THE UNIVERSITY
OF BIRMINGHAM

Literature Search on
The Efficacy of Brief Intervention In The Management of Drinking Problems

Aggressive Research Intelligence Facility
West Midlands Health Technology Assessment Collaboration

August 2005

For the Drivers Medical Group
DVLA
Swansea

ARIF

About ARIF and the West Midlands Health Technology Assessment Collaboration

The West Midlands Health Technology Assessment Collaboration (WMHTAC) is an organisation involving several universities and academic groups who collaboratively produce health technology assessments and systematic reviews. The majority of staff are based in the Department of Public Health and Epidemiology at the University of Birmingham. Other collaborators are drawn from a wide field of expertise including economists and mathematical modellers from the Health Economics Facility at the University of Birmingham, pharmacists and methodologists from the Department of Medicines Management at Keele University and clinicians from hospitals and general practices across the West Midlands and wider.

WMHTAC produces systematic reviews, technology assessment reports and economic evaluations for the UK National Health Service's Health Technology Assessment (HTA) programme, the National Institute for Health and Clinical Excellence (NICE). Regional customers include Strategic Health Authorities, Primary Care Trusts and regional specialist units. WMHTAC also undertakes methodological research on evidence synthesis and provides training in systematic reviewing and health technology assessment.

The two core teams within WMHTAC are the Aggressive Research Intelligence Facility (ARIF) and the Birmingham Technology Assessment Group (BTAG)

ARIF provides a rapid on-demand evidence identification and appraisal service primarily to commissioners of health care. Its mission is to advance the use of evidence on the effects of health care and so improve public health. The rapid response is achieved by primarily relying on existing systematic reviews of research, such as those produced by the Cochrane Collaboration, the National Institute for Health and Clinical Excellence (NICE), the NHS Centre for Reviews and Dissemination, and the NHS Health Technology Assessment (HTA) programme. In some instances, longer answers to questions are required in which case mini rapid reviews of existing systematic reviews and key primary studies are compiled, typically taking 1-2 months to complete.

Occasionally a full systematic review is required and then topics are referred to BTAG who coordinate the production of systematic reviews for several customers under a number of contracts. ARIF is intrinsically involved in the production of these systematic reviews.

Aggressive Research Intelligence Facility (ARIF)
West Midlands Health Technology Assessment Collaboration (WMHTAC)
Department of Public Health and Epidemiology
University of Birmingham
Birmingham
B15 2TT

arifservice@bham.ac.uk
0121 414 3166

1 Aims

The aims of this report were to address the following questions submitted by the Driver Medical Group:

1.1 Primary Questions

(a) To ascertain whether some form of medical assessment for all convicted drink drivers, as opposed to those falling into the current HRO category, would be of value, in preventing repeat drink-driving offending.

After discussion with Dr Kathy Watts this question was reformulated as:

> What is the effectiveness of interventions aimed at preventing repeat drink-driving offending in convicted drink drivers? Are there sub-groups of convicted drink drivers in whom interventions are more or less effective?

(b) What is the efficacy of brief interventions at primary care level in relapse of harmful drinking.

After discussion with Dr Kathy Watts this question was reformulated as:

> What is the effectiveness of brief interventions given at the primary care level to reduce harmful drinking in adults?

1.2 Secondary questions

(c) Breakdown of intervention protocols such as,
CAGE
MAST
AUDIT etc and their respective efficacy in identifying "at risk" patients

(d) The key features of greatest prognostic significance for risk of relapse (good e.g. family support, bad e.g. living alone, time related etc)

(e) Time scales to first relapse to second relapse etc. How has "relapse" been defined?

Tackling these secondary questions was beyond the resources available for this report and therefore these are not specifically addressed in this report.

Further details of the request submitted by the Drivers Medical Group are given in Appendix 1 – Details of Request.

2 Background

Background information is given in the documentation supplied by the Drivers Medical Group contained in Appendix 1 – Details of Request.

3 Methods

Outline methods in addressing the primary questions were:

- To undertake searches for existing systematic reviews looking at:
  - the effectiveness of interventions to prevent re-offending in convicted drink drivers and
  - the effectiveness of brief primary care interventions aimed at reducing harmful drinking in adults.
- To widen searches to primary studies if necessary.
- To identify from the searches the most relevant systematic reviews and / or primary studies for further scrutiny, based on match to the problem being addressed, currency and robustness of the research.
- To comment on the methodological quality of relevant reviews and / or studies
- Where appropriate and possible data on relevant outcomes was to be extracted and tabulated.
- Data analysis would depend on information identified.

3.1 Searches

3.1.1 Existing Reviews.

Searches concentrated on identifying existing systematic reviews on this topic and were performed utilising the well-established ARIF search protocol (Appendix 2 – Search strategies)

3.1.2 Primary Studies

Limited searches for primary studies were undertaken in the Cochrane Library and MEDLINE. Structured searches of Internet resources were undertaken for ancillary information.

The detailed search strategies can be found in Appendix 2 – Search strategies.

Searches were predominantly undertaken by an information specialist with additional searches by a research reviewer. Both interacted to ensure searches were conducted appropriately.

An information specialist and a research reviewer scanned the search results for relevance based on information in the title and abstract. Hard copies of potentially relevant articles were obtained.

Full copy articles were assessed for their match to the questions being addressed (external validity) with the most valid, robust and recent articles subjected to further scrutiny and reporting.

The reference lists of the most relevant articles were also checked in order to identify further relevant papers.

4 Results

Results are divided into two sections; one for each of the two primary questions.

4.1 What is the effectiveness of interventions aimed at preventing repeat drink-driving offending in convicted drink drivers? Are there sub-groups of convicted drink drivers in whom interventions are more or less effective?

The most relevant research identified by our searches assessing the effectiveness of interventions aimed at preventing convicted drink-driver recidivism was a cohort study and further follow up study undertaken by the Transport Research Laboratory (TRL). The studies assessed the effectiveness of the Department of Transport's Rehabilitation courses for convicted drink-drivers which were offered by designated (experimental) courts. The introduction of the programme provided an ideal opportunity to assess its effectiveness amongst the general convicted drink-driver population in a UK setting rather than in a more artificial study setting. Details of these two key reports are provided below:

Davies GP, Harland G, Broughton J. (1999) *Drink/driver rehabilitation courses in England and Wales.* TRL Report TRL426. Crowthorne: TRL Limited

Background

The Road Traffic Act 1991 allowed designated courts experimental power to offer drink-drive offenders the chance of attending a rehabilitation course. In return for successfully completing the course the offender's period of disqualification from driving could be reduced by up to a quarter.

The participating (experimental) courts were advised that the courses were likely to be more suitable for first time offenders, not convicted of very high blood alcohol levels. However offenders falling within the criteria used by the High Risk Offender Scheme were not to be necessarily excluded.

Rehabilitation courses were run by a number of different organisations including Probation Services, Road Safety departments, hospitals, charities and private companies. The courses were self-funding with costs at the time ranging from £50 to £250 paid by the drink/drive offenders. The content of the courses included:

- Information about alcohol and its effects on the body
- The effect of alcohol consumption on performance (especially driving ability and behaviour)
- Analysis of drink/driving offences
- Alternatives to drinking and driving
- Sources of advice

In the experimental courts it was in the remit of the magistrate to offer a rehabilitation course to an offender who was informed he/she would have to pay the course fee and that successful completion would result in the disqualification period being reduced by up to a quarter. The offender was then left to decide whether or not to accept.

TRL study methodology

TRL Report 426 assessed the effect of these rehabilitation courses by tracking three groups of drink/drivers convicted between 1993 and July 1996:

1. Those convicted at 19 experimental courts who attended a rehabilitation course
2. Those convicted at the 19 experimental courts who did not attend a rehabilitation course
3. Those convicted at 19 control courts (where rehabilitation courses were not available)

Each experimental court was matched with a control court in the same geographic region and matched as far as possible for variables such as sex & age of the offenders, relevant offences, socio-economic characteristics of the area covered and the general nature of the roads and through traffic. The rehabilitation courses were introduced mainly to cater for first time offenders.

Results

Most course attendees were disqualified for less than 2 years. The majority had been sentenced for one offence only and only about 30% were high-risk offenders. 20% fewer offenders were under 30 years old and 30% more offenders of 40 years or older attended courses than would be expected for typical drink-drive offenders. The largest difference in attendance related to social group, where there were relatively more course attendees from the more affluent groups, perhaps reflecting the fact that cost was cited as the main reason for not accepting a place on the course. Whilst women were slightly over-represented on courses they still comprised only 10% of offenders.

36 months after their original conviction only 3.4% of offenders who had attended courses had been re-convicted of drink-driving compared with 9.6% of those who did not attend courses. Re-conviction rates were also lower amongst course attendees when the data were controlled for differences in social group, sex, age and length of disqualification. Offenders aged 30-39 tended to benefit more from rehabilitation than older or younger offenders. The overall reduction in reconviction rates at 36 months was greater for offenders from social groups in the middle range, particularly if they had been disqualified for 2 or more years. Those course attendees who subsequently re-offended tended to wait until their licences had been reinstated whilst non-course attendees did not.

The experimental design of the study was intended to control for bias in subject selection, more specifically the possibility that offenders predisposed against re-offending would be more likely to be offered a place. It was also felt that this group of offenders may be more likely to accept and complete the training than those predisposed to re-offend thereby confounding the results. The analysis did not reveal any significant difference between the reconviction rates at the control courts and the experimental courts. However variations in the proportion of offenders completing training in different court areas provided an opportunity to

model the effect of subject selection bias. The model indicated that the effectiveness of the courses accounted for most of the difference between course and non-course attendees. Overall taking possible selection bias and confounding into account the courses appeared to reduce reconviction rates by slightly more that 50%.

Davies GP, Smith LR. (2003) *Reconvictions of drink/drive course attenders: a six year follow up.* TRL Report TRL574. Crowthorne: TRL Limited

Background

TRL Report 574 examined the reconvictions of the sample of offenders convicted of a drink-drive offence at the original referring courts between 1993 and July 1996 (TRL426) from their date of conviction for that offence until the end of December 2001.

Results

Data on reconvictions of course and non-course attendees were available for at least 72 months for over 80% of the original sample. There were slight differences in follow up rates between the course and non-course attendees which may have had some impact on the findings.

After 72 months nearly 2 ½ times more non-course attendees than course attendees had re-offended (17.9% of non-course attendees compared with 7.6% course attendees). The ratio of the rate of reconvictions for non-course attendees was similar at 3,4,5 and 6 years after conviction. The positive effect reported in TRL 426 therefore persisted after 6 years however the ratio was greater near the time of the original conviction as course attendees avoided re-offending whilst disqualified.

For men after 6 years the course was most successful for:

- Offenders from middle social groups
- Offenders aged between 30-39 years
- Offenders who had been convicted of 2 drink-drive offences with blood alcohol concentrations between one and 2 ½ times the legal limit within the last 10 years

Women drink-drive offenders re-offended less than male offenders: at 72 months 7.8% of women who had not attended a course had re-offended compared with 3.7% of course attendees.

A major effect of attending a course appeared to be that the offender was more likely to refrain from re-offending whilst disqualified than the non-course attendee. Once the disqualification period had ended the rate of offending for course attendees increased. Despite this however course attendees still offended less than non-course attendees at 72 months.

Our searches also identified the following Cochrane Systematic Review which focused specifically on alcohol ignition interlock programmes as a possible means of preventing convicted drink/driver recidivism:

Willis C, Lybrand S, Bellamy N. Alcohol ignition interlock programmes for reducing drink driving recidivism. *The Cochrane Database of Systematic Reviews* 2004, Issue 3. Art No: CD 004168. pub 2. DOI: 10.1002/14651858. CD004168. pub2.

Whilst this review has not been formally appraised we felt it would be of general interest. In summary, one RCT and 10 controlled trials were identified thereby providing a medium to high level of validity. The RCT showed that the interlock programme was effective whilst the device was installed: Relative Risk 0.36 (95%CI 0.21 to 0.63). The results of the controlled trials supported this conclusion with a general trend in both first time and repeat offenders towards lower recidivism rates when the interlock was installed. However neither the RCT nor the controlled trials provided evidence for effectiveness of the programmes following the removal of the device.

Finally we identified the following meta-analysis of remedial interventions with drink-drive offenders which although published in 1995 we felt was worth noting:

Wells-Parker E, Bangert-Drowns R, McMillen R, Williams M. Final results from a meta-analysis of remedial interventions with drink/drive offenders. *Addiction* 1995; **90:** 907-926

We have not formally appraised this review and meta-analysis as its validity is clearly negated by the fact that it is now considerably out of date. However the results do appear to be echoed by the more current studies discussed above. In summary Wells et al (1995) concluded that amongst studies with adequate methods (determined by the authors through an examination of effect size variation and study quality) remediation reduced drink-driving recidivism by 8-9% in comparison with no remediation.

4.2 What is the effectiveness of brief interventions given at the primary care level to reduce harmful drinking in adults?

We identified a number of systematic reviews (with and without meta-analysis) relevant to this question. The most valid article and the one recommended to any reader is:

Caroline Mulvihill, Lorraine Taylor and Seta Waller, with Bhash Naidoo and Betsy Thom. Prevention and reduction of alcohol misuse. Evidence Briefing Summary (Second edition), London: Health Development Agency; March 2005 http://www.publichealth.nice.org.uk/page.aspx?o=503439 [last accessed 8 August 2005]

Although called an evidence briefing it is in essence a systematic review of systematic reviews, meta-analyses and other reviews on the effectiveness of public health interventions to prevent and reduce alcohol misuse. It was compiled by the UK NHS Health Development Agency, now part of the National Institute for Health and Clinical Excellence (NICE).

Searches to identify studies for inclusion in the review were conducted in April 2004 to update an earlier version of the report. Detail is given of the bibliographic sources searched and the terms utilised in the

searches. Searches appear to be comprehensive and appropriate. References lists of relevant articles and the steering group for the review were referred to in order to identify further articles. Thus, this review is fairly current with only reviews published in the last 16 months likely to be missing. Furthermore, the authors appear to have considered at least 10 articles referred to them during the peer review process, however it is not clear if any of these were published after the main searches were conducted.

Articles were considered for inclusion in the review if they were systematic reviews, meta-analyses and other syntheses and review-level papers with systematic methodology, and were reviews in adults and children to prevent/reduce alcohol misuse for all population groups, as well as hazardous/risky/harmful drinkers.
Only English language articles were included in the review and this is a potential weakness. However, given our assessment of the review and the evidence, it is unlikely that any omitted foreign language article would have both robust results that were generalisable to the UK population and health care setting, and findings that could change the conclusions of the review.

Excluded from the review were reviews of interventions for alcohol dependency, reviews on screening for alcohol problems/misuse and reviews of interventions to minimise the harm associated with drinking alcohol (both individual and society level).

Decisions about whether to include or exclude an article were made by two reviewers although it is not clear if they undertook this task independently.

The internal validity (quality) of included studies was assessed in a structured way using a critical appraisal tool, which appears to be similar to those utilised by ARIF/WMHTAC. Again this appears to have been undertaken by two reviewers but it is not clear if this was undertaken independently of each other to further reduce bias. However, a third reviewer was utilised to resolve any disagreements.

It appears that only those papers adhering to all the criteria on the critical appraisal tool were considered as containing suitable evidence for the review. Twenty-five articles are listed as not adhering to the criteria with 15 adhering to the criteria reported in further detail. However, a minimum of 42 articles/studies were assessed using the appraisal tool so there are at least 2 articles (in addition to the 2 articles the reviewers state they were not able to assess in the timeframe of the review) that do not appear in either list.
Furthermore there appears to be a degree of ambiguity in the application of the inclusion criteria and the subsequent application of the critical appraisal tools. The tool appears to have been applied to some primary studies and some studies that were not systematic reviews and these, according to the reviewers description of the methods utilised, should have been excluded at an earlier stage in the review process and thus not be assessed using the critical appraisal tool. Whilst this does not appear to have resulted in any articles that should have been included in the review being excluded, and should not necessarily impact on the findings of the review, it does raise a minor concern regarding either the reporting of the review methodology and/or how this section of the review was conducted. We intend to seek clarification of this point from the authors.

For the most part we identified the same systematic reviews that were included in the report and concur with the presented assessment of both their validity and findings.

The reviewers highlight the issues concerning the variability of the definitions of terminology around alcohol consumption and its misuse. For the review, the reviewers utilised the definitions given by individual study/review authors. We would probably have done the same and commented on any obvious anomalies between articles. The reviewers also provide a small glossary to indicate some of the variability. We will not comment further on these nomenclature issues.

The findings of the review that are relevant to brief interventions in the primary care setting to reduce harmful alcohol consumption are outlined below with any additional comments from us in italics.

- **GP-based Lifestyle Advice.** There is conflicting review-level evidence for the effectiveness of GP-based lifestyle advice interventions to reduce heavy drinking. *This evidence comes solely from the review by Ashenden et al 1997. Four of the six trials included in the review were undertaken in the UK (one each for USA & Sweden). This review is now almost ten years old and it is likely that further research may have been published on this topic and this could have a bearing on this finding.*
- **Psychosocial Interventions delivered by GPs.** There is review-level evidence to suggest that a cognitive behavioural intervention by a GP is no more effective than a cognitive behavioural intervention by a nurse practitioner or brief advice. There is also review-level evidence to suggest that a behavioural change programme is no more effective than brief advice, assessment of drinking behaviour only or follow-up measurement only on alcohol consumption or alcohol-related problems, *This evidence comes from the Cochrane review by Huibers et al (2003) and is based on one RCT and one CCT both with 12 month follow-up.*
- **Brief Interventions.**
    - There is review level evidence to suggest that heavy drinkers receiving brief interventions are twice as likely to moderate their drinking six to 12 months after an intervention when compared to drinkers receiving no intervention*. This evidence comes from the a meta-analysis by Wilk et al (1997) which included 12 RCTs, most studies conducted outside of USA although exact location is not clear. In 9 studies patients were drinking more than 20-35 drinks per week. The intervention was brief counseling / advice (10-15 minutes) including education and feedback with 1-4 follow up sessions in 7 of the studies. We have not been able to view this article within the timeframe of this report. It is likely that further trials may have been published since this review was undertaken.*
    - There is review-level evidence to show that brief intervention trials (especially multi-contact) can reduce net weekly drinking by 13-34% resulting in 2.9-8.7 fewer drinks per week and a significant effect on recommended or safe alcohol use. *This evidence comes from the systematic review by Whitlock et al (2004), which included 12 trials which were carried out in USA(6), UK(3), Norway and Australia. The population was adult risky/harmful drinkers and the intervention brief multi-contact (at least one follow-up) behavioural counseling interventions in a primary care setting. Two studies evaluated very brief interventions (one session of up to 5 minutes duration), 6 brief interventions (one session up to 15 minutes duration) and 7 brief multi-contact interventions (initial session of up to 15 minutes plus*

follow up contacts). Where stated the duration of follow-up was 6-12 months. Data is narratively reported.

- There is currently a lack of review-level evidence for the effectiveness of very brief compared to extended interventions in decreasing alcohol intake in both men and women. *This evidence comes a meta-analysis by Poikolainen (1999), which includes 14 data sets identified up to 1997. There is the likelihood that more studies have been published since this analysis was undertaken. Data were analysed by intervention type; very brief (5-20 minutes) and extended (several visits). Both Poikolainen and the reviewers recommendation above is based on the fact that there was statistical lack of homogeneity and likely large differences in the intervention projects included in the meta-analysis. Brief interventions seemed to be sometimes but not always effective.*
- There is currently a lack of review-level evidence for the effectiveness of very brief interventions in decreasing alcohol intake in men and women. *This evidence comes from Poikolainen 1999 and Whitlock et al 2004. Please see above for details and caveats regarding these studies. Very brief interventions were classified differently in these reviews/meta-analysis.*
- There is review-level evidence for the effectiveness of extended brief interventions (several visits) in primary care health settings for women. Extended brief interventions decreased alcohol intake in women by on average 51g per week. There is currently a lack of review-level evidence for the effectiveness of extended brief interventions (several visits) in primary healthcare setting for men. *This evidence comes from Poikolainen (1999). Please see the caveats above.*
- There is review-level evidence to suggest that brief interventions are equally effective in men and women for hazardous alcohol consumption in primary care settings. *This evidence comes from Ballesteros et al (2004a) and Whitlock et al (2004). The latter has been described above. Ballesteros et al appear to have aimed to update the meta-analysis of Poikolainen (1999) by incorporating newer studies and restricting analysis to only those studies that report outcomes separately for men and women. Given that it is more up to date and appears to have been, to some extent, more rigorous in certain methodological aspects the meta-analysis, the findings of Ballesteros et al should probably predominate.*
- There is review-level evidence to suggest that brief interventions are effective in opportunistic (non-treatment seeking) samples and as typically delivered by healthcare professionals. *This evidence comes from Moyer et al (2002) who took a broad view and tried to ascertain the effect of brief interventions in treatment seeking and non-treatment seeking patients. There is a further and more recent review we identified that also looks at brief primary care interventions for non-treatment seeking patients. This review, by Bertholet et al (2005) came to the same conclusion.*

  Turning to brief interventions for those patients seeking treatment, the findings suggest that there is no difference between brief and more extended interventions. Moyer et al acknowledge that because there is some degree of overlap between these two interventions the findings are not sufficient to warrant replacement of extended services with briefer ones. We have only looked briefly at this article.

- There is review-level evidence to support the moderate efficacy of brief interventions for hazardous drinkers in the primary care setting. There is a lack of evidence of a dose-effect relationship linking the intensity of brief interventions with outcome. *This evidence comes from the second meta-analysis by Ballesteros et al (2004b) who updated the evidence from Poikolainen (1999) and Wilk et al (1997). Thirteen RCTs were included, four of which were from the UK. Analysis was undertaken to ascertain the effectiveness of differing intensities of intervention from no intervention, through 3-5 minute general sessions and brief 10-15 minutes specific intervention, and on to extended brief interventions which included reinforcement sessions. Whilst no clear evidence of a dose effect was found the findings do support the moderate efficacy of brief interventions.*

The bottom line of the above appears to be that brief interventions in primary care for alcohol issues may, to some extent, be effective compared to no intervention. However, the heterogeneity of the population and type of intervention has a bearing on the degree of effectiveness. Some components of brief intervention programmes may be more effective than others and this warrants further investigation. Some of the reviews such as Whitlock et al (2004) have tried to assess this from included studies. We would have to say that without appraisal of how this was undertaken the findings of such analyses should be treated with a degree of caution.

The review highlights a number of areas where further research is required in order to overcome the present uncertainties and limitations of available evidence.

The review also reports on the evidence of effectiveness of interventions to reduce alcohol impaired driving, such as the effectiveness of the blood alcohol concentration laws, lowering these concentrations for inexperienced drivers, minimum drinking age laws, and ignition interlock devices on drunk driving recidivism (see above). Most of the findings reported are from the review article by Shults et al (2001). Furthermore there are also sections in the review on the effectiveness of interventions in primary care to increase rates of screening for, and giving advice on, harmful drinking, the use of self help materials and the effectiveness of interventions for children and young people.

This report also contains an informative section on the methodological issues that are pertinent to the utilisation of evidence, and particularly that from systematic reviews and systematic meta-analyses, in drawing up guidelines and policy recommendations.

There is a Cochrane Library review in-progress by Kaner et al on the effectiveness of brief primary care interventions for excessive drinkers that may also be of interest.

4.3 Limitations of this report

This is not a systematic review but a rapid assessment for relevant literature. However it relies heavily on systematic reviews/meta-analyses of primary studies and systematic reviews. Searches for existing systematic reviews were conducted in the main medical and related electronic bibliographic databases and augmented by additional searches for wider literature in key topic specific websites and Internet resources. Therefore this report is based on probably the most robust information available on the topic. A proviso is that given the breadth of the topic and issues around whether assessments of effectiveness of specific interventions to prevent re-offending of drink drivers are likely to be either published, in the public domain and/or abstracted in key bibliographic/internet sources does not necessarily mean (however slim the chance) that some key information has not been omitted.

5 Conclusion

5.1 Effectiveness of interventions aimed at preventing repeat drink-driving offending

The cohort studies identified provided an ideal opportunity to assess the effectiveness of interventions aimed at preventing repeat drink-driving offending amongst the general convicted drink-driver population in a UK setting rather than in a more artificial study setting. The studies were well conducted and aimed to match the experimental and control courts as closely as possible for variables which may impact on the outcomes assessed. However this type of research will always be vulnerable to accusations of possible selection bias thereby reducing the validity of its results to some extent. The study results indicate interventions aimed at preventing repeat drink-driver offending have a small but positive effect in reducing drink-driver recidivism. Furthermore whilst the magnitude of this effect reduces over time it is still apparent 6 years after the original conviction.

5.2 Effectiveness of brief interventions for harmful drinking in primary care

The identified systematic review of existing systematic reviews has been, on the whole, reasonably well conducted. The review indicates that there is sufficient evidence to suggest that brief interventions in primary care are to some degree effective in reducing alcohol intake compared to no intervention. The finding appears to be consistent across the recent systematic reviews that have addressed this topic. However, there are a number of areas that require further investigation to refine the precision of the findings.

6 References

Ashenden R, Silagy C, Weller D A systematic review of the effectiveness of promoting lifestyle change in general practice (Structured abstract) *Family Practice* 1997; **14(2)**: 160-175 http://www.mrw.interscience.wiley.com/cochrane/cldare/articles/DARE-970628/frame.html

Ballesteros J, Gonzalez-Pinto A, Quereteja I, Arino J Brief interventions for hazardous drinkers delivered in primary care are equally effective in men and women *Addiction* 2004; **99** :103 -8

Ballesteros J, Duffy JC, Quereteja I, Arino J, Gonzalez-Pinto Efficacy of brief interventions for hazardous drinkers in primary care: systematic review and meta-analyses *Alcoholism: Clinical and Experimental Research* 2004; **28(4)**: 608-18

Bertholet N, Daeppen J-B, Wietlisbach V, Fleming M, Burnand B Reduction of alcohol consumption by brief alcohol intervention in primary care Systematic review and meta-analysis *Arch Intern Med* 2005 ; **165(9)**: 986-996

Davies GP, Harland G, Broughton J Drink/driver rehabilitation courses in England and Wales TRL Report 426 Crowthorne: Transport Research Laboratory; 1999

Davies GP, Smith LR Reconvictions of drink/drive course attenders: a six-year follow-up TRL Report 574 Crowthorne: Transport Research Laboratory; 2003

Huibers MJH, Beurskens AJHM, Bleijenberg G, Schayck CP van The effectiveness of psychosocial interventions delivered by general practitioners The Cochrane Database of Systematic Reviews: Reviews 2003 Issue 2 John Wiley & Sons, Ltd Chichester, UK DOI: 10.1002/14651858.CD003494 YR: 2003 NO: 2 http://www.mrw.interscience.wiley.com/cochrane/clsysrev/articles/CD003494/frame.html

Kaner E, Campbell F, Pienaar ED, Heather N, Schlesinger C, Saunders J Brief interventions for excessive drinkers in primary care health settings The Cochrane Database of Systematic Reviews: **Protocols** 2004 Issue 2 John Wiley & Sons, Ltd Chichester, UK DOI: 10.1002/14651858.CD004148.pub2 2004 ; NO: 2: http://www.mrw.interscience.wiley.com/cochrane/clsysrev/articles/CD004148/frame.html

Mulvihill C, Taylor L, Waller S. Prevention and reduction of alcohol misuse Evidence briefing 2nd edition London: Health Development Agency; 2005 http://www.publichealth.nice.org.uk/page.aspx?o=503439

Moyer A, Finney JW, Swearingen CE, Vergun P Brief interventions for alcohol problems: a meta-analytic review of controlled investigations in treatment-seeking and non-treatment seeking populations *Addiction* 2002; **97**: 278-292

Poikolainen K Effectiveness of brief interventions to reduce alcohol intake in primary health care populations: a meta-analysis (Structured abstract) *Preventive Medicine* 1999 ; **28(5)**: 503-509 http://www.mrw.interscience.wiley.com/cochrane/cldare/articles/DARE-999258/frame.html

Shults R, Eider R, Sleet D, Nichols J, Alas M, Grande-Culis V et al Reviews of evidence regarding interventions to reduce alcohol-impaired driving *American Journal of Preventive Medicine* 2001; **21(4S)**: 66-88

Wells-Parker E, Bangert-Drowns R, McMillen R, Williams M Final results from a meta-analysis of remedial interventions with drink/drive offenders (Structured abstract) *Addiction* 1995 ; **90(7)**: 907-926 http://www.mrw.interscience.wiley.com/cochrane/cldare/articles/DARE-950357/frame.html

Whitlock E P, Green C A, Polen M R, Berg A, Klein J, Siu A, Orleans C T Behavioral counseling interventions in primary care to reduce risky/harmful alcohol use (Provisional record) Rockville, MD, USA: Agency for Healthcare Research and Quality 2004 http://www.mrw.interscience.wiley.com/cochrane/cldare/articles/DARE-20048398/frame.html

Wilk AI, Jensen NM, Havighurst TC Meta-analysis of randomised controlled trials addressing brief interventions in heavy alcohol drinkers *Journal of General Internal Medicine* 1997; **12(5)**: 274-83

Willis C, Lybrand S, Bellamy N Alcohol ignition interlock programmes for reducing drink driving recidivism The Cochrane Database of Systematic Reviews: Reviews 2004 Issue 3 John Wiley & Sons, Ltd Chichester, UK DOI: 10.1002/14651858.CD004168.pub2 2004 NO: 3
http://www.mrw.interscience.wiley.com/cochrane/clsysrev/articles/CD004168/frame.html

7 Appendices

7.1 Appendix 1 – Details of Request

ARIF REQUEST FORM

Date of Request	20 / 05 / 05
Lead Medical Adviser Issuing request	Name – Dr Delyth Sheppard Secretary to the Alcohol, Drugs and Substance Misuse Panel Please note Dr Sheppard is current on sick leave. Queries may be referred to Dr Kathy Watts [redacted]
Contact details	Drivers Medical Group DVLA Sandringham Park Swansea Vale Llansamlet Swansea SA7 OAA [redacted]

1. Without worrying about the structure of the question, state in full the nature and context of the problem.

(a) To ascertain whether some form of medical assessment for all convicted drink drivers, as opposed to those falling into the current HRO category, would be of value, in preventing repeat drink-driving 0ffending.
(b) Efficacy of brief intervention at primary care level in relapse of harmful drinking.
(c) Breakdown of intervention protocols such as,
CAGE
MAST
AUDIT etc and their respective efficacy in identifying "at risk" patients

(d) The key features of greatest prognostic significance for risk of relapse (good e.g. family support, bad e.g. living alone, time related etc)

(e) Time scales to first relapse to second relapse etc. How has "relapse" been defined?

2. Please give a background to the question. Why has DMG raised this problem?

There is a possibility of extending the HRO Scheme as a proactive measure to provide a "warning shot/health promotion opportunity" to all convicted drink-drivers, which would tie in with the Government's Alcohol Harm Reduction Strategy.

ICD-10 code. F10.1 harmful

3. Giving references where appropriate, briefly detail the sources you have used to obtain background information on the *options* and *issues*, which might be important for the problems, you describe.

(a) At A Glance Guide to the current Medical Standards of Fitness to Drive February 2005. Chapter 5 Drug and Alcohol Misuse and Dependency and Appendix
(b) Best Practice Guidelines for Alcohol Cases, March 2002
(c) Best Practice Guidelines for High Risk Offender Cases, March 2002
(d) DSM IV .
(e) Official Journal of the European Communities, Second Directive Annex 3
(f) Ex-post evaluation of specific projects funded under the Transport Safety Policy Final Report- EuroBob, August 2004
(g) Government Alcohol Harm Reduction Strategy for England
(h) The Drink Driver Rehabilitation Scheme
(i) What Works: Reducing Re-Offending, National Probation Service

4. Please give name and contact details of any expert or clinical contact e.g. relevant Panel Chairman/ expert Panel member.

Dr Bruce Ritson (Chairman)
MD Ed FRCP Ed FRCPsych
4 McLaren Road
Edinburgh EH9 2BH

[redacted]

Dr Michael Farrell (Panel Member)
LRCPI & Lm LRCSI & Lm MRCP MRCPsych
Consultant Psychiatrist
South London & Maudsley NHS Trust
Addiction Resource Centre
63-65 Denmark Hill
Camberwell
London SE5 8RS

[redacted]

Dr Eilish Gilvarry (Panel Member)
MB FRCPsych MRCGP FRCPI
Consultant Psychiatrist
Newcastle, N Tyneside & Northumberland Mental Health Trust
Drug & Alcohol Service
Plummer Court
Carliol Place
Newcastle Upon Tyne
NE1 6UR

[redacted]

Dr Alison L Lowe (Panel Member)
Mb ChB MRCPsych

Consultant Psychiatrist Addictive Behaviour
East Herts Community Drug and Alcohol Service
2a Baldock Street
Ware
Herts
SG12 9DZ

[redacted]

Joel Valmai European Commission
[redacted]

5. What is the nature of the target population of the issue detailed above? E.g. age, profile, vocational drivers, young drivers, other co-morbid features.

All first-time drink drivers who are predominantly but not exclusively young and male; who fall into the levels in this country or jurisdiction of the literature search.

Co-morbid features- nil.

6. What are the outcomes you consider particularly important in relation to the question posed? What decisions rest on these outcomes?

See question one and also the role of primary care in delivery success/outcomes.
GP, practice nurse, trained counsellor
And which method of intervention seems to produce successful outcomes.

What is the latest date that an ARIF response would be of value 8 / 8 / 05

Please either:

Fax this form to: 0121 414 7878 marking FAO ARIF

E-mail as a word document or pdf attachment to: [redacted]

Post to:- Dr David Moore
Senior Research Reviewer and Analyst
Aggressive Research Intelligence Facility
West Midlands Health Technology Assessment Collaboration
Department of Public Health
University of Birmingham
Edgbaston
Birmingham
B15 2TT

Please ring 0121 414 3166 or 6767 if you have any queries, or you want to check the progress with your request.

7.2 Appendix 2 – Search strategies

7.2.1 ARIF Reviews Protocol

SEARCH PROTOCOL FOR ARIF ENQUIRIES

(Feb 2005)

In the first instance the focus of ARIF's response to requests is to identify systematic reviews of research. The following will generally be searched, with the addition of any specialist sources as appropriate to the request.

A. Cochrane Library

- Cochrane Reviews
- Database of Abstracts of Reviews of Effectiveness (DARE)
- Cochrane Central Register of Controlled Trials (CENTRAL)
- Health Technology Assessment (HTA) database

B. ARIF Database

- An in-house database of reviews compiled by scanning current journals and appropriate WWW sites. Many reviews produced by the organisations listed below are included.

C. NHSCRD (WW Web access)

- DARE
- Health Technology Assessment Database
- Completed and ongoing CRD reviews

D. Health Technology Assessments and evidence based guidelines(WW Web access)

- NICE appraisals and work plans for TARs, Interventional Procedures and Guidelines programmes (NCCHTA work pages:www.ncchta.org/nice/)
- Office of Technology Assessment
- NHS Coordinating Centre for Health Technology Assessments
- Canadian Co-ordinating Office for Health Technology Assessment
- New Zealand Health Technology Assessment
- Wessex STEER Reports
- Agency for Healthcare Research and Quality (AHRQ)
- National Horizon Scanning Centre
- SIGN (Scottish Intercollegiate Guidelines Network)

E. Clinical Evidence

F. Bandolier

G. TRIP Database

H. Bibliographic databases

- Medline - systematic reviews
- Embase - systematic reviews
- Other specialist databases.

I. Contacts

- Cochrane Collaboration (via Cochrane Library)
- Regional experts, especially Pharmacy Prescribing Unit, Keele University (&MTRAC) and West Midlands Drug Information Service (url: www.ukmicentral.nhs.uk) for any enquiry involving drug products

J. Transport Specific

- Transport Research Laboratory etc
- Others as required

K. Topic Specific

- Others as required

Example Search Strategies

Interventions to reduce re-offending - Search strategy used on Cochrane Library (Wiley internet version) 2005 Issue 2 Search 1

#1 exp alcohol induced disorders/
#2 exp alcoholism/
#3 exp alcohol drinking/
#4 #1 or #2 or #3
#5 relapse
#6 recidivism
#7 #5 or #6
#8 #4 and #7

Brief primary care interventions to reduce harmful drinking - Search strategy used on Cochrane Library (Wiley internet version) 2005 Issue 2

#1 alcohol
#2 drink*
#3 exp alcohol induced disorders/

#4 exp alcoholism/

#5 exp alcohol drinking/

#6 #1 or #2 or #3 or #4 or #5

#7 primary next care

#8 exp family practice/

#9 general next practi*

#10 #7 or #8 or #9

#11 #6 and #10