

Alcohol identification and intervention in English emergency departments

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ABSTRACT

Aims In the ED, alcohol identification and brief advice is an effective method of reducing consumption and related harms. Our objective was to conduct a national survey of English EDs to determine current practice regarding alcohol identification and provision of brief advice and to compare changes in activity to a previous National Survey conducted in 2011.

Methods This was a cross-sectional survey of all consultant-led EDs in England.

Results Of 180 departments, 147 (81.6%) responded. All departments may question adult patients about their alcohol consumption, with many (63.6%) asking all patients aged over 18 years as part routine care and using a formal screening tool (61.4%). The majority of departments asked young people (aged 11–17 years) about their consumption (83.8%), but only 11.6% did so as a part of routine practice. Compared with the 2011 survey, there have been significant increases in routine screening among adults (15.9%, CI 4.16% to 27.18%; $p=0.006$), general practitioners being informed about patients' alcohol-related presentations (10.2%, CI 0.64% to 19.58%; $p=0.028$) and access to an alcohol health worker or a clinical nurse specialist (13.4%, CI 3.64% to 22.91%, $p=0.005$). Modest (non-significant) changes were also found in access to training on brief advice (9.7%) and the use of formal screening questions on adult patients (9.7%).

Conclusion Alcohol screening together with referral or intervention is becoming part of routine practice in England. Compared with our previous national survey, increases in alcohol screening and intervention activity are demonstrated, with improvements in routine questioning (among adults), the number of general practitioners being informed about alcohol-related attendances, provision of training, access to specialist services and the use of formal screening tools.

INTRODUCTION

Alcohol use is associated with high levels of morbidity and mortality. Within the UK, alcohol-related deaths have increased by 10% since 2003 (1% from 2012), with 13% of all females and 18% of all males drinking at a level associated with an increased risk of harm.¹ ED patients are more likely to present with alcohol misuse problems than the general population,² and up to 70% of all ED admissions in the evenings and at weekends are associated with hazardous and harmful levels of consumption.³ It is clear that the ED is an effective environment to identify both hazardous drinkers and to offer timely help and advice to reduce alcohol consumption and related harms.⁴

Key messages

What is already known on this subject

- ▶ Alcohol identification and brief advice (IBA) is known to reduce consumption and related harms among patients attending Emergency Departments (ED) and this is recommended in both National Institute for Health and Care Excellence and Public Health England (PHE) guidelines.
- ▶ Previous national surveys have identified that not all departments adhere to these guidelines; thus, this study explores current provision of alcohol IBA activity in English EDs.

What this study adds

- ▶ Compared with previous surveys, significant improvements were noted in routine questioning (among adults), access to specialist services and the number of general practitioners being informed about patients' alcohol-related attendances.

Alcohol identification and brief advice (IBA) is an effective and cost-effective method to lower levels of consumption and reduce alcohol-related harm among patients attending EDs.⁵ National Institute for Health and Care Excellence (NICE) Guidelines suggest that screening followed by feedback of the results is the most efficacious approach to IBA in the ED.⁶ This reflects the UK Alcohol Strategy (2012) that encouraged the use of local public health grants to help develop the implementation of alcohol IBA and provision of access to specialist nurses within the ED.⁷ Recent UK guidelines⁸ and a report by the Royal College of Emergency Medicine (RCEM)⁹ support the use of alcohol IBA within the ED. To determine the extent to which these recommendations have been adopted by EDs, a survey of all EDs in England was undertaken. This survey followed up on the earlier National Surveys completed in 2007 (funded by Action on Addiction) and 2011 (funded by Alcohol Research UK)^{10 11} to determine the current prevalence of alcohol IBA on adult and younger patients. In addition, items on older patients and frequent alcohol-related attendees were also included.

MATERIALS AND METHODS

Study design

This was a prospective cross-sectional survey that targeted all consultant-led EDs in England ($n=180$). The study was classified as a service audit/



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Table 1 Comparison of findings from the 2011 and 2015 surveys

	2011 (n=151)	2015 (n=147)	Difference in proportions
Response rate, %	81.0	81.6	0.6
Access to training on screening, %	63.6	70.1	6.5
Access to training on brief advice, %	57.0	66.7	9.7
Identified alcohol champion, %	57.6	59.2	1.6
Routinely ask about alcohol (adults), %	47.7	63.6	15.9*
Use of a formal screening tool (adults), %	51.7	61.4	9.7
Ask about alcohol (young people), %	82.0	83.8	1.8
Routinely ask about alcohol (young people), %	8.9	11.6	2.7
Use of a formal screening tool (young people), %	14.6	15.0	0.4
Measure blood alcohol as required, %	55.7	61.5	5.8
Record alcohol-related attendance, %	70.5	75.4	4.9
Inform patients' GP of alcohol-related attendance, %	74.8	85.0	10.2*
Offer help/advice for alcohol problems, %	100.0	97.7	-2.3
Have access to AHW or CNS, %	71.8	85.2	13.4*

*p<0.05.

AHW, alcohol health worker; CNS, clinical nurse specialist; GP, general practitioner.

evaluation and therefore did not require NHS ethical approval. Institutional approval to proceed was provided by the University of Surrey Ethics Committee. The study was supported by a small grant from Alcohol Research UK.

The Royal College of Emergency Medicine provided contact details for all EDs. A description of the study accompanied by a link to our online survey was sent to the 'Lead Clinician' of each department. A covering letter encouraging participation in the survey, signed by the lead researcher and both the president and the alcohol lead of the RCEM accompanied the initial contact email. Hospital names were requested to track participation, but respondents themselves were able to remain anonymous.

One week after this initial contact, departments who had not responded were emailed a reminder accompanied by the covering letter and survey link. Two weeks after the initial invitation, the medical secretaries of non-responding departments were contacted to confirm contact details, and a third wave of emails was sent. A further 2 weeks later, a final copy of the survey and invitation was emailed to departments who had not yet responded.

Outcome measures

- ▶ An anonymous online survey was developed based on our previous national survey¹⁰ and in association with the Section of Alcohol Research at the National Addiction Centre, King's College London.
- ▶ The survey was designed to evaluate current alcohol screening and brief advice or intervention procedures in the ED and was supported by the Royal College of Emergency Medicine.
- ▶ It comprised 44 questions with both open and closed response options.
- ▶ In addition to the questions covered in the 2011 survey, we asked about frequent alcohol-related attendees, patients aged 65+ years and about assertive outreach services.

Changes in proportions were explored using an N-1 χ^2 test. Associations between variables were calculated using Pearson's χ^2 test.

RESULTS

There was no significant change in the response rate, compared with the 2011 survey, with a total of 147 departments completing survey materials (81.6% response rate). Compared with the 2011 survey, there was no significant change in the proportion of participating departments. However, we found significant increases in access to alcohol health worker (AHW)/clinical nurse specialist (CNS) (13.4%, CI 3.64% to 22.91%; $p=0.005$), levels of routine questioning about alcohol consumption among adults (15.9%, CI 4.16% to 27.18%; $p=0.006$) and general practitioners (GPs) being informed about patients' alcohol-related attendances (10.2%, CI 0.64% to 19.58%; $p=0.028$). The rates of access to brief advice training (9.7%) and the use of formal screening tools in adults (9.7%) also increased; however, these did not reach statistical significance. Table 1 shows a comparison of key findings to the results of the 2011 survey.

Every department indicated that adult patients may be asked about their use of alcohol. Almost two-thirds do so as part of routine practice (63.6%), whereby all adults presenting to the department are questioned about their drinking. Consumption is typically assessed using a formal screening tool (61.4%). The Alcohol Use Disorders Identification Test - Consumption (AUDIT-C (33.7%) and the Paddington Alcohol Test (PAT; 31.4%) were the most frequently cited measures, accounting for almost two-thirds of all screening activity.

Most departments (83.8%) reported that young people (defined as aged 11–17 years) could also be asked about their drinking; however, less than one in six did so routinely (11.6%). Of the one in seven departments (15%) that used a formal screening tool for this population, the most common measures were the PAT (26.7%) and the AUDIT-C (53.3%).

Almost all departments asked adults aged 65+ years about their drinking (94.9%), with around half doing so routinely (52.7%). About half of these assessed older adults using a formal screening tool, the most common being the PAT (21.5%), the CAGE (21.5%) and the AUDIT-C (35.4%).

Most departments (70.5%) formally recorded an alcohol-related attendance in the patient's notes, and almost all of these (90.4%) then inform the patients' GPs about their attendance. Informing patients' GPs about an alcohol-related attendance was significantly associated with recording attendances in the patients' notes ($\chi^2=8.76$, $df=1$, $p=0.003$).

The provision of help or advice to patients identified as having an alcohol use disorder was offered by nearly every department (97.3%). This help was typically a referral to their own 'in house' specialist team (51.6% of all departments), with about one-in-four referring patients on to an external agency (27.4%). Departments that provided an intervention themselves either provided a leaflet (12.1%) or verbal brief advice (8.9%). Most departments were able to access either an AHW or CNS (85.2%), typically based on-site.

An assertive outreach (AO) service was offered by half of departments (40%), and the same proportion offered access to a programme to reduce alcohol-related attendances among frequent attendees. Departments that offered AO services were most likely to be those that also access to a programme to reduce alcohol-related attendances ($\chi^2=5.33$, $df=1$, $p=0.021$).

Since the 2011 survey, there has been no substantive change in the proportion of EDs who were able to identify an 'alcohol champion'—a senior staff member who provides leadership around alcohol issues. We found the departments with such champions who were more likely to have access to IBA training ($\chi^2=25.59$, $df=1$, $p<0.001$). There is capacity for more of

these champions to be identified, which should further increase screening and intervention activity in departments.

DISCUSSION

This survey of alcohol identification and intervention activity in England had an encouraging response rate of over 81%, matching the levels achieved by our previous national surveys.^{10 11} Changes in the provision of alcohol IBA in English EDs since 2011 remain positive. The number of GPs being informed by departments about their patients' alcohol-related presentations, routine questioning about drinking (in adults) and provision of access to specialist nurses and health workers have all increased significantly. In addition, positive changes in the use of formal alcohol screening tools on adult attendees and the provision of training on alcohol IBA have also been observed.

Departments have adopted the recent recommendations,^{7 8 12} with alcohol screening and either onward referral or intervention delivered by ED staff now becoming a part of routine practice. Approximately two-thirds of EDs now routinely question (most using a formal tool) adult patients about their consumption. Help or advice to patients who are identified as having an alcohol use disorder is offered by almost every ED in England, mostly in the form of a referral to specialist workers or services (the majority of which are based on-site). Referral to specialist workers is effective at reducing levels of alcohol consumption and related harms⁴ and minimal intervention (either a leaflet or brief advice) is associated with significant reductions in levels of hazardous or harmful drinking.¹³

Reports and guidelines published or updated since 2010^{8 9 12 14} as well as in reviews of the literature on alcohol IBA^{15–17} have consistently recommended an increase in asking routine questions about alcohol consumption among adults presenting to EDs. Our results show that EDs have taken positive steps towards this; however, we found that routine questioning of patients aged under 18 years was limited. This suggests that there is room for further improvement, particularly because adolescents aged 15–24 years account for the largest number of ED attendances¹⁸ and that levels of consumption and related harm among that age group who drink have increased.¹ Given that alcohol IBA is effective at reducing consumption and harm in young people,¹⁹ it is imperative that departments increase the levels of screening activity for this population.

Older patients (aged 65+ years) are asked about their alcohol consumption by most departments, although not usually as a matter of routine. About 20% of older people drink at unsafe levels²⁰ and considering their increased potential complications due to concomitant medications and sensitivity to alcohol,²¹ increased rates of screening and intervention for this population is needed.

Our results identified an improvement in GPs being informed about their patients' alcohol-related attendance from 75% to 85% of occasions. Improved communication with GPs represents a move towards integration across primary and secondary care services, which supports the National Confidential Enquiry into Patient Outcome and Death (2013) recommendations for multidisciplinary care.¹⁴ This highlights the potential for GPs to become more involved in the wider deployment of alcohol screening and brief interventions, particularly as primary care has been identified as a suitable setting for more in-depth interventions.²²

Following recent UK guidelines,⁹ it is encouraging that many departments are offering assertive outreach services and are also implementing strategies to tackle reattenders. Furthermore, it

is promising to note that there has been a significant improvement (up to 13.4%) in the number of EDs that are able to access AHW or CNS-based alcohol care teams. Evidence suggests that access to such teams can reduce levels of alcohol consumption and harm.¹² We acknowledge the increasing role that liaison psychiatry, in particular the Rapid Assessment, Interface and Discharge services, have in addressing alcohol-related harms among patients presenting to EDs. It is possible that some of the improvements noted in this report could be due in part to these specialist teams. Future surveys of ED alcohol IBA should ensure that their contribution is appropriately assessed.

Departments currently use a number of different screening tools, with the AUDIT-C²³ and PAT,²⁴ the most commonly applied measures, in line with the latest NICE and RCEM guidelines.^{8 9} We suggest that the choice of screening materials is secondary to the actual use of such measures, and that EDs should be able to access whatever screening materials work best for their patients and staff.

The proportion of departments measuring blood alcohol concentration (BAC) has increased slightly since 2011. Research suggests that routine BAC measurement for patients who are unable to complete screening materials is appropriate.²⁵ Departments should consider the use of blood tests when other information about a patient's alcohol use is unavailable, as this could provide additional insight leading to better health outcomes.

Although data were collected using self-report measures, this was unlikely to have induced bias in the data given that responses were anonymous. The high response rate achieved suggests that our results can be generalised to the wider population of EDs in the UK; however, given that other countries have widely differing interpretations of what constitutes hazardous and harmful alcohol consumption, our study should serve to illustrate how raising awareness of alcohol issues, together with providing effective and cost-effective interventions, can increase alcohol IBA activity and highlight that the ED is an appropriate location in which to deliver such activity.

In conclusion, our results are encouraging, highlighting general adherence to national guidelines and improvements in the provision of screening and brief intervention practices since 2011.

Contributors RP conceived the study, obtained funding, collected data, analysed results and prepared the final manuscript based on an earlier report to the funder (available from the Alcohol Research UK website) as a requirement of the grant process. GG reviewed relevant literature, analysed results and prepared the final manuscript.

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Competing interests None declared.

Patient consent This was an audit of current activity and as such did not collect participant details.

Ethics approval University of Surrey Ethics Committee.

Provenance and peer review Not commissioned; externally peer reviewed.

Data sharing statement Additional unpublished data from the survey is found in our report to funders: The Third National Emergency Department Survey of Alcohol Identification and Intervention Activity which can be downloaded here:

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REFERENCES

- 1 HSCIC. *Statistics on alcohol: England, 2015*. London, 2015.
- 2 Borges G, Cherpitel CJ, Medina-Mora ME, et al. Alcohol consumption in emergency room patients and the general population: a population-based study. *Alcohol Clin Exp Res* 1998;22:1986–91.

- 3 HMSO. *Alcohol Harm Reduction Strategy for England*. London: The Cabinet Office, 2004.
- 4 Crawford MJ, Patton R, Touquet R, *et al*. Screening and referral for brief intervention of alcohol-misusing patients in an emergency department: a pragmatic randomised controlled trial. *Lancet* 2004;364:1334–9.
- 5 Schmidt CS, Schulte B, Seo HN, *et al*. Meta-analysis on the effectiveness of alcohol screening with brief interventions for patients in emergency care settings. *Suchttherapie* 2015;16.
- 6 Drummond C, Deluca P, Coulton S, *et al*. The effectiveness of alcohol screening and brief intervention in emergency departments: a multicentre pragmatic cluster randomized controlled trial. *PLoS One* 2014;9:e99463.
- 7 HMSO. Office H, ed. *The Government's Alcohol Strategy*. London: Her Majesty's Stationary Office, 2012.
- 8 NICE. Alcohol use disorder: preventing the development of hazardous and harmful drinking: National Health Service, 2010.
- 9 RCEM. *Alcohol: a toolkit for improving care*. London, 2015.
- 10 Patton R, O'Hara P. Alcohol: signs of improvement. The 2nd national emergency department survey of alcohol identification and intervention activity. *Emerg Med J* 2013;30:492–5.
- 11 Patton R, Strang J, Birtles C, *et al*. Alcohol: a missed opportunity. A survey of all accident and emergency departments in England. *Emerg Med J* 2007;24:529–31.
- 12 PHE. *Alcohol care in England's Hospitals: An opportunity not to be wasted*. London, 2014.
- 13 Coulton S, Perryman K, Bland M, *et al*. Screening and brief interventions for hazardous alcohol use in accident and emergency departments: a randomised controlled trial protocol. *BMC Health Serv Res* 2009;9:114.
- 14 Ncepod. *Measuring the units: a review of patients who died with alcohol-related liver disease*. London: National Confidential Enquiry into Patient Outcomes and Death, 2013.
- 15 O'Donnell A, Anderson P, Newbury-Birch D, *et al*. The impact of brief alcohol interventions in primary healthcare: a systematic review of reviews. *Alcohol Alcohol* 2014;49:66–78.
- 16 Mitchell SG, Gryczynski J, O'Grady KE, *et al*. SBIRT for adolescent drug and alcohol use: current status and future directions. *J Subst Abuse Treat* 2013;44:463–72.
- 17 Pilowsky DJ, Wu LT. Screening instruments for substance use and brief interventions targeting adolescents in primary care: a literature review. *Addict Behav* 2013;38:2146–53.
- 18 Currie C, Davies A, Blunt I, *et al*. *Alcohol specific activity in hospitals in England*. London, 2015.
- 19 Patton R, Deluca P, Kaner E, *et al*. Alcohol screening and brief intervention for adolescents: the how, what and where of reducing alcohol consumption and related harm among young people. *Alcohol Alcohol* 2014;49:207–12.
- 20 Rao R, Schofield P, Ashworth M. Alcohol use, socioeconomic deprivation and ethnicity in older people. *BMJ Open* 2015;5:e007525.
- 21 Immonen S, Valvanne J, Pitkala KH. Prevalence of at-risk drinking among older adults and associated sociodemographic and health-related factors. *J Nutr Health Aging* 2011;15:789–94.
- 22 Kaner E, Bland M, Cassidy P, *et al*. Effectiveness of screening and brief alcohol intervention in primary care (SIPS trial): pragmatic cluster randomised controlled trial. *BMJ* 2013;346:e8501.
- 23 Bush K, Kivlahan DR, McDonell M, *et al*. The AUDIT Alcohol Consumption Questions (AUDIT-C): an effective brief screening test for problem drinking. *Arch Intern Med* 1998;158:1789–95.
- 24 Patton R, Hilton C, Crawford MJ, *et al*. The paddington alcohol test: a short report. *Alcohol Alcohol* 2004;39:266–8.
- 25 Touquet R, Csipke E, Holloway P, *et al*. Resuscitation room blood alcohol concentrations: one-year cohort study. *Emerg Med J* 2008;25:752–6.