

# Don't take it for granted

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**Barriers for BI implementation  
in PHC are clear**

## Alcohol Measures for Public Health Research Alliance (AMPHORA)

Report on the mapping of European need and service provision for early diagnosis and treatment of alcohol use disorders

### Deliverable 2.5, Work Package 6

The public health impact of individually directed brief interventions and treatment for alcohol use disorders in European countries

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Table 4.5 – Main barriers to alcohol brief interventions in primary care

Reason	N of responses	Percent of cases
Time constraints	224	72.0
Lack of financial incentives	97	31.2
Risk of upsetting the patient	87	28.0
Lack of training	125	40.2
Lack of services to refer patient to	68	21.9
Other reasons	33	10.6
<b>Total</b>	<b>634</b>	

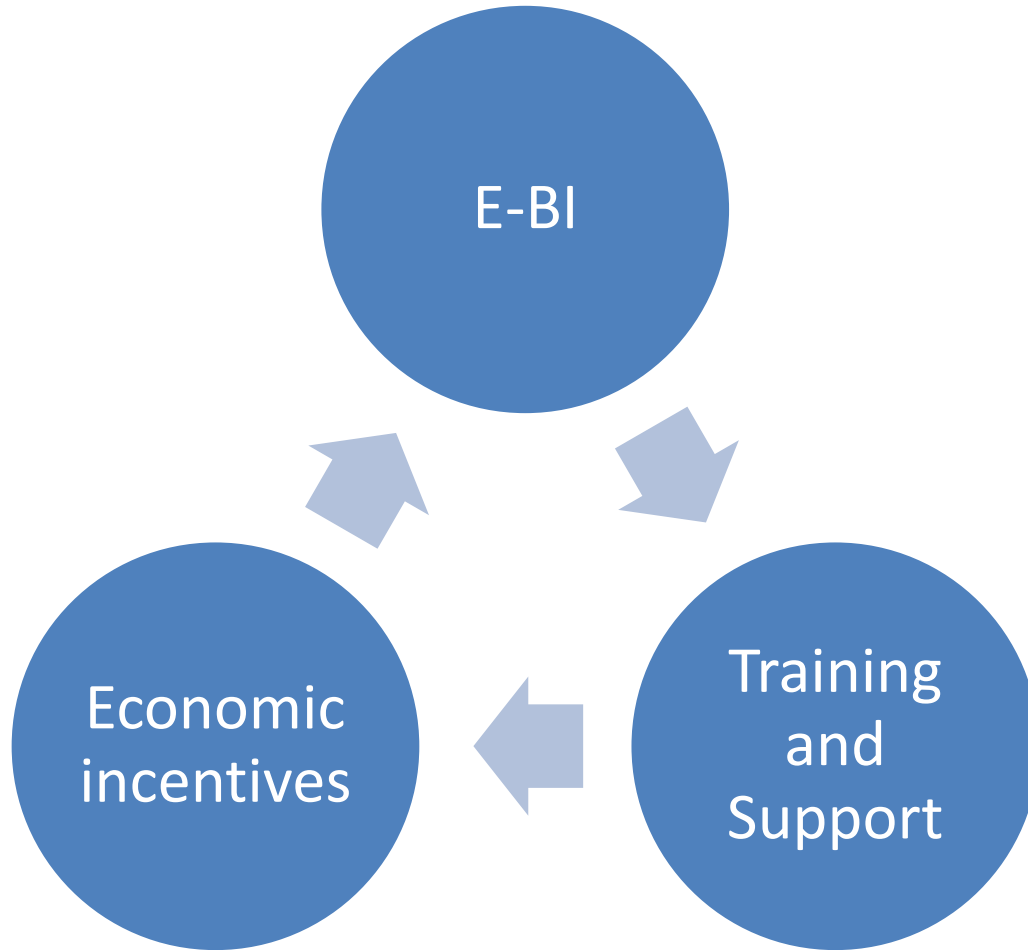
**Facilitated access to e-BI has been  
proposed to overcome these  
barriers**





# ODHIN

Optimizing delivery of health care interventions



# A randomised controlled non-inferiority trial of primary care-based facilitated access to an alcohol reduction website (EFAR-FVG): the study protocol

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## ABSTRACT

**Introduction:** There is a strong body of evidence demonstrating the effectiveness of brief interventions by primary care professionals for risky drinkers. However, implementation levels remain low because of time constraints and other factors. Facilitated access to an alcohol reduction website offers primary care professionals a time-saving alternative to standard face-to-face intervention, but it is not known whether it is as effective.

**Methods and analysis:** A randomised controlled non-inferiority trial for risky drinkers comparing facilitated access to a dedicated website with standard face-to-face brief intervention to be conducted in primary care settings in the Region of Friuli Venezia Giulia, Italy. Adult patients will be given a leaflet inviting them to log on to a website to complete the Alcohol Use Disorders Identification Test (AUDIT-C) alcohol screening questionnaire. Screen positives will be requested to complete an online trial module including consent, baseline assessment and randomisation to either standard intervention by the practitioner or facilitated access to an alcohol reduction website. Follow-up assessment of risky drinking will be undertaken online at 1 month, 3 months and 1 year using the full AUDIT questionnaire. Proportions of risky drinkers in each group will be calculated and non-inferiority assessed against a specified margin of 10%. Assuming a reduction of 30% of risky drinkers receiving standard intervention, 1000 patients will be required to give 90% power to reject the null hypothesis.

**Ethics and dissemination:** The protocol was approved by the Isoncina Independent Local Ethics Committee on 14 June 2012. The findings of the trial will be disseminated through peer-reviewed journals, national and international conference presentations and public events involving the local administrations of the towns where the trial participants are resident.

**Registration details:** Trial registration number NCT: 01638338.

## ARTICLE SUMMARY

### Article focus

- Is the website-facilitated access to alcohol brief intervention (BI) as good as face-to-face BI?
- Is primary care the right setting to promote internet usage?

### Key messages

- Risky drinking is an important health issue.
- General practices are too busy to provide BI on alcohol.

### Strengths and limitations of this study

- A new, widespread tool is proposed to reduce risky drinking.
- If not effective, this study will promote BI among general practitioners.
- The domestic use of computers is not widespread in Italy, and community involvement might be important.

## BACKGROUND

Hazardous alcohol consumption is a significant public health problem, with an estimated 3.8% of all global deaths and 4.6% of global disability-adjusted life years lost attributable to alcohol.<sup>1</sup> The European Union (EU) is the heaviest drinking region in the world, drinking an average of 11 litres of pure alcohol per adult each year.<sup>2</sup> In Region Friuli Venezia Giulia, risky alcohol consumption varies between 23.2% and 37.4% of the general population, being more significant in young adults (18–24 years).<sup>3–6</sup> There is strong evidence that screening and brief interventions (SBIs) are effective in reducing both alcohol consumption and the harms associated with hazardous drinking.<sup>7</sup> However, in primary care, less than 10% of hazardous and harmful drinkers are

## Main conclusions

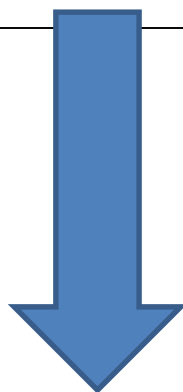
- Non-inferiority: eBI = BI
- Cost-effectiveness: eBI > BI

**But facilitated access to e-BI is  
not a miracle**



## Improving the delivery of brief interventions for heavy drinking in primary health care: outcome results of the Optimizing Delivery of Health Care Intervention (ODHIN) five-country cluster randomized factorial trial

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“The option of referral to eBI did not lead to a higher proportion of screened patients”

Open Access

Research

## BMJ Open Implementing referral to an electronic alcohol brief advice website in primary healthcare: results from the ODHIN implementation trial

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### ABSTRACT

**Objectives:** The objective of the present study was to explore whether the possibility of offering facilitated access to an alcohol electronic brief intervention (eBI) instead of delivering brief face-to-face advice increased the proportion of consulting adults who were screened and given brief advice.

**Design:** The study was a 12-week implementation study. Sixty primary healthcare units (PHCUs) in 5 jurisdictions (Catalonia, England, the Netherlands, Poland and Sweden) were asked to screen adults who attended the PHCU for risky drinking.

**Setting:** A total of 120 primary healthcare centres from 5 jurisdictions in Europe.

**Participants:** 746 individual providers (general practitioners, nurses or other professionals) participated in the study.

**Primary outcome:** Change in the proportion of patients screened and referred to eBI comparing a baseline 4-week preimplementation period with a 12-week implementation period.

**Results:** The possibility of referring patients to the eBI was not found to be associated with any increase in the proportion of patients screened. However, it was associated with an increase in the proportion of screen-positive patients receiving brief advice from 70% to 80% for the screen-positive sample as a whole ( $p < 0.05$ ), mainly driven by a significant increase in brief intervention rates in England from 87% to 96% ( $p < 0.01$ ). The study indicated that staff displayed a low level of engagement in this new technology. Staff continued to offer face-to-face advice to a larger proportion of patients (54%) than referral to eBI (38%). In addition, low engagement was seen among the referred patients; on average, 18% of the patients logged on to the website with a mean log-on rate across the different countries between 0.58% and 36.35%.  
**Conclusions:** Referral to eBI takes nearly as much time as brief oral advice and might require more introduction and training before staff are comfortable with referring to eBI.

### Strengths and limitations of this study

- There is a lack of studies on implementing referral to an alcohol electronic brief intervention (eBI) by healthcare staff in primary healthcare as reported in the present study.
- The strength of this study is the participation from five jurisdictions, enabling us to study the variability of referrals to eBI.
- In addition, the high number of participating providers and primary healthcare units (PHCUs) is seen as a strength.
- Limitations include the failure of some jurisdictions to implement referral to the eBI as intended, as well as the lack of access and trust in internet-based health promotion among patients (that might be due to the age of the population screened in some jurisdictions).

### BACKGROUND

Alcohol continues to be a leading cause of disease globally.<sup>1</sup> Despite evidence on the efficacy and cost efficacy of screening and brief advice to risky drinkers in primary healthcare, these interventions are rarely implemented in routine practice, resulting in identification of <10% of the population at risk and <5% of those who are screened receiving brief advice.<sup>2-4</sup> Although delivery of a brief alcohol intervention might only take 10-15 min, this is too time-consuming for most consultations and has been put forward by healthcare professionals as one of the key factors hindering more widespread implementation of brief alcohol interventions.<sup>5,7</sup>

As access to the internet has increased, electronic brief advice websites (electronic brief intervention (eBI)) for risky drinkers



For numbered affiliations see end of article.





113 healthcare professionals must get 9 patients each one after delivering 150 brochures per professional (1000)

**BMJ Open** A randomised controlled non-inferiority trial of primary care-based facilitated access to an alcohol reduction website (EFAR Spain): the study protocol

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**ABSTRACT**  
**Introduction:** Early Identification (EI) and brief interventions (BIs) for risky drinkers are effective tools in primary care. Lack of time in daily practice has been identified as one of the main barriers to implementation of BI. There is growing evidence that facilitated access by primary healthcare professionals (PHCPs) to a web-based BI can be a time-saving alternative to standard face-to-face BI, but there is as yet no evidence about the effectiveness of this approach relative to conventional BI. The main aim of this study is to test non-inferiority of facilitation to a web-based BI for risky drinkers delivered by PHCP against face-to-face BI.  
**Method and analysis:** A randomised controlled non-inferiority trial comparing both interventions will be performed in primary care health centres in Catalonia, Spain. Ineligible adult patients attending participating centres will be given a leaflet inviting them to log on to a website to complete the Alcohol Use Disorders Identification Test (AUDIT-C) alcohol screening questionnaire. Participants with positive results will be requested online to complete a trial module including consent, baseline assessment and randomisation to either face-to-face BI by the practitioner or BI via the alcohol reduction website. Follow-up assessment of risky drinking will be undertaken online at 3 months and 1 year using the full AUDIT and D2-CDS scale. Proportions of risky drinkers in each group will be calculated and non-inferiority assessed against a specified margin of 10%. Assuming reduction of 50% of risky drinkers receiving standard intervention, 1000 patients will be required to give 90% power to reject the null hypothesis.  
**Ethics and dissemination:** The protocol was approved by the Ethics Committee of IDAP Jordi Gol i Guàrdia P14028. The findings of the trial will be disseminated through peer-reviewed journals, national and international conference presentations.  
**Trial registration number:** ClinicalTrials.gov NCT02003906

**INTRODUCTION**  
Risky drinking is a worldwide public health problem. In total, 74% of Europeans aged 15 years or older drink alcohol and 15% of them (58 million people) drink above the recommended level.<sup>1</sup> Around the world, 3.8% of premature deaths and 4.6% of disability-adjusted life years (DALYs) lost are attributable to alcohol use.<sup>2</sup> In Catalonia, one of five patients attending primary healthcare are risky drinkers.<sup>3</sup> However, the proportion of people who access treatment out of those who need it varies from 4% (Germany) to 25% (Italy). In Spain, the percentage of the in-reed population accessing treatment is 15.5%.<sup>4,5</sup> Early identification (EI) and brief intervention (BI) are among the most effective approaches for risky drinkers in primary healthcare.<sup>6,7</sup> However, there is an important gap between research and clinical practice.<sup>8</sup> Less than 10% of risky drinkers attended the primary healthcare benefit from BI.<sup>7</sup> The main barriers to implementing EI and BI in primary care are time constraints, lack of financial incentives, insufficient training or absence of services to refer patient to and risk of upsetting patients.<sup>9</sup> Web-based BIs (e-BIs) are an alternative to improve the implementation, acceptance and viability of BI and to overcome barriers that have hampered their use in daily practice.<sup>10</sup> The provision of facilitated access by primary care professionals to an alcohol reduction website could significantly increase BI rates by offering a time-saving alternative to face-to-face interventions. Many studies have shown the efficacy of computer-based interventions in getting college students to reduce their alcohol consumption.<sup>11-13</sup> The use of new technologies for mental health problems is becoming common in primary care, as, for example, in smoking cessation.<sup>14</sup> A review of trials of computer-based interventions in college drinkers found them to be more effective than no

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83 healthcare professionals get 7 patients each one after delivering 78 brochures per professional (368)

# Which barriers have impact on facilitated access to e-BI?



# Aim and methods

- E-survey to professionals (nurses and GPs) who had participated in EFAR Spain project
- Initially we aimed 60% of responses and at least 10 professionals of 4 quartiles of participation: low, medium-low, medium-high and high

# Survey

Satisfaction

Potential new  
barriers

(at least 50% of participants reported this barrier as relevant)

Framework

Usefulness

Traditional barriers

(at least 50% of participants reported that facilitated access overcome this barrier)

Healthcare professionals  
113

10 rejected (8.9%):  
1 death  
1 abroad  
1 family problems  
7 other reasons

Not available after 3 e-mails and at least 3 calls: 35 (31.0%)

68 surveys (60.2%)

Participation  
Very High 23 (33.8%)  
High 17 (25.0%)  
Low 17 (25.0%)  
Very Low 10 (14.7%)  
Unknown 1 (1.5%)

91.2% **women**  
61.8% **nurses**  
**Age** 48.4 years old  
**Workload** 21.9 patients per day  
**Brochures** 65.9

# Satisfaction and Usefulness

<b>Dimension</b>		<b>%</b>
<b>Satisfaction</b>	<b>Satisfaction</b>	79.4
	<b>Would participate again</b>	78
	<b>Patient's perceived satisfaction</b>	36.8*
	<b>Need more support</b>	17.7
<b>Usefulness</b>	<b>Useful for alcohol reduction</b>	26.5**
	<b>Useful for discussing about alcohol</b>	63.2
	<b>Useful for discussing about health</b>	50

# **Traditional and potential new barriers**



<b>Dimension</b>	<b>Barrier</b>	<b>All sample N (%) N= 68</b>	<b>High participation N=40</b>	<b>Low participation N=27</b>	<b>Statics (p- value)</b>
<b>Usefulness of facilitated access to e-health tool to overcome traditional barriers for BI</b>	<b>Lack of time</b>	57 (83.8)	36 (90.0)	21 (77.8)	1.896 (0.294)
	<b>Lack of resources for referring</b>	51 (75.0)	30 (75.0)	21 (77.8)	0.068 (0.794)
	<b>Lack of training</b>	51 (75.0)	33 (82.5)	18 (66.7)	2.223 (0.136)
	<b>Risk of upsetting the patient</b>	56 (82.4)	34 (85.0)	22 (81.5)	0.145 (0.745)
	<b>Lack of incentives</b>	39 (57.4)	25 (62.5)	14 (51.9)	0.751 (0.386)
	<b>Lack of familiarity with SBI resources</b>	51 (75.0)	32 (80.0)	19 (70.4)	0.822 (0.365)

Dimension	Barrier	All sample (n=68) N (%)
New barriers for facilitated access to e-BI	It is time-spending	24 (35.3)
	It requires a lot of training	11 (16.2)
	Low experience with e-health	23 (33.8)
	A lot of effort to achieve BI in one patient	<b>42 (61.8)</b>
	Lack of feedback	<b>39 (57.4)</b>
	Elderly population	<b>41 (60.3)</b>
	Rural population	20 (29.4)
	Low socio-economic status	21 (30.9)
	Poor access to Internet	28 (41.2)
	Target population is not clear	19 (27.9)

Dimension	Barrier	High participation N=40	Low participation N=27	Statics (p-value)
New barriers for facilitated access to e-BI	It is time-spending	12 (30.0)	11 (40.7)	0.825 (0.364)
	It requires a lot of training	7 (17.5)	4 (14.8)	0.085 (1.00)
	Low experience with e-health	12 (30.0)	10 (37.0)	0.362 (0.547)
	A lot of effort to achieve BI in one patient	21 (52.5)	20 (74.1)	3.159 (0.075)
	Lack of feedback	18 (45.0)	21 (77.8)	7.119 (0.008)
	Elderly population	20 (50.0)	20 (74.1)	3.883 (0.049)
	Rural population	13 (32.5)	7(25.9)	0.333 (0.564)
	Low socio-economic status	7 (17.5)	13 (48.1)	7.231 (0.007)
	Poor access to Internet	14 (35.0)	13 (48.1)	1.158 (0.282)
	Target population is not clear	9 (22.5)	9 (33.3)	0.963 (0.326)

# Multivariate analysis: binary logistic regression (high vs low participation)

	<b>OR</b>	<b>CI95%</b>	<b>p-value</b>
<b>Genre</b>	0.11	0.01-1.39	0.088
<b>Age</b>	1.08	1.00-1.17	0.055
<b>Workload</b>	1.03	0.95-1.11	0.544
<b>Family doctors</b>	1.10	0.20-6.02	0.913
<b>Lack of feedback</b>	<b>0.22</b>	<b>0.05-0.88</b>	<b>0.032</b>
<b>Elderly</b>	<b>0.22</b>	<b>0.05-0.91</b>	<b>0.037</b>
<b>Low SE</b>	<b>0.14</b>	<b>0.03-0.64</b>	<b>0.012</b>
<b>A lot of effort to achieve BI in one patient</b>	0.36	0.08-1.52	0.162

\*The logistic regression model was statistically significant,  $\chi^2(8) = 27.729$ ,  $p = .0001$ . The model explained 46.3% (Nagelkerke  $R^2$ ) of the variance in participation and correctly classified 78.8% of cases.

# Preliminary Conclusions

- E- health seems useful for overcoming traditional barriers according to healthcare professionals opinion
- Potential new barriers for facilitated access to e-health in primary care are:
  - think that the tool is not useful for alcohol reduction
  - lack of feedback
  - elderly population
  - low SE population in the practice
  - too much brochures to achieve one BI
- Those who participated less in the project trended to think more frequently that these barriers exist



- Confirm potential barriers for facilitated access to e-BI
- E-BI tools require feedback to the healthcare professional to increase their implementation
- Those professionals who attend elderly and low SE population require more support to implement e-BI



- Take into account healthcare professional's view (e.g. usefulness) in e-tool design
- Alternatives to brochures should be taken into account (e.g. SMS)
- Asking final users is necessary

**Thanks!**  
**Gràcies!**