

# Changes in offending following prescribing treatment for drug misuse



Tim Millar, Andrew Jones, Michael  
Donmall and Malcolm Roxburgh

## Summary

There is already evidence to indicate that drug users in treatment commit fewer crimes, although this is mostly based on users' self-reported criminal activity.

In this study, anonymised data from the Police National Computer was matched to information in the NTA's National Drug Treatment Monitoring System database. Researchers looked at a sample of opiate and crack users who had recently offended but had not been jailed, and had started drug treatment in the community. The number of offences committed almost halved following the start of treatment – from 4,381 to 2,348. The biggest category – acquisitive crime – fell from 1,234 to 635.

Reductions were consistent across the board for a range of crimes, although a higher proportion of the later round of offences were for breaches of previous sentences rather than new crimes. Half of the individuals committed no follow-up crimes at all.

In a sub-sample of offenders who had committed crimes that qualified for testing on arrest, the number of follow-up offences committed fell by 61 per cent; from 2,023 to 793. Acquisitive crimes fell from 1,245 to 539 (57 per cent). The results suggest that those who did commit further offences were more likely to have been serial offenders.

Treatment duration is associated with better outcomes and the longer this group was in treatment (up to ten months in some cases), the fewer follow-up offences were committed.

The results suggest an association between treatment and falls in crime, although they do not prove that these falls were solely the result of prescribing. The study also followed a very specific population. Nevertheless, these findings justify further research.

## The National Treatment Agency for Substance Misuse

The National Treatment Agency for Substance Misuse (NTA) is a special health authority within the NHS, established by government in 2001 to improve the availability, capacity and effectiveness of treatment for drug misuse in England.

The NTA works in partnership with national, regional and local agencies to:

- Ensure the efficient use of public funding to support effective, appropriate and accessible local services
- Promote evidence-based and co-ordinated practice, by distilling and disseminating best practice
- Improve performance by developing standards for treatment, promoting user and carer involvement, and expanding and developing the drug treatment workforce
- Monitor and develop the effectiveness of treatment.

The NTA has achieved the Department of Health's targets to:

- Double the number of people in treatment between 1998 and 2008
- Increase the percentage of those successfully completing or appropriately continuing treatment year-on-year.

The NTA is now in the frontline of a cross-government drive to reduce the harm caused by drugs. Its task is to improve the quality of treatment in order to maximise the benefit to individuals, families and communities.

Going forward, the NTA will be judged against its ability to deliver better treatment and better treatment outcomes for the diverse range of people who need it.

## Background

The links between problematic drug use and involvement in acquisitive crime are complex<sup>1-10</sup> and there are probably several underlying causal and sequential processes.<sup>7, 11-13</sup> Although empirical research does not suggest that problem drug use is the primary cause of involvement in acquisitive crime,<sup>7, 11, 13</sup> there is evidence that self-reported levels of criminality are reduced following treatment.<sup>4,14</sup> However, while self-reports of behaviour around drug use are reasonably accurate, few studies have considered the validity of drug users' self-reports of criminal behaviour.<sup>15</sup> This preliminary evaluation examined criminal records data to provide an additional indicator of changes in offending following treatment.

## Approach

This evaluation was based on linking information from the National Drug Treatment Monitoring System (NDTMS) and the Police National Computer (PNC). Pre and post-treatment patterns of arrest and charge were examined among a population of individuals admitted to structured drug treatment, which included a substitute prescribing component.

The use of data for this purpose was subject to approval from the National Treatment Agency for Substance Misuse (NTA) and the Home Office. The analysis was based on matching the attributer codes (initials, date of birth and gender) of problem drug users, recorded by NDTMS, with those of offenders on the PNC. The attributer codes were irreversibly encrypted into a 40-digit alphanumeric code before details of arrest and treatment were linked. This encryption process rendered the data anonymous for the purposes of the analysis; it was not possible for evaluators to recreate the attributer code on the basis of the encrypted version. The Central Office for Research Ethics Committees advised that an evaluation of this type did not require research ethics approval because it used anonymous secondary data. The linked data was held by the National Drug Evidence Centre and not made available to the Home Office, NTA or any third parties.

NDTMS and PNC data were used to select a sample of opiate and crack users who:

- Commenced treatment that started with a prescribing modality during 2004/05, but did not receive any other treatment modality during the previous year
- Were charged with an offence in the year prior to starting prescribing treatment, for which they were found guilty, cautioned, warned, reprimanded, or charges had remained pending
- Had no PNC record of a custodial sentence being imposed in the year before or year after starting treatment; therefore, they

remained in the community and were able to commit further offences.

It was necessary to include pending charges because a larger proportion of post-prescribing (as opposed to pre-prescribing) charges were unresolved and excluding these from the analysis would have biased the results. Criminal charges brought against this group were categorised as occurring during the year before or the year after starting prescribing, based on the date that the offence started, as recorded by PNC, and on the date of starting prescribing, as recorded by NDTMS. Charges with a "not guilty" verdict were dropped from the analysis.

## Findings

Table 1 shows all of the charges brought against the sample of 1,476 individuals in the year before and the year after starting prescribing. A total of 4,381 charges were brought during the year before prescribing started and 2,348 were brought during the year after, the most common charge category being theft. It is noticeable that "breach" offences accounted for 20 per cent of the charges brought during the year after entering treatment, compared to only ten per cent of the pre-treatment charges; that

Offence group	Number of charges	
	Year before	Year after
Theft	1,234	635
Absconding or bail offences	504	334
Breach of an order	438	473
Drugs (possession and small-scale supply)	430	138
Other motoring offences	402	159
Violence	273	120
Fraud and forgery	266	82
Public order or riot	170	84
Handling	100	41
Criminal or malicious damage	97	58
Drink driving offences	87	24
Soliciting or prostitution	83	31
Drugs (import, export, production or supply)	75	11
Other burglary	53	33
Domestic burglary	44	35
Taking and driving away and related offences	20	22
Theft from vehicles	18	10
Robbery	12	11
Other	66	16
Not recorded	9	31
Total	4,381	2,348

*Table 1: Number of charges (all offence types) brought against the sample in the year before and the year after starting prescribing treatment, by type of offence (n=1,476)*

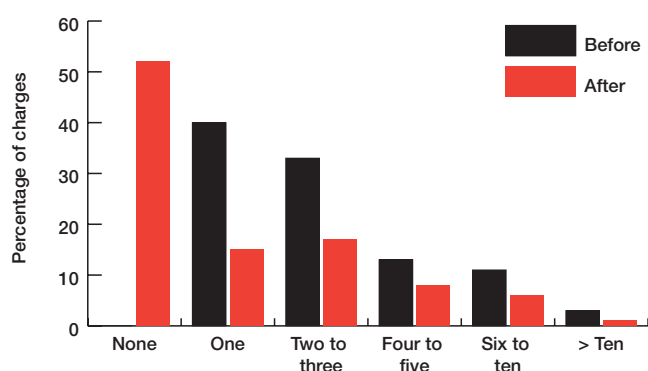


Figure 1: Number of charges (all offence types) brought in the year before and the year after starting prescribing treatment (n=1,476)

Note: Being charged with an offence in the year before prescribing started was a precondition for inclusion in the sample

is, a greater proportion of the post-treatment offences indicated non-compliance with a sentence rather than committing an additional offence. It is important to note that post-prescribing inclusion of individuals for a particular offence category does not imply their pre-prescribing inclusion for that category.

Figure 1 shows the number of charges brought against the sample during the year before and the year after prescribing started. Individuals were only included in the sample if they had been charged with an offence in the year before prescribing started; 40 per cent of individuals were charged with only one offence in the year before prescribing and a further 33 per cent with two or three offences. Most (52%) individuals were not charged with any offence in the year after prescribing started. The

mean number of charges fell from 3.0 (median = 2) in the year before prescribing started to 1.6 (median = 0) in the year after.

Prior to starting prescribing, a subset of 951 individuals was charged with one of the acquisitive or drug-related offences (trigger offences) that are likely to be associated with drug use and prompt drug testing while in police custody. Eleven per cent (105 individuals) of this group were referred to treatment via arrest referral or the Drug Interventions Programme. Trigger offences are, perhaps, a more useful indication of drug-related crime than the generality of offending and are examined here in more detail. The sub-sample was charged with 2,023 such offences prior to and 793 such offences after starting prescribing treatment, as shown in Table 2. Note that, as for Table 1, individuals were only included in the sample if they had been charged with an offence in the year before prescribing started, but post-prescribing inclusion for an individual offence category does not imply pre-prescribing inclusion for that category. Theft offences accounted for the majority of charges,<sup>a</sup> with more than 80 per cent of these being accounted for by shoplifting. Proportionally, the most marked reductions were for class A drug offences (involving heroin, crack and cocaine) and for obtaining property by deception.

Figure 2 shows the number of charges for trigger offences brought against the sub-sample of 951. Most individuals (54%) were charged with only one trigger offence in the year prior to starting prescribing and only 15 per cent were charged with more than three trigger offences. Most (62%) were not charged with a trigger offence in the year after prescribing started. The mean number of recorded trigger offences fell from 2.1 (median = 1) to 0.8 (median = 0). Much of this decrease was accounted for by the large group (62%) that was not recorded as having been

Offence	Number of charges		% reduction
	Year before	Year after	
Theft (all types)	1,245	539	57%
Obtaining property by deception	196	42	79%
Handling stolen goods	100	33	67%
Possessing (specified) class A controlled drug	231	54	77%
Supplying or intent to supply (specified) class A controlled drugs	84	10	88%
Burglary (dwelling and non-dwelling)	79	44	44%
Other offences* (each accounting for fewer than 50 charges)	88	71	19%
Total charges for trigger offences	2,023	793	61%

Table 2: Number of charges (trigger offences) brought in the year before and the year after starting prescribing treatment (n=951).

\* Begging, going equipped for theft, taking motor vehicle without consent, robbery

<sup>a</sup> The minor discrepancy between the figure for pre-prescribing theft in Table 1 and that in Table 2 is due to the way in which standard summary schema categorises certain sub-categories of theft.

Prescribing duration (months)	Mean and median number of charges				% charged in following year	Number
	Year before		Year after			
	Mean	Median	Mean	Median		
< 3 months	2.2	2	1.1	0	44%	188
3–10 months	2.1	1	1.1	0	44%	228
> 10 months	2.1	1	0.7	0	33%	535

Table 3: Average (mean/median) number of charges for trigger offences and percentage charged with a trigger offence during the year after prescribing started, by duration of first prescribing episode

charged with further trigger offences. Evidently, the change was less marked among the group (38%) charged with further recorded trigger offences after prescribing started; from a mean of 2.4 (median = 2) to 2.2 (median = 1) offences. (This change was not statistically significant.)

In the absence of a control group it is not possible to ascribe these changes to the effect of prescribing *per se*. However, the outcome of prescribing treatment for drug misuse is related to its duration.<sup>16-20</sup> Hence, it is plausible to hypothesise that, if prescribing has a specific effect on offending and arrests, then this will be most apparent for those treated for longer periods. The bulk (535; 56%) of the subsample of 951 trigger offenders remained in their initial prescribing treatment for more than ten months (300 days), one-fifth (188; 20%) for less than three months (<90 days) and around one-quarter (228; 24%) for between three and ten months. Table 3 shows the average (mean and median) number of charges brought against each of these three groups in the period before and after prescribing started, together with the recorded re-offending rate.

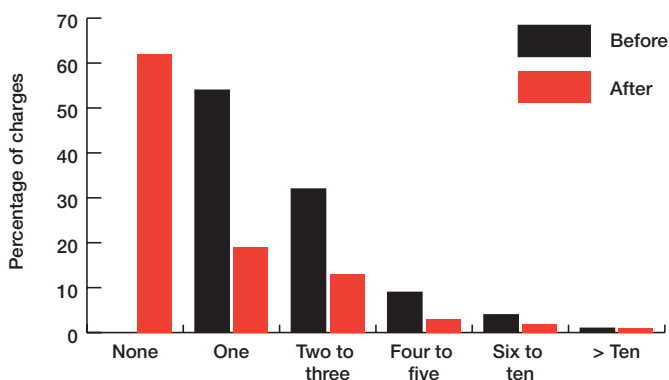


Figure 2: Number of charges (trigger offences) brought in the year before and the year after starting prescribing treatment (n=951).

Note: Being charged with an offence in the year before prescribing started was a precondition for inclusion in the sample

<sup>b</sup> Wilcoxon repeated measures and Mann-Whitney independent samples tests

The three groups exhibited a similar mean number of arrests before prescribing started, but the mean number of post-prescribing arrests was smallest for the group with the longest prescribing duration. Statistical comparison<sup>b</sup> of the short-duration (less than three months) and long-duration (more than ten months) groups confirmed that, while the groups did not differ with respect to pre-prescribing arrests and both exhibited a decline in the number of recorded offences, there was a statistically significant difference between them with respect to the number of charges brought after prescribing had started ( $z=2.75$ ,  $p=0.03$ ); although they started from the same baseline, fewer post-prescribing charges were brought against those with a longer prescribing duration.

## Conclusions

The study sample had committed a range of recorded offences. Much of this offending was theft and mainly shoplifting; crimes such as burglary and robbery were comparatively rare. Of course, the association between recorded and actual offending may vary according to offence type and some crimes may carry a higher probability of detection and arrest.

It is most encouraging that levels of recorded offending fell after prescribing started. This is consistent with changes in the level of self-reported offending observed in other UK studies.<sup>4, 14</sup> However, as we and other studies have pointed out, in the absence of a control group it is not possible to ascribe the reduction in recorded offending to the effect of prescribing *per se*. Indeed, an initial examination of criminal records data for a wider population of problem drug users suggested that there were natural peaks and troughs in arrest patterns, irrespective of whether or not an intervention was provided. However, the reduction in recorded offending was greatest for those with the longest duration of prescribing. This suggests an association with treatment, although the direction of the association cannot be determined. This finding may lend support to the view that there are critical thresholds beyond which treatment effectiveness is optimised.<sup>16, 18-20</sup> Alternatively, insofar as those in the long-duration group were in receipt of prescribing for most or all of the

period studied, it is consistent with the hypothesis that the prescribing effect is strongest for clients who are still receiving, or have recently received, such treatment.<sup>21, 22</sup>

For most, being charged with a trigger offence was a comparatively infrequent event – 54 per cent of the sample were arrested and charged with only one such offence in the year prior to starting prescribing. Most (62%) were not recorded as having committed any further trigger offences in the year after prescribing started and this group accounted for much of the decline in the number of known offences. Indeed, the rate of recorded offending did not change among those known to have committed further trigger offences, implying the existence of a group of more persistent offenders. Taken together, these findings suggest that simply whether or not a person has re-offended may be a more useful indicator than changes in *rates* of recorded offending. Fewer of the long-duration group re-offended at all.

While criminal records data may provide an indicator of the level of crime committed by the sample, it should be acknowledged that the association between levels of recorded and actual offending may not be linear – that this, association may vary according to the types of crime involved and that treatment may change the nature of this association. Also, the rather short (one-year) follow-up period used here, which was constrained by the data available at the time, might not have provided a sufficient window for arrest to have occurred. It is recommended that future applications should consider pre and post-treatment periods of two years.

The preliminary analysis is confined to a very specific group – those opiate and crack users who were recorded as having committed an offence in the year prior to starting prescribing treatment, who, as far as could be determined, remained at large in the community for the whole of the period studied and were, therefore, able to commit further offences. It was desirable to be as specific as possible about the type of intervention provided, but those offenders who remain in the community may not be representative of those who commit more, or more serious, offences, who may be more likely to be imprisoned. There is potential for future work to consider changes in recorded offending among different treatment sub-groups and, perhaps, to consider different pathways through the treatment and criminal justice system.

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## Reader information

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<b>Lead author</b>	Tim Millar, National Drug Evidence Centre, University of Manchester
<b>Contributing authors</b>	Andrew Jones and Michael Donmall (National Drug Evidence Centre, University of Manchester) and Malcolm Roxburgh (National Treatment Agency for Substance Misuse)
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### National Treatment Agency for Substance Misuse

8th floor, Hercules House, Hercules Road, London SE1 7DU

Tel 020 7261 8801. Fax 020 7261 8883

Email: [nta.enquiries@nta-nhs.org.uk](mailto:nta.enquiries@nta-nhs.org.uk) Website: [www.nta.nhs.uk](http://www.nta.nhs.uk)

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