

 **Drug and Alcohol FINDINGS** Your selected document

This entry is our account of a study selected by Drug and Alcohol Findings as particularly relevant to improving outcomes from drug or alcohol interventions in the UK. Entries are drafted after consulting related research, study authors and other experts and are © Drug and Alcohol Findings. Permission is given to distribute this entry or incorporate passages in other documents as long as the source is acknowledged including the web address <http://findings.org.uk>. The original study was not published by Findings; click on the [Title](#) to obtain copies. Free reprints may also be available from the authors – click [Request reprint](#) to send or adapt the pre-prepared e-mail message. Links to source documents are in [blue](#). Hover mouse over [orange](#) text for explanatory notes. The Summary is intended to convey the findings and views expressed in the study. Below are some comments from Drug and Alcohol Findings.

Click [HERE](#) and enter e-mail address to be alerted to new studies and reviews

---

► [The impact of screening, brief intervention and referral for treatment in emergency department patients' alcohol use: a 3-, 6- and 12-month follow-up.](#)



DOWNLOAD PDF  
for saving to  
your computer

**Academic ED SBIRT Research Collaborative.** [Request reprint](#)  
**Alcohol and Alcoholism: 2010, 45(6), p. 514–519.**

A few minutes with specially hired interventionists can curb the intake of heavy-drinking emergency patients, but in routine practice hospital staff will usually have to do this work. A US study tested this real-world scenario and found the modest drinking reductions were short-lived.

**Summary** Set in US emergency departments, this report investigates whether short-term (three months) drinking reductions among risky drinkers exposed to a brief alcohol intervention ([reported earlier](#) in Findings) would be sustained over the following nine months, a year in total since the intervention. The elements of the intervention – screening, brief intervention, and (if appropriate) referral for treatment – make the acronym SBIRT, which together with its emergency department setting formed the acronym for the study – ED SBIRT.

For the study, patients whose responses to a seven-question screening survey administered by research staff indicated that they were drinking above US national low-risk [guidelines](#) were recruited from 14 sites nationwide. Following screening, at each site these patients were sequentially allocated to form a comparison ([or 'control'](#)) group simply given a list of local referral options, or to the SBIRT intervention. SBIRT patients received the same handout plus the 'Brief Negotiated Interview' intended to reduce unhealthy alcohol use. Based on motivational interviewing, during this highly scripted session lasting on average eight minutes, specially trained emergency department staff first fed back to the patient the results of the screening tests and expressed concern at their risky drinking, then sought to enhance motivation to cut back using motivational techniques such as exploring the pros and cons of drinking as the patient sees them, and reframing and reflecting back to the patient some of their own responses. The session

was planned to end with the patient signing an agreement committing them to the drinking goals decided during the preceding discussion, and with referral to primary care or alcohol services as appropriate.

## Main findings

Follow-up surveys were conducted three, six and 12 months later by telephone using an interactive voice response system. 8908 patients were approached at the sites and 7751 agreed to be screened. Of these, 2051 exceeded low-risk limits and 1132 (55% of the identified risky drinkers) agreed to join the study and were enrolled. Of these, 62% completed the three-month follow-up survey, 50% at six months and 38% at 12. There were indications that patients most likely to miss the follow-ups were those least likely to respond well to the intervention. At the first and presumably too later follow-ups, they tended disproportionately to be men, without health insurance, and among the less well educated in the sample.

At three months there was a clear impact of the intervention. After adjusting for differences between the groups and **estimating** probable outcomes for patients who could not be followed up, patients allocated to the intervention reported consuming just over **five UK units** less per week than controls, and the maximum number of drinks per occasion was **one and a third UK units** less. As a result, 26% of SBIRT patients no longer exceeded US low-risk alcohol consumption thresholds but just 17% of controls.

By six months and again at 12 months these promising effects had nearly or entirely dissipated and there were no statistically significant differences in alcohol consumption between intervention and control groups. At all three follow-up points, risky but probably **not dependent** drinkers **did not respond** significantly better to the intervention than **possibly dependent** drinkers.

## The authors' conclusions

Lack of intervention effects at 12 months is consistent with results from other recent emergency department studies and highlights the importance of multi-contact interventions and/or 'booster' sessions for maintaining the impact of brief interventions on risky drinking. The substantial literature on brief interventions in primary care settings provides strong support for this conclusion, as virtually all the studies reporting effects persisting beyond three months mounted multi-contact interventions. According to a **recent review** of brief primary care alcohol intervention studies, effects from all single contact interventions decayed markedly after three months. Given the success of primary care brief interventions, active referral to GPs offers an opportunity to enhance emergency department interventions. However, difficulties in this study in maintaining research contact over the follow-up period may mean that multi-contact interventions too will be poorly attended. Not only might this reduce their impact, it would also complicate the evaluation of such interventions as loss to follow-up will probably be conflated with loss to further intervention sessions.



This report from a large-scale and important US study underlines the fragility of the evidence base for emergency department brief alcohol interventions, which are best seen as having an established potential for curbing drinking and injuries, but one inconsistently realised. By training the hospitals' own emergency staff to conduct

the intervention rather than relying on 'imported' specialists, the study went part way to testing a more real-world implementation of brief interventions than most other studies, but still the screening element was conducted by research staff. When hospital staff are relied on, unless they are motivated and committed, few people who might benefit from intervention are identified. Despite research-aided screening, on average each interventionist in the featured study counselled just one patient every 19 days, a figure which might have risen to one every 10–11 days without the encumbrance of research procedures. In the absence of dedicated screening personnel, throughput would probably have been much less.

Emergency staff who conducted the intervention were **unable to fully sustain** practice improvements after a single training workshop in the intervention. Though still higher than before training, 12 months later they were using the intervention less often than three months after training and felt slightly less confident about using it and less responsibility for its implementation. Untouched by the training were the barriers they felt to implementing such interventions, including the need for institutional support, continued supervised clinical practice, time constraints, reimbursement problems and the lack of referral options for patients needing follow-on care. The conclusion was that booster training sessions might help, though clearly some of the barriers would also be barriers to further training and would continue to impede implementation of that training.

Further distancing the study from routine implementation was the fact that all the trial sites were *academic* departments, whose commitment to staff training and evidence-based practice is unlikely to be matched across the board. In particular, they were selected **partly because** they already had weekly conferences for resident education. Elsewhere training and implementation might have been less successful and drinking reductions seen fleetingly at the three-month follow-up might have been less apparent.

The study was carefully designed and eliminated major threats to the validity of its findings, but suffered from an inability to follow-up patients, a testament to the **transient nature** of US heavy drinking emergency patients. Over 60% who started the trial were missing at the last follow-up. Together with identified at-risk drinkers who did *not* join the study, it meant that the final follow-up involved just a fifth of the patients who might have been targeted for alcohol intervention. No current estimation method can eliminate concerns that such a study is an inadequate (even if one of the best we have) guide to how the intervention might perform if routinely applied to all at-risk drinkers seen by emergency departments.

Along with the small size of the **extra** drinking reductions attributable to the intervention and their dissipation within six months, the study does not offer much reassurance on the effectiveness or cost-effectiveness of training emergency department staff in structured alcohol interventions as opposed to simple advice-giving and referral.

### Other emergency department studies

**Previous studies** have shown that just a few minutes counselling at-risk drinkers among emergency patients *can* reduce consumption and alcohol-related injuries, improve welfare, promote treatment uptake, and cut the future workload of emergency services. But there have also been negative findings, and the research record is **fairly evenly balanced** between these and more positive findings. A **recent synthesis** of research on

interventions conducted actually in the emergency department rather than after admission found that overall such interventions have not been shown to significantly reduce alcohol consumption, while impacts on drink-related problems have been variable. More positively, three studies did together indicate that six to 12 months after the interventions patients were half as likely as comparison patients to have suffered an alcohol-related injury, but all three were from the USA, and two involved only teenage patients whose drinking would have been illegal in that country. In all three the patients were known to have recently been drinking or had a history of drink problems rather than merely having tested as exceeding national drinking guidelines, underscoring the possibility that heavy drinkers are most affected by such interventions.

Patchy findings have prompted [attempts](#) to identify why some interventions have worked in some situations but others have failed, but the evidence is insufficient to answer this question. In particular, it remains unclear whether a relatively elaborate, theory-based approach really is needed. One well designed [US study](#), which managed to follow-up nearly all the patients it recruited, found that an intervention very similar to that in the featured study was no more effective than one minute of straightforward advice at discharge that (among other things) the patient cut their drinking. As in the featured study, both interventions were conducted by emergency department staff.

It [seems likely](#) that (as in [a US study](#)) when emergency department alcohol interventions do curb drinking, impacts are concentrated among relatively heavy and/or dependent drinkers rather than those who only modestly exceed low-risk drinking limits.

### British studies

In 2008 an [audit](#) of alcohol health service provision in England found that advice-giving at accident and emergency departments was rare. Commissioners have [reportedly found](#) it hard to persuade staff to undertake this work.

The best researched example is the programme at St. Mary's hospital in London, which uses trained and motivated (performance feedback is important) emergency unit staff to screen suspected heavy drinkers or patients with complaints linked to heavy drinking. Doctors explain to positive screen patients that drinking is damaging their health and offer an appointment with an on-site health worker, typically the same or the next working day. In these circumstances, two-thirds of patients attend for advice. Offering this service [was found](#) to reduce later drinking and return visits to the department. This last finding may be attractive to commissioners seeking to meet national targets to reduce alcohol-related hospital admissions. [Further analysis](#) based on the same study found that total public service costs and productivity losses over the following 12 months were roughly equivalent whether or not the intervention was offered, but that offering it was the most cost-effective option for reducing drinking. [Another study](#) at the unit demonstrated the (at least temporary) feasibility of tasking reception staff to hand out screening questionnaires to all adult ambulant patients, and the willingness of over half the patients to fill in and return the forms.

### The UK policy climate

In England directors of public health are [expected](#) to include alcohol brief interventions among attempts to address the population-wide determinants of ill health. This policy is

in line with [recommendations](#) from Britain's National Institute for Health and Clinical Excellence (NICE), which in 2010 saw screening and brief interventions targeted at risky drinkers as an effective way to prevent drinking problems, though one less important at a population level than policy changes affecting the price and availability of alcohol. Among the sites NICE envisaged for this work were emergency departments, and the recommended approach was the [FRAMES model](#). However, the guidance acknowledged that (in contrast to primary care) research on emergency department interventions was scarce and the barriers to implementation were considerable.

In Scotland [national policy](#) prioritises screening and brief intervention in primary care, antenatal care, and accident and emergency departments, backed by a health service target for 2008/09–2010/11 to deliver 149,449 brief interventions across the three years supported by dedicated funding. Set [in the context](#) of what was in any event 111,200 primary care consultations for alcohol misuse in a single year in 2006/07, this target of around 50,000 a year across all three priority settings may seem to lack ambition.

The [Welsh substance misuse strategy](#) recognises the potential value of brief alcohol interventions in accident and emergency departments, but its action plan made no commitment to their expansion; neither did the strategy for [Northern Ireland](#).

### Practice implications

Given findings to date and the policy context in most of the UK, commissioners and emergency department managements may not feel alcohol screening and intervention initiatives are mandated either on the evidence or by policy levers. However, neither should they ignore the possibility that patients' health can be improved, and department workloads relieved, by brief advice to risky drinkers identified through a rapid screening procedure and/or through [indications](#) that the attendance was alcohol-related. If procedures permit, screening questions should be built in to routine assessment/triage procedures. Unless actively and continuously monitored and encouraged, screening may be applied haphazardly and to only a small proportion of the patients who could benefit. If possible the intervention should be conducted while the patient is waiting in the department or on the ward if admitted as an inpatient. If a follow-up reminder and progress check (in person or by telephone or letter) can be factored in, outcomes can be monitored and are likely also to be improved. More severely dependent patients require referral to treatment, preferably actively pursued then and there by hospital staff. A letter to the GPs of positive-screen patients would alert them to the need to pay attention to the patient's drinking, and offer a second chance of intervention if counselling in the hospital proved impractical or was refused.

In the UK advice on brief interventions [is available](#) from the Alcohol Learning Centre. US guidance is available on the [specific intervention](#) used in the featured study and on emergency department alcohol screening and intervention [in general](#).

*Thanks for their comments on this entry in draft to Robert Patton of the National Addiction Centre in London. Commentators bear no responsibility for the text including the interpretations and any remaining errors.*

Last revised 11 March 2011

► [Comment on this entry](#) ► [Give us your feedback on the site \(one-minute survey\)](#)

Unable to obtain the document from the suggested source? Here's an [alternative](#).

---

**Top 10 most closely related documents on this site. For more try a [subject or free text search](#)**

[The impact of screening, brief intervention, and referral for treatment on emergency department patients' alcohol use STUDY 2007](#)

[Counselor skill influences outcomes of brief motivational interventions STUDY 2009](#)

[Screening, brief interventions, referral to treatment \(SBIRT\) for illicit drug and alcohol use at multiple healthcare sites: comparison at intake and 6 months later STUDY 2008](#)

[What process research tells us about brief intervention efficacy ABSTRACT 2010](#)

[The effectiveness of brief intervention among injured patients with alcohol dependence: who benefits from brief interventions? ABSTRACT 2010](#)

[The role of ethnic matching between patient and provider on the effectiveness of brief alcohol interventions with Hispanics ABSTRACT 2010](#)

[Investing in alcohol treatment: brief interventions THEMATIC REVIEW 2002](#)

[Injury rate cut in heavy drinking accident and emergency patients NUGGET 2003](#)

[Drink-driving cut by 30-minute talk with hospital patients NUGGET 2006](#)

[Evidence-based practice? The National Probation Service's work with alcohol-misusing offenders STUDY 2009](#)