Summary of findings from two evaluations of Home Office Alcohol Arrest Referral pilot schemes

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I. Introduction

Alcohol Arrest Referral (AAR) pilot schemes were set up to test whether providing brief alcohol interventions in a criminal justice setting could impact on re-offending. Two phases of Home Office-funded AAR pilots were set up across 12 police forces in total over the period October 2007 to September 2010. Both phases were evaluated separately using similar methodological approaches.

This report provides a summary of the key findings from the two evaluations, focusing mainly on the combined results for schemes within each of the two phases of pilots. Stand-alone, more detailed reports for each phase are available on the Home Office website (phase one: http:// www.homeoffice.gov.uk/publications/science-researchstatistics/research-statistics/crime-research/occ101, phase two: http://www.homeoffice.gov.uk/publications/scienceresearch-statistics/research-statistics/crime-research/ occ102) and they include further breakdowns of analyses by scheme and other variables.

Key findings

- Overall the evaluations did not suggest that AAR schemes reduced re-arrest. Average costs per intervention across the pilot schemes varied from £62 to £826, but most schemes did not break even as they did not reduce re-arrests overall.
- Over one-half of those arrested for alcohol-related offending within the pilot schemes had not been arrested in the six months prior to the trigger arrest and also were not arrested in the six months following. This suggests that the majority of those arrested within the night-time economy are not prolific offenders, at least in terms of arrest records.
- There was some evidence of reduced alcohol consumption among those who received the intervention, but for a number of reasons this finding should be treated with caution.
- Delivering interventions in a custody setting is possible, but requires good co-operation between custody staff and alcohol workers. Having an established custody scheme in place, such as a Drug Interventions Programme (DIP), may smooth the way for delivery and could have potential cost savings if workers could be used for both alcohol and drugs work.

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Keywords

Alcohol Brief intervention Custody Evaluation Night-time economy Offending Police

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Background

The Alcohol Arrest Referral (AAR) pilot schemes were first introduced by the Home Office in 2007 as a means of tackling the link between alcohol and offending, in particular in the night-time economy. This was supported by the report 'Safe. Sensible. Social The next steps in the National Alcohol Strategy' (Department of Health and Home Office 2007) which identified AAR as a possible means of delivering alcohol interventions in a criminal justice setting to reduce alcohol-related offending.

AAR uses the principles of brief interventions to help people to identify harmful and hazardous drinking patterns and to establish ways of reducing alcohol intake. Brief interventions are characterised primarily by their short length and may be delivered in one or more sessions, but usually not beyond five (Babor et al., 2006). They usually involve motivational interviewing as part of an assessment of needs (Raistrick et al., 2006). There has been extensive research¹ in the health care field around the efficacy of brief interventions in reducing alcohol consumption. The schemes in the two phases of the AAR pilots were an attempt to see whether these benefits could extend to a criminal justice setting and, specifically, to test whether they could lead to a reduction in re-offending for individuals arrested for alcohol-related offences, primarily, within the context of the night-time economy.

AAR schemes were piloted in a total of 12 police forces in two phases. The first pilot schemes ran between October 2007 and October 2008 and took place in four police forces, with the evaluation covering the same time period. During this time a Ministerial statement announced a second phase of piloting, referred to in the reports as phase two, which included eight more police forces. The second phase pilot schemes become operational in November 2008 and formal piloting ran until September 2010, when Home Office funding concluded. The second phase evaluation took a 12-month sample of cases drawn from the period May/June 2009 to June 2010, when all schemes were fully operational. Both phases were evaluated separately, but used similar methodological approaches. Both phases of the AAR pilots were targeted at adults aged over 18 who had been arrested and deemed, by a police officer, to be under the influence of alcohol.² The intervention comprised a brief session with an alcohol worker with follow-up sessions offered to those where appropriate. Pilot schemes were given a degree of autonomy around how to deliver interventions, but they generally covered the following as a minimum:

- an assessment of clients' alcohol consumption using the Alcohol Uses and Disorder Identification Tool (AUDIT³);
- provision of information around the risks of alcohol consumption, including links to offending, and practical advice and techniques for reducing alcohol consumption;
- an assessment of levels of self-reported offending in the previous six months;
- in phase one, a readiness to change scale and the General Health Questionnaire⁴ (NFER-Nelson, 1992); and
- in phase two, an assessment of behavioural and attitudinal issues using the Short Inventory of Problems (SIP⁵) and a measure of motivation to change.

Alcohol workers completed a form called the Alcohol Intervention Record (AIR) for each client. The AIR was developed to include data for both monitoring and evaluation purposes,⁶ and tools relevant for the intervention. The AIR form used in phase two differed slightly from that used in phase one following amendments to address feedback from the first evaluation.

2 To note – in phase one, individuals arrested for drink driving offences were not eligible for the intervention.

- 3 AUDIT is a validated and standardised measure which comprises a set of ten questions about alcohol consumption and individuals' experiences through alcohol. The responses are summed and, depending on the score, drinkers may be classified as being hazardous (8–15 points), harmful (16–19 points) or dependent drinkers (20 plus points). For the purposes of the pilot, those scoring 0–7 were classified as 'no risk' (Babor et al., 2001).
- 4 The General Health Questionnaire (GHQ) described by NFER-Nelson (1992) is a measure of psychological wellbeing comprising 12 questions, each with 2 responses – whether it applies, and the extent to which the individual is affected.
- 5 SIPs is a validated tool that collects information about the psychosocial consequences of drinking (Forcehimes et al., 2007).
- 6 Data from the AIR were shared with the evaluators if consent had been received from clients.

For example see: Review of Effectiveness of Treatment for Alcohol Problems http://www.nta.nhs.uk/publications/documents/nta_ review_of_the_effectiveness_of_treatment_for_alcohol_problems_ fullreport_2006_alcohol2.pdf and Kaner et al, 2009.

2. Approach

Aims of the evaluations

The evaluations of the phase one and two pilot schemes had similar goals. They aimed to:

- analyse the profile of those engaged in Alcohol Arrest Referral (AAR) schemes;
- establish whether alcohol interventions can reduce re-offending;
- provide evidence on the cost effectiveness of schemes;
- seek evidence on any changes in alcohol consumption and wellbeing/health; and
- learn implementation and delivery lessons.

The evaluations covered process, outcome and cost assessments using both qualitative and quantitative data to meet these evaluation aims. An overview of the methodologies used is provided below. See Box I at the end of this summary for a discussion about the limitations of the design, and learning points from the evaluation.

Process evaluation

- Interviews with purposively selected personnel involved in the delivery and running of the pilots:
 - phase one: 40 interviews across all pilot schemes;
 - phase two: 163 interviews across the eight pilot schemes (some key personnel were interviewed twice within this at different time points).
- Observation of interventions (22 in phase one and 16 in phase two).
- Examination of project documentation.

- Interviews with clients who had attended AAR interventions:
 - phase one: 41 interviews at three months postintervention and 16 follow-up interviews with the same individuals at six months postintervention. These were selected from harmful and hazardous drinkers;
 - phase two: 50 in-depth interviews with purposively selected clients at one month post-intervention.
- Analysis of AIR data (2,177 valid forms for phase one and 4,739 valid forms for phase two).

Outcome assessment

- Impact assessment comparing arrest rates (as a proxy for re-offending) for those who received the intervention against matched individuals not receiving an intervention from within the same police force in a time period before the start of the AAR scheme.⁷ A difference-in-difference analysis was used to determine whether the schemes had reduced re-arrests from six months pre- to six months post-intervention/dummy intervention:
 - phase one: Findings are based on three of the four schemes⁸ (as data for scheme B were not available in a form amenable to analysis). Of the 1,728 cases with valid AIR data from schemes A, C and D a total of 1,053 clients were matched. The matching rates ranged from 56 per cent in scheme A to 81 per cent in scheme D;
 - phase two: Valid AIR data were available for 4,821 clients for matching, 98 per cent of which were matched to police records (4,739) to form the comparison group.

⁷ For phase one the comparison group was taken from arrests occurring between June 2006 and May 2007. For phase two the comparison group was drawn from a 24-month sample of arrestees committing offences at least 12 months prior to the AAR pilot.

⁸ To note schemes have been anonymised throughout this and the main reports.

- Exploration of factors that might account for any changes in arrest rates.
- Follow-up interviews with clients who had attended AAR interventions:
 - phase one: 162 responses received from postal, telephone and email follow-up of clients;⁹
 - phase two: 667 telephone interviews with clients at six months post-intervention.¹⁰

Cost assessment

 Break-even analyses¹¹ to determine the level of reduction of re-offending that would be necessary for schemes to break even and thus be cost effective.

3. Findings

Scheme overview

In both phases, pilot sites were given a degree of autonomy in setting up their AAR schemes to meet their local needs in the best way. Table I summarises some of the key differences across the schemes in terms of how individuals were referred, where interventions were delivered and the length of sessions. A discussion of some of the key process study findings around this is included below.

Referral route and location of interventions

Pilot schemes were able to deliver interventions in custody suites after the arrest or at non-custody venues using either mandatory or voluntary referral routes.

Mandatory routes (via conditional bail or conditional caution¹²) tended to require individuals to attend sessions away from custody. Those preferring delivery away from custody felt that the environment would foster a more therapeutic relationship, according to some AAR worker interviewees. First sessions for voluntary interventions were generally delivered in custody. Practitioners preferring custody-based interventions felt that the setting was critical in making the link between the individuals arrest and their alcohol use.

In practice, the majority of first sessions were delivered on a voluntary basis – over 80 per cent in phase one and 75 per cent in phase two. Practitioners in both phases of the pilots reported difficulties in the use of mandatory routes, mainly due to concerns around the enforceability of conditions and the reported overly onerous process of issuing conditional cautions.¹³

Attendance away from custody tended to be low, as experienced by two phase-one schemes that switched to custody-based delivery following early low throughput. The use of mandatory conditions improved attendance at the first sessions. However, when follow-up sessions away from custody were offered, attendance was higher for voluntary attendees (62% of voluntary clients attended subsequent sessions compared with 34% of those referred

⁹ Follow-up questionnaires were posted to 1,617 clients who consented to be contacted and provided details. Attempts were also made to follow up clients by telephone and email after poor response rates. Despite repeated attempts only 173 provided responses, 162 (10%) of which contained data on alcohol consumption.

¹⁰ Follow-up interviews were attempted with all AAR clients who had consented to take part in the evaluation and who provided valid contact details (1,943 out of 4,739 cases). Despite repeated attempts at contact only 667 valid interviews were completed (34% of those supplying details).

II Cost effectiveness analyses were planned but due to the negative or null results from the impact study these were limited to break-even analyses in both phases.

¹² Schemes had service level agreements for a minimum number of interventions via conditional bail and conditional caution.

¹³ This was a general criticism of conditional cautions when they were originally implemented (Blakeborough and Pierpoint, 2007).

Scheme reference	Primary referral route	Location of first session	Average length of first session (minutes)	Number of interventions delivered
Phase one				
А	Voluntary	Police custody	Sessions most	1,275
В	Voluntary	Non-custody venue changing to custody after one month	frequently 10–20 minutes with the majority under 30	372
С	Voluntary	Non-custody venue changing to custody	minutes.**	255
D	Conditional bail or conditional caution	Non-custody venue		275
			TOTAL	2,177
Phase two				
A	Voluntary	Police custody	20	485
В	Voluntary	Police custody	53	1,443
С	Conditional bail	Non-custody venue	35	516
D	Voluntary	Police custody	42	495
E	Voluntary	Non-custody venue	26	645
F	Voluntary	Non-custody venue	48	250
G	Voluntary	Police custody	36	365
Н	Voluntary	Police custody	18	540
			TOTAL	4,739

Table 1: Overview of pilot schemes local delivery

*These data were not routinely recorded during sessions so figures are based on a small number of session observations (22). **Note:** An assumption has been made that an individual would only receive one intervention during the course of the pilots.

via mandatory routes). This suggests that mandatory routes are useful in securing attendance at the first sessions, but thereafter motivation and engagement with the intervention may be of more importance.

Delivering interventions

Over the course of interviews with practitioners from both phases of the pilots some key findings around delivering the schemes emerged.

Practitioners found that early and ongoing engagement with the police was essential to the effective development and running of the schemes. Engagement and buy-in from senior police staff was seen as important in facilitating the relationship between AAR staff and custody officers.

Custody officers played a vital role in the delivery of the schemes, particularly in screening and referring clients, and it was important that AAR workers established good working relationships with the police as early as possible. One element that appeared to help the setup of schemes was having established links to a Drug Interventions Programme (DIP¹⁴) in the custody suite. This was considered an advantage by many of the practitioners as police custody staff were used to having arrest referral workers in the custody suite, and there was a precedent for the principle that custody suites can act as a point for referral into assessment and treatment.

The presence of a DIP in custody also had a possible resource advantage as some schemes contracted the same agency to run both the DIP and AAR interventions. In those instances administrative and managerial staff could be shared, as well as the resources dedicated to alcohol and drugs. However, when questioned on this in phase one, some practitioners felt that alcohol and drug resources should be kept separate due to a concern that combining resources ran the risk of alcohol work being lost to the larger DIP agenda.

¹⁴ The Drug Interventions Programme (DIP) is part of the national strategy for tackling drug use that aims to divert drug-using arrestees into treatment. It includes mandatory drug testing for specific offences and drug arrest referral in some areas.

Profile of arrestees

Volume of cases included in the evaluation

Overall, the four schemes in phase one provided details of 2,177 interventions over a 12-month period, over one-half of which were delivered in one scheme. The combined total of interventions for the 12-month evaluation period for phase two pilots was 4,739.¹⁵

Caseload details

Evaluations of both phases of the AAR pilots provided valuable information about a group of arrestees who have been under researched – those arrested for offences where alcohol may have been a factor. This is due to difficulties in reliably identifying alcohol-related offences from police data. This information is important in improving the understanding of those involved in offending and disorder, particularly in the night-time economy.

Demographic information about the client group is summarised in Table 2, along with information about offence type and Alcohol Uses and Disorder Identification Tool (AUDIT) scores. Similar demographic characteristics were seen across both phases of the pilot with the vast majority of arrestees being male, White and most commonly aged between 18 and 24. Methods for classifying offence categories varied slightly between the phase one and two pilots, but generally they showed similar profiles with just over one-third (34% in phase one and 37% in phase two) of all arrests being for violence offences; nearly one-fifth (16% for phase one and 17% for phase two) of offences were for being drunk and disorderly; and there were notable levels of criminal damage and acquisitive crime in both phases.

Alcohol use

Evidence shows that brief interventions are more effective for harmful and hazardous drinkers than for dependent drinkers, and prior to the start of the pilot schemes practitioners anticipated that the majority of clients would fall into the hazardous/harmful drinking category. In reality a much higher proportion of clients, over one-third, were classified as dependent drinkers. Around 15 per cent of clients were also assessed as having 'no risk'. These findings were similar in both phases of the pilot.

Table 2:Key characteristics of clients
receiving an Alcohol Arrest
Referral intervention

	Phase one profile n = 2,177	Phase two profile n = 4,739		
Age	40% 18–24 16% 25–29 11% 30–34 12% 35–39 20% >40 ¹⁶	43% 18–24 18% 25–29 11% 30–34 9% 35–39 19% >40		
Gender	83% male 17% female	86% male 14% female		
Ethnicity	91% White	93% White		
Arrest offence	 34% violent offences 18% public order offences 16% drunk and disorderly 12% criminal damage 11% acquisitive crime 9% other offences 	 37% violent offences 17% drunk and disorderly 12% acquisitive offences 10% criminal damage offences 10% drink driving 7% other offences 4% public order offences 3% drug offences 		
Alcohol use	38% dependent 11% harmful 35% hazardous 16% no risk Harmful and hazardous combined 46%	37% dependent 13% harmful 36% hazardous 15% no risk Harmful and hazardous combined 49%		

Source:Valid Alcohol Intervention Record forms apart from 'Previous offending history' which is based on arrest data. **Notes:**

I. In phase one the AAR worker identified the arrest offence, in phase two the clients were asked to name the offence themselves.

2. Drink driving offences were supposed to be excluded from the phase one pilot schemes, although a few interventions appear to have been delivered to individuals for this offence, which were recorded in the 'other offences' category.

¹⁵ Schemes may well have delivered more interventions over this time period, but only those with valid Alcohol Intervention Record (AIR) returns were included in the sample to be sure that full interventions were delivered.

¹⁶ All four schemes intended to screen out those aged under 18. However, I per cent in phase one were aged 17 or under.

Arrest profiles

Another important finding was that the majority of people in both the intervention and comparison groups had not been arrested in the six months before or six months after the arrest leading to the intervention – just over 60 per cent of individuals in phase one and between 54 per cent (intervention group) and 61 per cent (comparison group) in phase two. This finding is consistent with a study of arrests around licensed premises in the West Midlands, which found that around 40 per cent of those arrested for one or two violent offences had no other criminal involvement over a period of several years (Donkin and Birks, 2007).

The findings suggest that on the whole, those arrested within the night-time economy are not generally prolific offenders, at least in terms of arrest records. The low arrest profiles of the intervention and comparison groups have implications for both evaluations, as they make the detection of changes in levels of arrest more difficult. This is because the majority of individuals would not usually be re-arrested and thus large sample sizes are required to detect statistically significant changes.

Outcome analysis

One of the primary aims of the evaluation was to determine whether AAR schemes could deliver reductions in alcohol consumption found in health settings in a criminal justice setting, and for this to then also impact on individuals offending levels. The overall findings for both phases of the pilots are summarised here; more detailed analyses are provided in the main reports.

Impact on re-offending

The primary outcome measure was to compare changes in arrest rates for those receiving the intervention with a retrospectively matched comparison group selected from the same police force area before the pilot schemes were introduced. In interpreting the findings it should be noted that there are some limitations to the comparison group, which are described in Box I at the end of this summary.

Overall the evaluations did not find any strong evidence to suggest that AAR schemes reduced re-offending for individuals arrested for alcohol-related offences. The findings from the individual phases are summarised below.

Phase one

The results show that there was a small reduction in re-arrests for the three schemes in this phase where data were available overall (an average of 0.005 arrests per person), but this was not statistically significant.¹⁷ This reduction also applied at an individual pilot scheme level regardless of gender, whether the referral route was voluntary or compulsory, and whether the offender was classified as a harmful/hazardous drinker or a dependent drinker. But none of these combinations resulted in statistically significant differences.

However, the low arrest profile for individuals arrested for alcohol-related offending and the small sample sizes achieved make it difficult to detect statistically significant small changes in arrest rates. Given these findings the larger sample sizes in phase two provided an important additional test to determine whether AAR could be beneficial.

Phase two

Overall the combined intervention group (i.e. clients in all schemes) had 6 per cent more arrests post-intervention than the comparison group, and this result was statistically significant.¹⁸ One scheme (scheme A)¹⁹ did have a positive impact showing a significant reduction in arrest following the intervention but this was overshadowed by the negative or null results in the remaining seven forces and the result did not hold up during regression analyses.

Further breakdowns to explore how re-arrest patterns differ by scheme and client characteristics can be found in the main report. Overall, there were no clear sub-groups, including age, gender or index offence for whom the intervention appeared to be more effective.

Impact on alcohol consumption

Although neither evaluation found a specific criminal justice benefit in terms of reducing arrest rates, change in alcohol consumption was also examined to see whether the potential benefits of brief interventions from health settings could be replicated in a criminal justice setting.

¹⁷ Detailed tables can be found in the main report – Home Office Occasional Paper 101. (Kennedy et al, 2012) Evaluation of Alcohol Arrest Referral pilot schemes (phase 1) http://www.homeoffice.gov. uk/publications/science-research-statistics/research-statistics/crimeresearch/occ101

¹⁸ Detailed tables can be found in the main report – Home Office Occasional Paper 102. (McCracken et al, 2012) Evaluation of Alcohol Arrest Referral pilot schemes (phase 2) http://www.homeoffice.gov. uk/publications/science-research-statistics/research-statistics/crimeresearch/occ102

¹⁹ Scheme A particularly reduced re-arrests for drink driving and drunk and disorderly offences.

The two evaluations found statistically significant reductions in alcohol consumption between the time of the intervention and follow-up periods for those who were able to be contacted. This fits with existing evidence around brief interventions, but as these data could only be collected for individuals receiving the intervention it is not possible to determine whether reductions were a result of the intervention or whether they would have happened anyway, i.e. as a result of other unobserved factors.

Clients' views on the usefulness and relevance of interventions in relation to changing their alcohol use were mixed. A number of clients interviewed in phase one said that the intervention had prompted reflections on their drinking behaviour and the assessment of their drinking had come as 'a shock'. A substantial number of clients reported having made changes to their drinking, such as reducing the speed at which they drank or the avoidance of certain people or places, but many of these individuals did not attribute these changes wholly to the session and memories of the content of sessions were often vague.

In the phase two pilot schemes the overall impression given by clients was that interventions were able to identify and make use of motivational levers. Details about alcohol units and how long they stay in the system were frequently recalled. Clients who had already identified a need to reduce their alcohol intake found the sessions to be useful, but the benefits were less obvious for those who did not believe they had a problem.

Cost assessment

Cost of the schemes

The costs of delivering interventions were calculated for all schemes over the two phases of the pilots. Tables 3 and

Table 3: Direct costs of Alcohol Arrest Referral pilot for phase one schemes

Scheme	Staff costs (£)	Other costs (£)	Total per annum (£)	Number of interventions per annum (£)	Average cost per intervention (£)
Phase one					
А	33,75	9,346	143,097	1,275	112
В	101,561	44,168	145,729	372	392
С	85,668	23,760	109,428	255	429
D	110,420	47,252	157,672	275	573

Table 4: Direct costs of Alcohol Arrest Referral pilot for phase two schemes

Scheme	Staff costs (£)	Other costs (£)	Total per annum (£)	Number of interventions per annum (£)	Average cost per intervention (£)
Phase two					
A	47,953	5,304	53,257	45.3	98
В	244,038	27,711	271,749	255	166
С	42,195	1,120*	43,315	108	62
D	122,778	834 *	123,612	128	178
E	136,204	37,274	173,478	109	140
F	213,445	15,403	228,848	30	826
G	96,492	45,423	141,915	54	294
н	116,571	3,662	120,333	167	97

* Did not include any costs for training, travel, etc.

Notes for Tables 3 and 4

I Costs collected in phase one and phase two are not directly comparable.

2 Phase one costs are based on the average cost of an intervention on a full year's data. Phase two costs are based on figures from the whole 20-month pilot period (not just valid AIRs over the evaluation period) and include attendance at both first and second appointments, where relevant, which total 12,097 sessions.

4 show a breakdown of staff and other costs, e.g. training and travel. These costs are used to calculate a cost per intervention (this may include a number of sessions in some schemes) to give some indication of the scale of costs incurred. However, this will be heavily influenced by the number of interventions delivered so a break-even analysis was performed to provide some sense of the magnitude of reductions in arrest that would be required for AAR to be cost effective.

Total costs for phase one schemes were broadly similar ranging from £109,428 to £157,672 overall (partially due to the level of funding received). There was a wider variation in total costs in phase two from £43,315 to £271,749. It should be noted that additional funding was obtained by some schemes from other sources, such as Primary Care Trusts or Community Safety Partnership funds during the pilot schemes, which is included within the costs outlined.

Direct comparison of costs between schemes is difficult due to differences in what was recorded under 'other costs' and variations in 'in-kind' support utilised by schemes. However, costs were largely dominated by staffing costs for all schemes.

The average cost per intervention ranged from ± 112 to ± 573 in phase one and from ± 62 to ± 826 in phase two (which includes follow-up sessions where relevant).²⁰ The higher the number of interventions delivered the lower the cost of the intervention, as would be expected.

Break-even analysis

For both phases cost effectiveness analyses were planned, but due to the negative or null results from the impact studies these were not possible, so a break-even analysis was undertaken to indicate the impact that would be needed in order for alcohol interventions to represent value for money. Calculations were based on Home Office cost of crime data and the average costs were established for the mix of alcohol-related offences recorded for the intervention group across all schemes.²¹

The two evaluations used slightly different methodological approaches to calculating the break-even point, but both found that relatively minor reductions in arrest rates would be required for the schemes to break even. Phase one found that the schemes would have needed to result in a reduction of between 0.6 and 6.0 arrests for every 100 interventions delivered to break even; phase two found that a 4.7 per cent reduction in re-offending would be required. Despite this most schemes did not break even. It should be noted that the cost analyses ignores potential health benefits and related savings. Were these to be included, the break-even point may be lowered further.

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20 The average cost of a session in the phase two pilot was \pounds 170.
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21 For a more detailed explanation of the methodology, see Home Office Occasional Papers 101 and 102

4. Conclusion/discussion

Alcohol Arrest Referral (AAR) schemes aimed to test whether the benefits of brief interventions to reduce alcohol consumption in health settings could be extended to a criminal justice setting to assist in reducing offending in the night-time economy. The schemes aimed to target those arrested for alcohol-related offending and used brief interventions to emphasise the role that alcohol might have played in their offending, thus becoming a motivational lever to reduce drinking. This was assessed in two successive evaluations of the two phases of the AAR pilots.

Feasibility of Alcohol Arrest Referral schemes

AAR schemes were successfully introduced in a number of police forces. This required effective working relationships between custody staff and alcohol agency workers, both to refer and to treat individuals. Interventions delivered in custody were useful in ensuring throughput of cases. Mandatory routes for referral were more difficult to put in place than voluntary routes for procedural reasons, particularly in the case of conditional bail. But they did lead to better attendance at the first sessions, when interventions were delivered away from custody, than voluntary referrals. However, subsequent sessions were less well attended for mandatory referrals.

Profile of arrestees

One of the key benefits from the evaluations was finding out more about the population of people who are arrested in the night-time economy. This information is usually difficult to ascertain as flagging in custody for alcohol-related crimes is not consistently recorded. Indeed the comparison groups for both evaluations had to be constructed using proxy measures to approximate this.

The evaluations found that the profile of arrestees was different to practitioners' initial thoughts, most notably, there was a higher proportion of dependent drinkers than anticipated. Furthermore, an important finding was that individuals were not necessarily prolific arrestees, i.e. over 50 per cent had just one arrest for the offence triggering the intervention meaning no previous or subsequent arrests in the six months either side of the arrest. This makes it difficult for the intervention to have a substantial impact on arrest rates. It also raises questions about whether an offender-centred approach is the most effective way of tackling night-time economy-related crime and disorder if this is not a prolific group of offenders.

Effectiveness of Alcohol Arrest Referral schemes

Overall there was no strong evidence to suggest that delivering alcohol interventions following arrest could impact on criminal justice outcomes, namely reducing re-offending. There could be several reasons for this.

- Brief interventions delivered in a custody suite are not an effective way to reduce alcohol-related offending.
- The re-arrest rates for alcohol-related offending are low, meaning that this is not a prolific group of offenders and therefore it would be harder to make any impact on the re-arrest rate.
- Insufficient screening was undertaken to target the clients most likely to respond positively to a brief intervention.
- The intervention did not sufficiently address the criminogenic needs of those arrested.

Despite the lack of evidence around criminal justice benefits there are some suggestions that the interventions reduced alcohol consumption. The evidence is relatively weak due to the lack of available information on alcohol consumption in the comparison group, but the general direction of evidence matches that found in other research on brief interventions.

The cost analyses showed that relatively small reductions in re-offending would be required in order for schemes to break even and be cost effective. Thus, they may be useful routes for delivering brief interventions or acting as useful referral pathway, e.g. for dependent drinkers. However, the benefits will not necessarily be seen by criminal justice agencies.

Box I: Design limitations and learning from evaluation

There were several key challenges and learning points from the two evaluations that are detailed below and that should be taken into consideration when interpreting the results.

Comparison group

The key challenge for any non-random evaluation design is identifying a suitable comparison group. Feasibility work carried out before the first phase of the pilots determined that a within force retrospective comparison design using pre- and post-intervention measures was the best option available. Randomisation was ruled out due to uncertainty about the throughput of cases and the inherent difficulties of randomising in a custody suite setting. A within force comparison before the pilot was preferred over matching to other forces over the same time period, to minimise local variations in practice that might affect the results.

An additional factor in considering the quality of the comparison group is that information around alcohol consumption is not available for people not going through the interventions as these data are not routinely collected by the police. There is an alcohol flag in custody systems, but practices around its completion vary across forces and so cannot be relied upon for evaluation purposes. A proxy indicator had to be used to construct the comparison group for offences not specifically related to alcohol (e.g. drink driving, where it is clear that alcohol was a component of the offence). Cases were matched on age and gender, using a similar offence type and where the offence took place between 9 p.m. and 6 a.m. (to reflect the night-time economy). This was not a perfect match as the comparison group could include individuals who were not intoxicated.

In order to attempt to address some of the problems from phase one further feasibility work was undertaken during the phase two pilots to try to identify a more robust comparison, i.e. a prospective sample that would have data around alcohol consumption available. The most promising avenue was to identify eligible arrestees who were not given an intervention due to capacity/ resource issues. This approach was piloted, but in practice only a very small number of arrestees were not given an intervention for this reason due to the efficiency of the schemes in being able to deliver interventions to almost all suitable clients who agreed to an intervention. To note – those not consenting to the intervention could not be used as their motivational levels would be fundamentally different to those who agreed.

The phase two evaluation had therefore to use a similar methodological approach of a retrospective design as phase one, and thus the same limitations apply. The only way to overcome this would be to include prospective collection of alcohol data in a custody setting away from the pilot sites.

Follow-up interviews

Attempts were made in both evaluations to follow up clients who had received interventions to ask about their experiences and any potential impacts the Alcohol Arrest Referral (AAR) scheme might have had. This was only partially successful in both phases due to low response rates. The main difficulties were gaining consent for details to be passed to researchers and collecting accurate contact details. Processes for gaining consent were simplified in phase two and methods of contact were varied, i.e. mainly by phone as opposed to postal response. This led to a better response rate overall, but the results are still not generalisable.

Difficulty in detecting changes in arrest rates

The relatively low numbers of arrests in the six months either side of the index arrest mean that large sample sizes were required to detect small changes in arrest rates. The lack of access to arrest data in a form amenable to analysis for scheme B; low numbers of interventions in schemes C and D; and the varying matching rates (from 56% to 81%) all meant that only 1,053 out of 2,177 cases could be included in the analyses.

There was a much higher throughput of valid cases in phase two (4,739 cases) meaning that analyses were based on larger numbers and were therefore more robust. However, the profile of arrestees was similar to that in phase one, i.e. most had only one arrest and were not prolific offenders so it was still difficult to detect statistically significant changes in re-arrest rates.

References

Babor T., Higgins-Biddle, J., Saunders, J. and Monteiro, G. (2001) 'The Alcohol Use Disorders Identification Test Guidelines for Use in Primary Care', Second Edition.World Health Organisation.

Babor, T. G., Higgins-Biddle, J. C., Dauser, D., Burleson, J. A., Zarkin, G. A. and Bray, J. (2006) 'Brief Interventions For At-Risk Drinking: Patient Outcomes and Cost-Effectiveness in Managed Care Organizations', Alcohol & Alcoholism, vol. 41 (6), pp 624–31.

Blakeborough, L. and Pierpoint, H. (2007) 'Conditional Cautions: An examination of the early implementation of the scheme.' Ministry of Justice Research Summary 7. London: Ministry of Justice. https://www.justice.gov.uk/publications/docs/conditionalcautions.pdf

Department of Health and Home Office (2007) 'Safe. Sensible. Social. The next steps in the National Alcohol Strategy.' London: Department of Health/Home Office. http://www.dh.gov.uk/en/Publicationsandstatistics/ Publications/PublicationsPolicyAndGuidance/DH_075218

Donkin, S. and Birks D. J. (2007) 'Victims and Offenders of Night-time Economy Violence.' London: UCL Jill Dando Institute of Crime Science.

Forcehimes, A.A., Tonigan, J. S., Miller, W. R., Kenna, G.A. and Baer, J. S. (2007) 'Psychometrics of the Drinker Inventory of Consequences', Addictive Behaviours, August, vol. 32 (8), pp 1699–704.

Kaner E., Bland M., Cassidy P., Coulton S., Deluca, P., Drummond C., Gilvarry E., Godfrey C., Heather N., Myles J., Newbury-Birch D., Oyefeso A., Parrott S., Perryman, K., Phillips, T., Shenker D. and Shepherd J. (2009). 'Screening and brief interventions for hazardous and harmful alcohol use in primary care: a cluster randomised controlled trial protocol', BMC Public Health, 9, 287.

NFER-Nelson (1992) General Health Questionnaire (GHQ-12). Windsor, UK: NFED-Nelson.

Raistrick, D., Heather, N. and Godfrey, C. (2006) 'Review of the effectiveness of treatment for alcohol problems.' National treatment agency for substance misuse, November 2006. This summary report draws together findings from phases one and two of the alcohol arrest referral pilots so the views expressed are those of the authors. Thanks go to the authors of the phase one and two evaluation reports for their hard work and continued support for the project and to Tonia Davison at the Home Office for her work on finalising the projects.

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