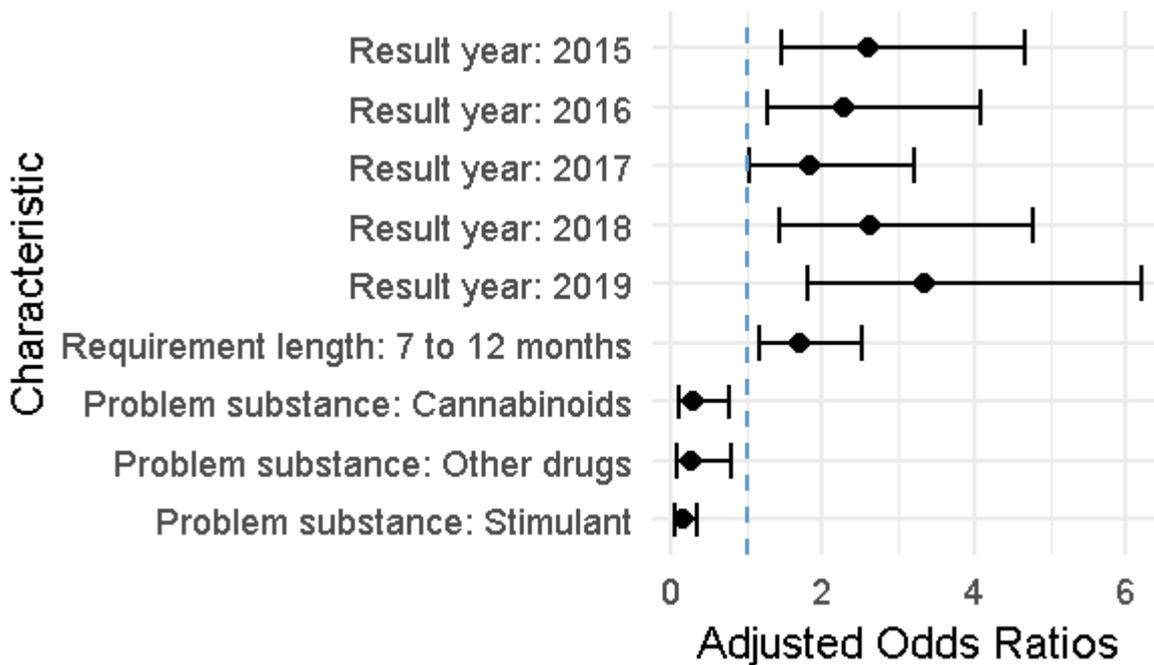## Characteristics associated with successful transition to treatment after a DRR

Figure 4 shows the results from the multilevel logistic regression model for offenders sentenced to a DRR. The figure only displays characteristics that were statistically significant at the 5% significance level.

Older offenders were more likely to access treatment. Those aged 45 to 54 were 2.2 times more likely, and those aged 55 and older were 8.1 times more likely to access treatment compared with individuals aged 18 to 24 (Figure 4).
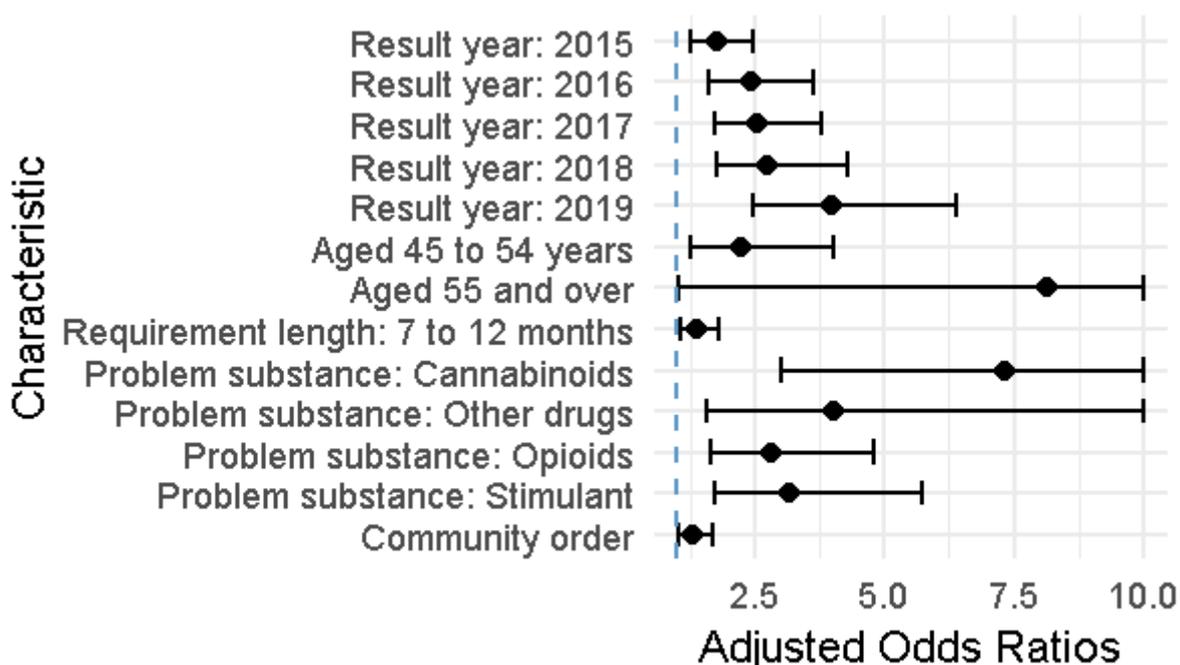
As with ATRs, individuals who were sentenced later than 2014 were more likely to access treatment, each year increasingly more likely than the last (Figure 4).

Those with a requirement order length of between 7 to 12 months were 39% more likely to access treatment than those with an order time of 6 months or less (Figure 4).

Individuals with a community order were 29% more likely to access treatment compared with those with a suspended sentence order (Figure 4).

Unlike with ATRs, individuals reporting alcohol as the main problem substance were the least likely to access treatment that those misusing other substances. Those reporting cannabinoids as the main problem substance were the most likely to access treatment than alcohol (7.3 times more likely) (Figure 4).

Figure 4: Socio-demographic and offender characteristics odds ratios related to accessing treatment after a DRR [note 1]

[Note 1] Confidence intervals were capped at an upper limit of 10 to improve the clarity of the forest plot visualisation. True upper confidence intervals were aged 55 and over (65.47), cannabinoids (17.86) and other drugs (10.24) as problem substance.

Reference categories are individuals aged 18 to 24, suspended sentence as disposal type, alcohol as problem substance, 2014 as result year, 0 to 6 months as requirement length.

Characteristics associated with quick access to treatment

The following multilevel logistic regression models assess whether particular characteristics of an individual increase or decrease the likelihood of accessing treatment quickly. This is measured by either being in treatment at the requirement sentence date or accessing treatment within 3 weeks of the requirement date. The model does not include anyone who did not ever engage with treatment. Therefore, it compares those who accessed treatment within 3 weeks of their requirement date (or were already in treatment) with those who accessed treatment after 3 weeks of their requirement date.

Characteristics associated with quick access to treatment after an ATR

Figure 5 shows the results from the multilevel logistic regression model for offenders sentenced to an ATR. The figure only displays characteristics that were statistically significant at the 5% significance level.

There was no significant association between later sentence dates and engaging with treatment when limiting time of treatment access to within 3 weeks. However, individuals in 2016 and 2018 were still more likely to access treatment quickly than in 2014 (Figure 5).

Individuals with 3 court requirements were 54% less likely to access treatment quickly than those with just one, a difference not seen when looking at engagement across an individual's entire requirement order length.

Individuals with alcohol recorded as their problem substance were 65% more likely to access treatment quickly than those with cannabinoids as their main problem substance which is comparable to treatment access rates across the individual's full order length.

Figure 5: Socio-demographic and offender characteristics odds ratios related to accessing treatment quickly after an ATR

Reference categories are alcohol for problem substance, 2014 as result year, one as total requirement.

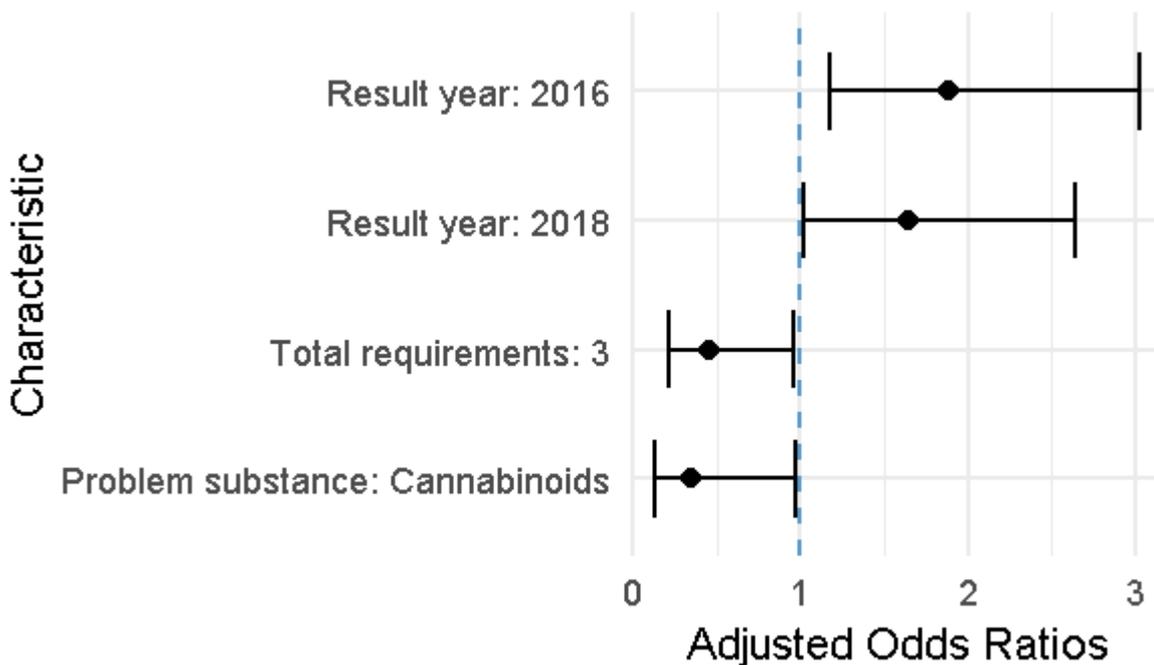## Characteristics associated with quick access to treatment after a DRR
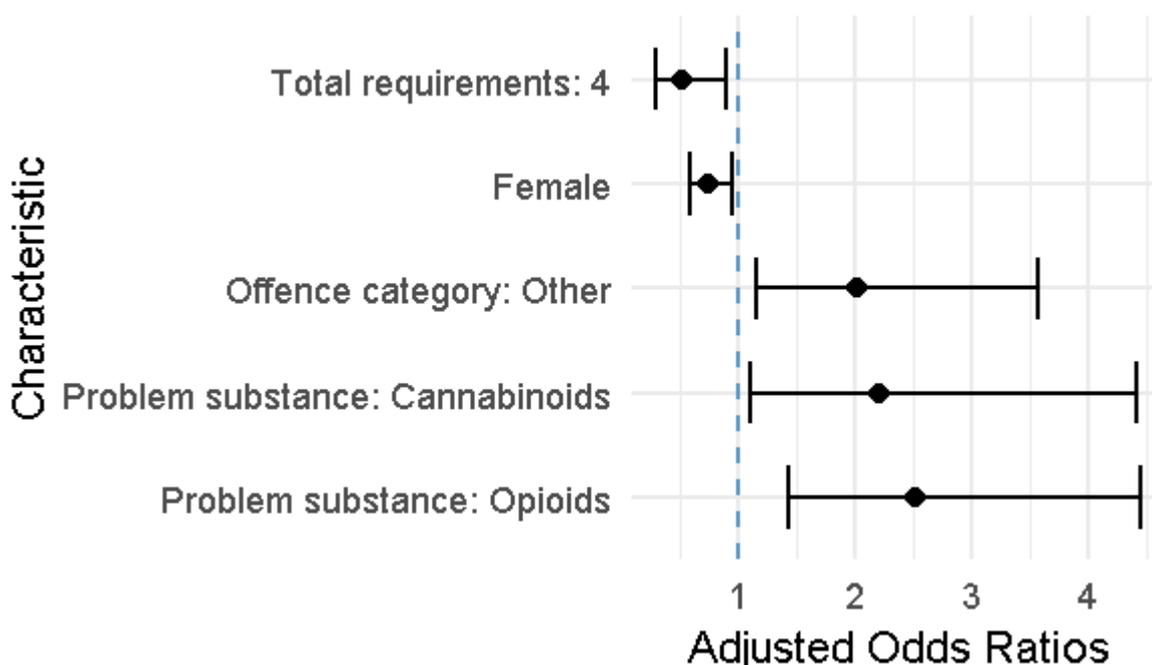
Figure 6 shows the results from the multilevel logistic regression model for offenders sentenced to a DRR. The figure only displays characteristics that were statistically significant at the 5% significance level.

Limiting the timeframe to 3 weeks after the sentence date showed that females were 26% less likely than males to access treatment. This is a notable change to transitioning into treatment services at any point through the CSTR timeframe, where no differences in sex were observed.

Similarly to ATRs, individuals with 4 or more court requirements were 49% less likely to access treatment within 3 weeks than those with 1, a difference only observed when looking at quick access to treatment compared to anytime access within the allotted timeframe.

Individuals with alcohol recorded as their problem substance were less likely to access treatment quickly compared with those who recorded cannabinoids or opioids as their main problem substance (Figure 6).

Figure 6: Socio-demographic and offender characteristics odds ratios related to accessing treatment quickly after a DRR

Reference categories are male as sex, violence as offence category, alcohol as problem substance type and one as total requirement.

Characteristics associated with successfully completing treatment

The following multilevel logistic regression models assess whether particular characteristics of an individual increase or decrease the likelihood of a successful completion outcome. Only individuals with a successful or unsuccessful treatment outcome were included in the model. Those recorded as deceased, still in treatment or other null outcomes were removed.

Characteristics associated with successfully completing treatment after an ATR

Figure 7 shows the results from the multilevel logistic regression model for offenders sentenced to an ATR. The figure only displays characteristics that were statistically significant at the 5% significant level.

Older ages had a higher rate of successful outcome, with those aged 55 and over having the highest success rate overall (3.3 times greater than those aged 18 to 24) (Figure 7).

Individuals in the second WIMD quintile were 49% more likely to have a successful treatment outcome than those in the first quintile.

Individuals who were sentenced at a later year were more likely to have a successful treatment outcome than those sentenced in 2014 (Figure 7).

Individuals with a shorter requirement order length had a 48% greater success rate than those who engaged with treatment with an order length between 7 to 12 months.

Individuals with a community order were 44% more likely to have a successful treatment outcome compared with those with a suspended sentence order.

Individuals whose offence category was driving under the influence of either drugs, alcohol or both were 66% more likely to successfully complete treatment compared to those whose offence category was violence. However, those with a violent offence were 35% more likely to successfully complete treatment than those sentenced for theft (Figure 7).

Individuals with alcohol recorded as their problem substance were 55% more likely to have a successful treatment outcome than those with opioids as their main problem substance.

Figure 7: Socio-demographic and offender characteristics odds ratios related to successfully completing treatment after an ATR

Reference categories are those aged 18 to 24, suspended sentence as disposal type, violence as suspended sentence, alcohol as problem substance, 2014 as result year, 0 to 6 months as requirement length, first WIMD quintile.

Characteristics associated with successfully completing treatment after a DRR

Figure 8 shows the results from the multilevel logistic regression model for offenders sentenced to an DRR. The figure only displays characteristics that were statistically significant at the 5% significance level.

Females were 28% more likely to successfully complete treatment than males.

Individuals aged 45 to 54 were 79% more likely to successfully complete treatment than those aged 18 to 24.

Those in the second and fourth WIMD quintile were more likely to successfully complete treatment compared with those in the first quintile (Figure 8).

Non-White-British individuals were 89% more likely to successfully complete treatment compared with White-British individuals.

Individuals who were sentenced later in the study period were more likely to have a successful treatment outcome than those sentenced in 2014 (Figure 8).
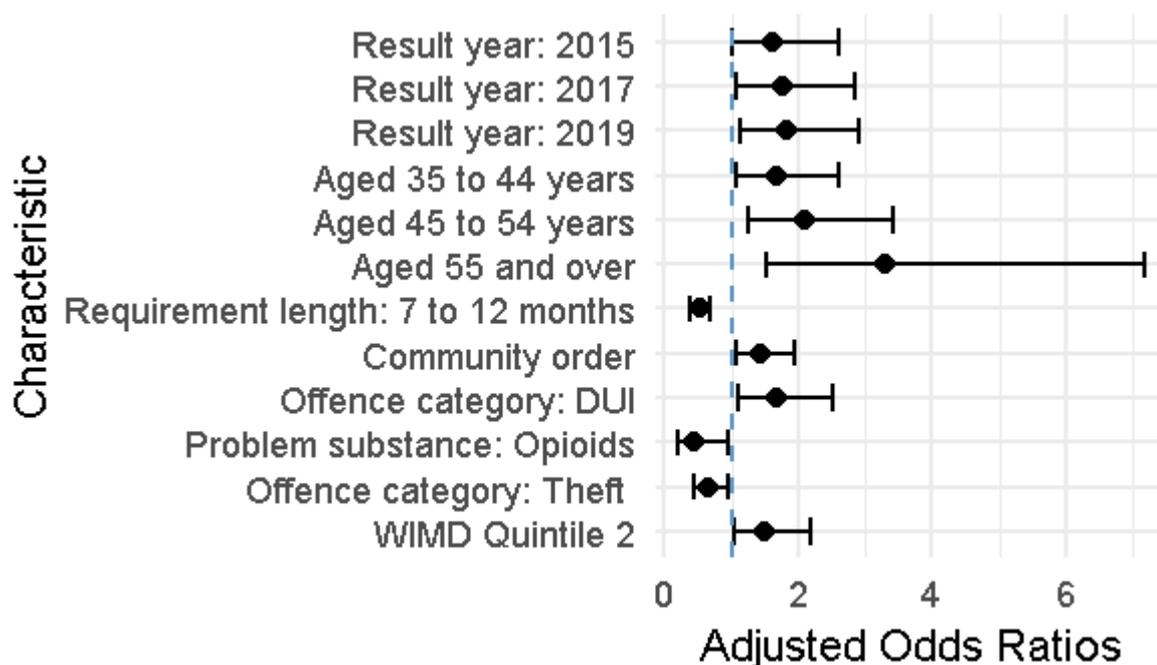
Individuals with a shorter requirement order length had a 35% greater success rate than those who engaged with treatment with an order length between 7 to 12 months.

Those with a violent offence were 38% more likely to successfully complete treatment than those sentenced for theft.

Individuals with a community order were 22% more likely to have a successful treatment outcome compared with those with a suspended sentence order.

Individuals with cannabinoids recorded as their problem substance were 3.2 times more likely to have a successful treatment outcome than those with alcohol as their main problem substance (Figure 8).

Figure 8: Socio-demographic and offender characteristics odds ratios related to successfully completing treatment after a DRR

Reference categories are those aged 18 to 24, suspended sentence as disposal type, ethnicity other than White-British, male as sex, violence as offence category, alcohol as problem substance type, 2014 as result year, 0 to 6 months as requirement length and first WIMD quintile.

Conclusion

The analysis included in this report provides evidence on the pathways between probation and treatment services for community sentence treatment requirements in Wales and an overview of the following treatment journey.

Of individuals sentenced to a CSTR, 83% had a treatment journey within a suitable timeframe of their sentence, suggesting a relatively successful transition into treatment services. A recommendation for future analysis would be to explore the proportion of those who did not. Some within this group will have legitimate reasons for not engaging with treatment services (like custodial sentences or death) meaning it has not been possible to distinguish between legitimate and non-legitimate lack of engagement in this study alone.

Given the vast majority of individuals do transition into treatment services, it is important to ensure a successful completion outcome. Of those who entered treatment after receiving a CSTR, 58% completed treatment or were still engaged in treatment. These successful outcomes were more likely for alcohol treatment requirements (73% of individuals) compared with drug rehabilitation requirements (49% of individuals). Older ages were most associated with engaging with, and successfully completing, treatment while there were no large socio-demographic or sentence related differences in engagement with treatment or successful outcomes when comparing between ATRs and DRRs. Research undertaken by ADR Network UK found similar results with more than two-thirds (68%) of ATRs were successfully completed[2].

Improving the number of successful treatment outcomes for those sentences to a DRR would greatly enhance the service provided. A recommendation for further analysis would be to understand if the treatment outcomes of those with a CSTR differ significantly from the general population going through treatment services.

Comparability to analysis undertaken in England

The English report found that in the study period there were 15,121 offenders (38.9% of the available 38,895 records) who appeared to have either been in treatment on or starter treatment after their sentence date[3]. Compared to England our results show that Wales has a higher transition rate into treatment services and slightly higher engagement with treatment services for both ATR and DRR. However, while many of the methods in this analysis align with those used in England, there were considerable differences in the accuracy of linkage methodology and data availability.

The main difference was the process of linking across probation and treatment services. For this study, probation and treatment data sets were linked to a spine of all individuals in Wales to identify those who appear in both data sets. This enabled us to differentiate between an individual who did not match due to not being represented in the other data set and individuals who did not match due to the quality of the data relating to them not being sufficient to achieve a reliable match (above 90% confidence). The team responsible for the

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[2] (Lightowlers, 2024)
[3] (Office for Health Improvement and Disparities, 2023)

English analysis only had access to the probation data sets and the English substance treatment data. In Wales we were able to remove individuals who didn't meet sufficient matching confidence which was not possible in England.

In this study we also had access to a wider window of substance misuse treatment journeys compared to the English study. Given the high percentage of our sample (29%) who were already in treatment on the day their sentence starts, this could have significant effect on the results of those successfully transitioning.

Disclaimer

This study makes use of anonymised data in the SAIL databank at Swansea University, Wales, UK. All work conducted in the SAIL databank was completed under the permission and approval of the SAIL independent Information Governance Review Panel (IGRP) under project number 1451. We would like to acknowledge all the data providers who make anonymised data available for research.

The data used in this study is available from the SAIL databank. All proposals to use SAIL data sets must comply with information governance policies and are subject to review by the independent Information Governance Review panel. Before data can be accessed, approval must be given by the IGRP. Requests to access these data sets should be directed to the SAIL databank.

Reference section

Gov.uk, n.d. Pathways between probation and addiction treatment in England: Report. UK Government. Available at: [Pathways between probation and addiction treatment in England](#) [Accessed 18 March 2025].

Lightowlers, C., 2024. Reinforcing the abstinence ideal: criminal justice developments. Drugs: Education, Prevention and Policy, 31(5), pp.499-504.

Appendices

Appendix 1: CSTR population with no anonymised linking field

The number of CSTRs that were unable to be assigned an ALF during the linking process when the data set was submitted to the SAIL databank was 487. This means that it was not possible to ascertain who transitioned into treatment services. For this reason, CSTRs with no ALF were removed from the analysis. A summary of this population is included in the following tables.

Roughly three-quarters of CSTRs with no ALF were males, this is similar to the CSTRs who were assigned an ALF (3,475 males and 1,122 Females). Similarly, the majority of individuals are aged between 24 and 44 which is also consistent with CSTRs which were assigned an ALF. This suggests that there is no major underlying bias based on age or gender (Appendix 1, Table 1).

Appendix 1, Table 1: Number of CSTRs with no ALF by age and sex

Age band	Male	Female	Total
18 to 24	45	21	66
25 to 34	107	44	151
35 to 44	89	37	126
45 and older	59	19	78
Total	**300**	**121**	**421**

There were more DRRs (57%) than ATRs (43%) in the no ALF population which is broadly similar to population who were assigned ALFs (63% DRR and 37% ATR) (Appendix 1, Table 2).

Appendix 1, Table 2: Number of CSTRs with no ALF by requirement type and age

Age band	Drug rehabilitation requirement	Alcohol treatment requirement	Total
18 to 24	34	32	66
25 to 34	107	44	151
35 to 44	76	50	126
45 and over	21	57	78
Total	**238**	**183**	**421**

Just under a half of individuals who didn't have an ALF were resident in the most deprived areas in Wales (49%), this is a similar proportion to those CSTRs who did have an ALF (44%) (Appendix 1, Table 3).

Appendix 1, Table 3: Number of CSTRs with no ALF by requirement type and deprivation quintile

Deprivation quintile	Drug rehabilitation requirement	Alcohol treatment requirement	All CSTRs
1 (most deprived)	140	66	206
2	30	40	70
3	40	35	75
4	15	17	32
5 (least deprived)	13	25	38

Appendix 2: DRR and ATR transitioning into treatment service figures by age band.

Appendix 2, Table 1: Number and percentage of drug rehabilitation requirements with treatment services successful transitions by age band

Age band	Total drug rehabilitation requirements	Number of successful transitions	Percentage	Lower confidence interval	Upper confidence interval
18 to 24	400	308	77%	72%	82%
25 to 34	1,362	1,123	82%	80%	84%
35 to 44	863	724	84%	81%	87%
45 to 54	245	219	89%	85%	93%
55 and older	34	32	94%	86%	100%
All ages	**2,904**	**2,406**	**83%**	**81%**	**85%**

Appendix 2, Table 2: Number and percentage of alcohol treatment requirements with treatment services successful transitions by age band

Age band	Total alcohol treatment requirements	Number of successful transitions	Percentage	Lower confidence interval	Upper confidence interval
18 to 24	213	157	74%	67%	81%
25 to 34	599	489	82%	79%	85%
35 to 44	444	379	85%	81%	89%
45 to 54	319	274	86%	82%	90%
55 and over	118	103	87%	81%	93%
All ages	**1,693**	**1,402**	**83%**	**81%**	**85%**

Appendix 3: Figures related to CSTRs, DRRs and ATRs transitioning into treatment services, by WIMD quintile.

Appendix 3, Table 1: Number and percentage of CSTRs transitioning into treatment services, by WIMD quintile

Deprivation quintile	Total CSTRs	Number with a valid transition	Percentage with valid transition	Lower CI	Higher CI
1 (most deprived)	2,029	1,681	83%	81%	85%
2	1,032	834	81%	78%	84%
3	735	635	86%	83%	89%
4	506	422	83%	79%	87%
5 (least deprived)	295	236	80%	75%	85%

CI as confidence interval.

Appendix 3, Table 2: Number and percentage of DRR successful transition into treatment services, by WIMD quintile

Deprivation quintile	Total DRR	Number with a valid transition	Percentage with valid transition	Lower CI	Higher CI
1 (most deprived)	1,398	1,162	83%	81%	85%
2	636	511	80%	77%	83%
3	436	376	86%	82%	90%
4	295	252	85%	81%	89%
5 (least deprived)	139	105	76%	68%	84%

CI as confidence interval.

Appendix 3, Table 3: Number and percentage of ATR successful transition into treatment services, by WIMD quintile

Deprivation quintile	Total ATRs	Number with a valid transition	Percentage with valid transition	Lower CI	Higher CI
1 (most deprived)	631	519	82%	79%	85%
2	396	323	82%	78%	86%
3	299	259	87%	83%	91%
4	211	170	81%	75%	87%
5 (least deprived)	156	131	84%	78%	90%

CI as confidence interval.

Appendix 4: Categorisation of treatment outcomes in WNDSM

Each category below is aggregated from the data set as follows:

Appendix 4, Table 1: Treatment outcomes categories derived by WNDSM contact end codes

Category	WNDSM contact end code(s)
Deceased	• Deceased
Did not complete	• Referred to another service [note 1] • Prison • Treatment withdrawn – breach of contract • Moved from area • Did not attend or respond to follow-up contact • Inappropriate referral including those individuals not ready to engage
Treatment completed	• Treatment completed – drug free • Treatment completed
Treatment ongoing	• Referred to another service [note 1] • No contact end reason or date available
Null outcome	• Invalid • Blank
N/A	• No record of them in the WNDSM data set with a valid treatment journey (meaning treatment not started)

[Note 1] Referred to another service should mean that the individual starts another treatment journey within 21 days of this treatment journey finishing. For our analysis if no assessment happens within a month of their index treatment journey finishing, then they are categorised as did not complete. If an assessment did happen within the month, then they are categorised as treatment ongoing as their treatment is continuing as planned.

Appendix 5: Number and percentage of treatment outcomes by CSTR type

Appendix 5, Table 1: Number and percentage of treatment outcome categories of drug rehabilitation requirements

Treatment outcome	Number	Percentage
Deceased	18	1%
Did not complete	1,173	40%
Null outcome	25	1%
Treatment completed	966	33%
Treatment ongoing	224	8%
Did not enter treatment	498	17%
Total	**2,904**	**100%**

Appendix 5, Table 2: Number and percentage of treatment outcome categories of alcohol treatment requirements

Treatment outcome	Number	Percentage
Deceased	21	1%
Did not complete	338	20%
Null outcome	23	1%
Treatment completed	928	55%
Treatment ongoing	92	5%
Did not enter treatment	291	17%
Total	**1,693**	**100%**