



The Hospital Outpatients Alcohol Project (HOAP): Developmental Research for a Randomised Controlled Trial of Electronic Screening and Brief Intervention

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Alcohol Screening and Brief Intervention (SBI)

- Reduces unhealthy alcohol use in primary care patients (Kaner et al 2007)
- Recommended for routine implementation in healthcare settings in Australia (RACGP 2006; NPHT 2009), the US (USPSTF 2004), the UK (NICE 2010) and globally (WHO 2011)
- Not well implemented because there are numerous provider-level barriers (Johnson et al 2010)

Electronic Alcohol Screening and Brief Intervention (e-SBI)

- Circumvents provider-level barriers
- Reduces unhealthy alcohol use in University students (ie., computer-literate young people with high rates of binge drinking) (Carey et al 2009)
- Efficacy in other populations and settings unknown

Hospital Outpatient Setting

- Australian public hospitals provided about 16.7 million specialist outpatient clinic services in 2010-11 (AIHW 2012)
- A currently untapped opportunity to provide e-SBI to a large group of users of the public healthcare system

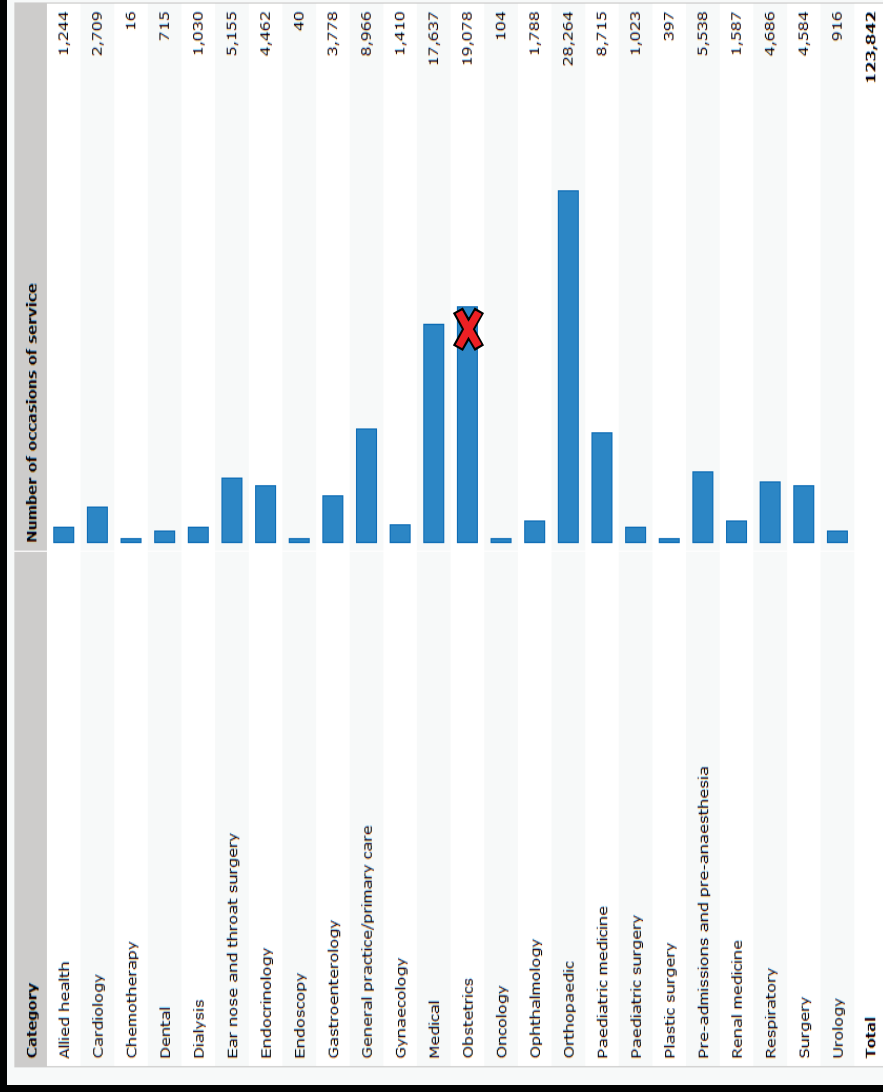
Aims

- To modify an existing e-SBI for use with hospital outpatients
 - ~ (ie., addition of normative data for adults across the age spectrum, addition of local sources of support for drinking)
- To determine the feasibility of conducting a large RCT in the hospital outpatient setting
 - ~ (ie., ability to recruit, deliver intervention to, and follow up participants in a manner that is acceptable to participants and does not interfere with patient care processes)

Ethical approval was obtained from the Hunter New England Human Research Ethics Committee (08/12/17/5.16) and the University of Newcastle Human Research Ethics Committee (H1-2009-0332).

Setting

- Ambulatory Care Centre (ACC), John Hunter Hospital
- Approx. 500 patients/day



Source: AIHW. (2012). My Hospitals - John Hunter Hospital - Outpatient Services - Occasions of service for July 2010-June 2011 . Retrieved from

<http://www.myhospitals.gov.au/hospital/john-hunter-hospital/services/outpatient-services>

Participants and Study Procedure

- Adult (18+) outpatients able to self-administer the e-SBI instrument
- Participants invited to:
 - (i) complete e-SBI on a laptop computer and
 - (ii) provide feedback via a paper-based survey



Screening

- **AUDIT-C**
(Bradley et al 2007)
- Participants were not randomised

Questions	Scoring system				
	0	1	2	3	4
How often do you have a drink containing alcohol?	Never	Monthly or less	2 - 4 times per month	2 - 3 times per week	4+ times per week
How many Standard Drinks containing alcohol do you drink on a typical day when you are drinking?	1 - 2	3 - 4	5 - 6	7 - 9	10+
How often do you have 6 or more Standard Drinks on one occasion?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily

Intervention - Assessment

1. AUDIT (Items 4 -10)
2. Largest number of drinks consumed in last 4 weeks
3. Duration (hours) of drinking occasion
4. Body weight for BAC estimate
5. Leeds Dependence Questionnaire (Raistrick et al 1994)



Feedback

AUDIT score

(Saunders et al 1993)

Feedback Facts Tips Support

Thanks for completing the survey Kate.

Here you will find some feedback based on the answers you have provided as well as some other information on staying safe whilst drinking which you may find useful.

YOUR ALCOHOL USE

0-7	Moderate Drinking
8-14	Hazardous Drinking
15-19	Harmful Drinking
20-40	Alcohol Dependence

Your AUDIT score was 8

MODERATE DRINKING (0-7)
Low risk of alcohol related harm.

HAZARDOUS DRINKING (8-14)
High risk of experiencing alcohol related harm and some people in this range may already be experiencing significant harm.

The main way to reduce your risk level (and AUDIT score) is to reduce the number of drinks you consume per occasion. You may like to check out the [tips](#) section for ideas on reducing your consumption.

HARMFUL DRINKING (15-19)
A person scoring in this range will already be experiencing significant alcohol related harm.

ALCOHOL DEPENDENCE (20-40)
A person scoring in this range may be alcohol dependent and advised to have a clinical assessment of their drinking.

Feedback

Criterion
feedback
(NHMRC 2009)

&

Normative
feedback
(AIHW 2008)

YOUR DRINKING AMOUNT COMPARED - DRINKS PER OCCASION

Standard Drinks Consumed Per Occasion

You reported having on average **6** drink(s) on a typical occasion. The graph on the right shows how this compares to medical guidelines¹ and to other people of your age and gender².

1. National Health and Medical Research Council (NHMRC). Australian guidelines to reduce health risks from drinking alcohol. Canberra: NHMRC; 2009.
2. Australian Institute of Health and Welfare (AIHW). 2007 National Drug Strategy Household Survey: detailed results. Drug Statistics Series number 22. Cat. no. PHE 107, Canberra: AIHW; 2008.

Category	Standard Drinks Consumed Per Occasion
Medical Guidelines (1)	1
18-19 year old women (2)	3
Your Drinking	6

YOUR DRINKING AMOUNT COMPARED - DRINKING FREQUENCY AND AMOUNT

Standard Drinks Consumed Per Week

You reported consuming on average **15** drink(s) per week, and **60** drink(s) per month. The graph on the left shows how this compares to medical guidelines¹ and to other people of your age and gender².

1. National Health and Medical Research Council (NHMRC). Australian guidelines to reduce health risks from drinking alcohol. Canberra: NHMRC; 2009.
2. Australian Institute of Health and Welfare (AIHW). 2007 National Drug Strategy Household Survey: detailed results. Drug Statistics Series number 22. Cat. no. PHE 107, Canberra: AIHW; 2008.

Category	Standard Drinks Consumed Per Week
Medical Guidelines (1)	1
18-19 year old women (2)	2
Your Drinking	15

Feedback

BAC feedback
– estimate for
recent heavy
occasion
&
expenditure
feedback

YOUR BLOOD ALCOHOL CONTENT

Your estimated Blood Alcohol Content (BAC) for your heaviest drinking occasion is **0.16%**

Your BAC is an indication of how intoxicated you are, with a higher BAC corresponding with a greater likelihood of experiencing alcohol-related harm, especially when driving.

This estimate takes into account you gender, weight, the number of standard drinks consumed and the number of hours over which you reported drinking this amount.



At a BAC of 0.15 and above you are **380 times more likely** to be killed in a single-vehicle crash than a driver with a zero BAC.

YOUR MONEY

Depending on where you buy your drinks (i.e. a bottle store, pub or club), **you have spent between \$900 and \$3600 on alcohol in the last year.**

Feedback (cont...)

Leeds Dependence Questionnaire (Raistrick et al 1994)

YOUR RISK OF ALCOHOL DEPENDENCE

How in control of your drinking are you? The 10 questions you answered at the end of the questionnaire were from the Leeds Dependence Questionnaire, a validated clinical measure of the severity of alcohol dependence³.

Generally speaking, the higher the score the more reason for concern that your drinking may be out of control. Your score was 6 and suggests that...

...there is evidence of impaired control over your drinking and you may even have alcohol dependence. It is worth thinking seriously about whether your drinking is causing problems, being clear about what they are, and doing something about them.

3. Raistrick D et al. Development of the Leeds Dependence Questionnaire (LDQ): a questionnaire to measure alcohol and opiate dependence in the context of a treatment evaluation package. *Addiction* 1994; 89(5): 563-72.

Feedback (cont...)

Information on
chronic health
effects and
access to care

http://traipsurvey.health.nsw.gov.au/secure/Support.cfm?id=142&ref=12

Tips for Staying Safe

Feedback Facts Tips Support

Some people can stop or reduce their drinking by themselves, whilst others might need some support. Here are some options:

Alcohol and Drug Information Service (ADIS)
ADIS provides 24-hour confidential counselling, referral, information and advice to anyone concerned about their own or another's alcohol or other drug use.
Contact Information
Phone: 1800 422 599 or 9361 8000

Alcohol Help Centre
The Alcohol Help Centre is an interactive website dedicated to helping those who have concerns about their drinking. The goal is to promote interaction between people who have drinking problems and health professionals. The site offers free tools and support
Awabakal Medical Centre
Specialist support for Aboriginal and Torres Strait Islander people.
Contact Information
Phone: 4969 2424 or 1800 AWABAKAL

Hunter New England Health
Alcohol and Drug Service Intake Line (Monday - Friday 8am to 4pm)
Contact Information
Phone: 4923 2060

Alcohol and Other Drug Services
Contact Information
Phone: 1800 422 599

Calvary Mater Newcastle Hospital Emergency Department or John Hunter Hospital Emergency Department
Contact Information
Phone: 4921 1211

Drug And Alcohol Clinical Service
Contact Information
Phone: 4016 4588

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Results

- 99 (63%) outpatients consented:
 - ~ 54% were male
 - ~ there was a relatively uniform age distribution:
 - 35% aged 18-34
 - 31% aged 35-54
 - 35% aged 55+
 - ~ 15% had not consumed alcohol in the past 12 months and were excluded from further analyses

Hazardous and Harmful Drinking

- Among the 84 patients screened using the AUDIT-C:
 - ~ 51% screened negative (scored 0 – 4)
 - ~ 39% (n=33) screened positive (scored 5 – 9)
 - ~ 9.5% may be alcohol dependent (scored 10 – 12)

Acceptability of e-SBI to Hazardous and Harmful Drinkers

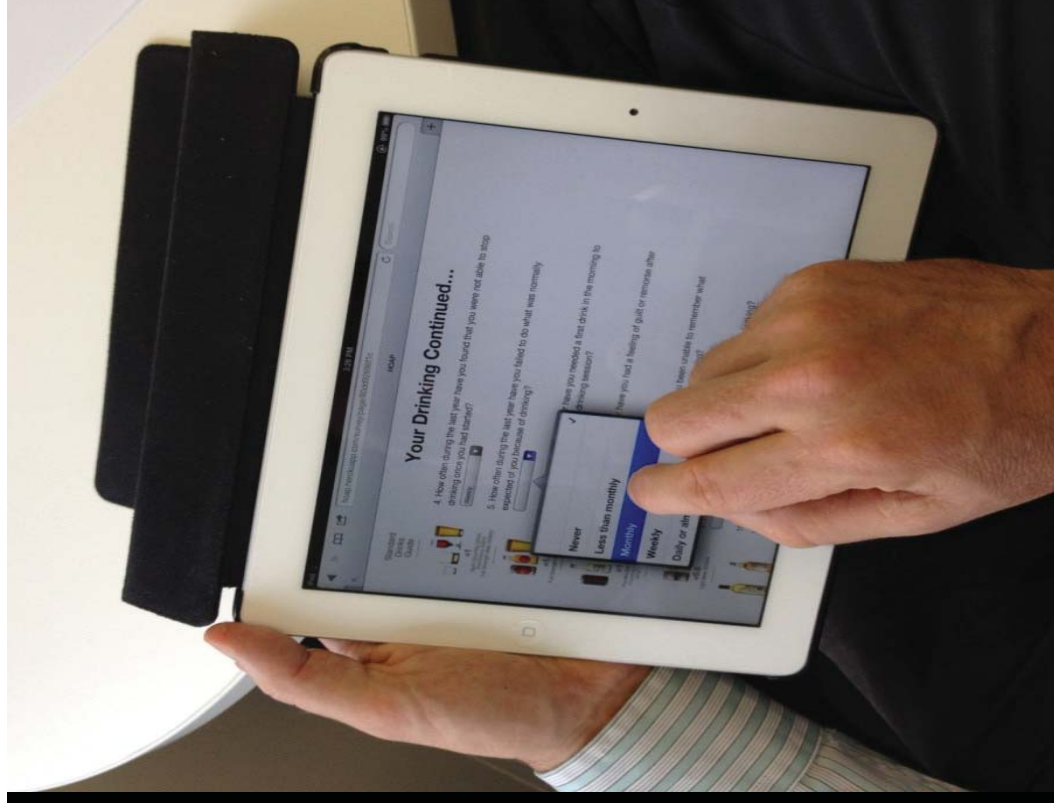
- 63% rated the level of computer competence required to complete the online survey as low/very low
- 59% found the feedback on their drinking surprising
- 84% indicated the feedback on their drinking was useful
- 100% thought the intervention would appeal to at least some of the people

Retention & Subjective Effects

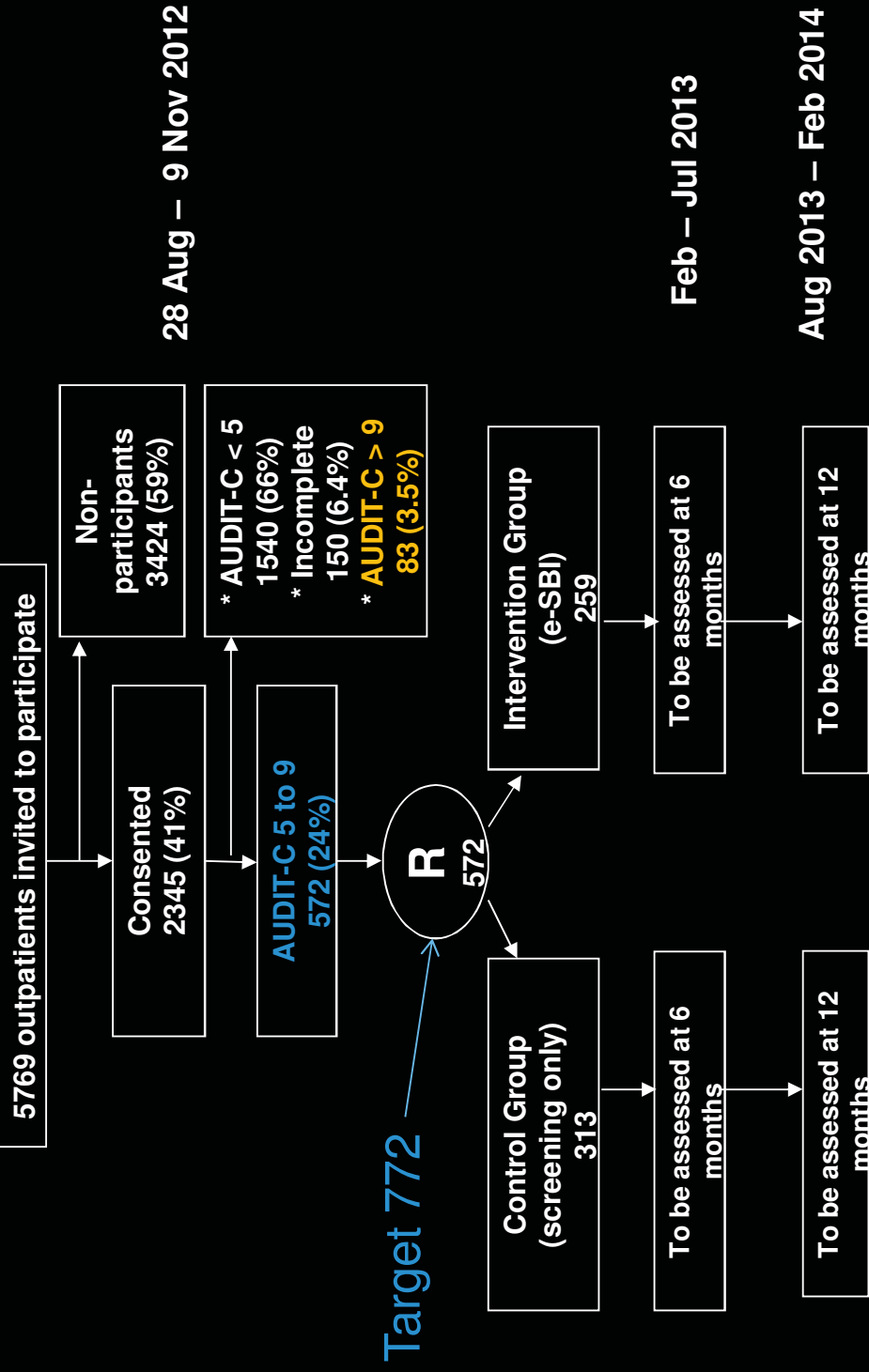
- 73% of hazardous/harmful drinkers responded at follow up
- 32% selected the response option “decreased” when asked “As a consequence of receiving the feedback the amount of alcohol I consume has: not changed; decreased; or increased”
- 21% reported they had “sought support to reduce my drinking as a consequence of receiving the feedback”
- 70% indicated they would “recommend this program to a friend if I was concerned about how much they were drinking”

Conclusion

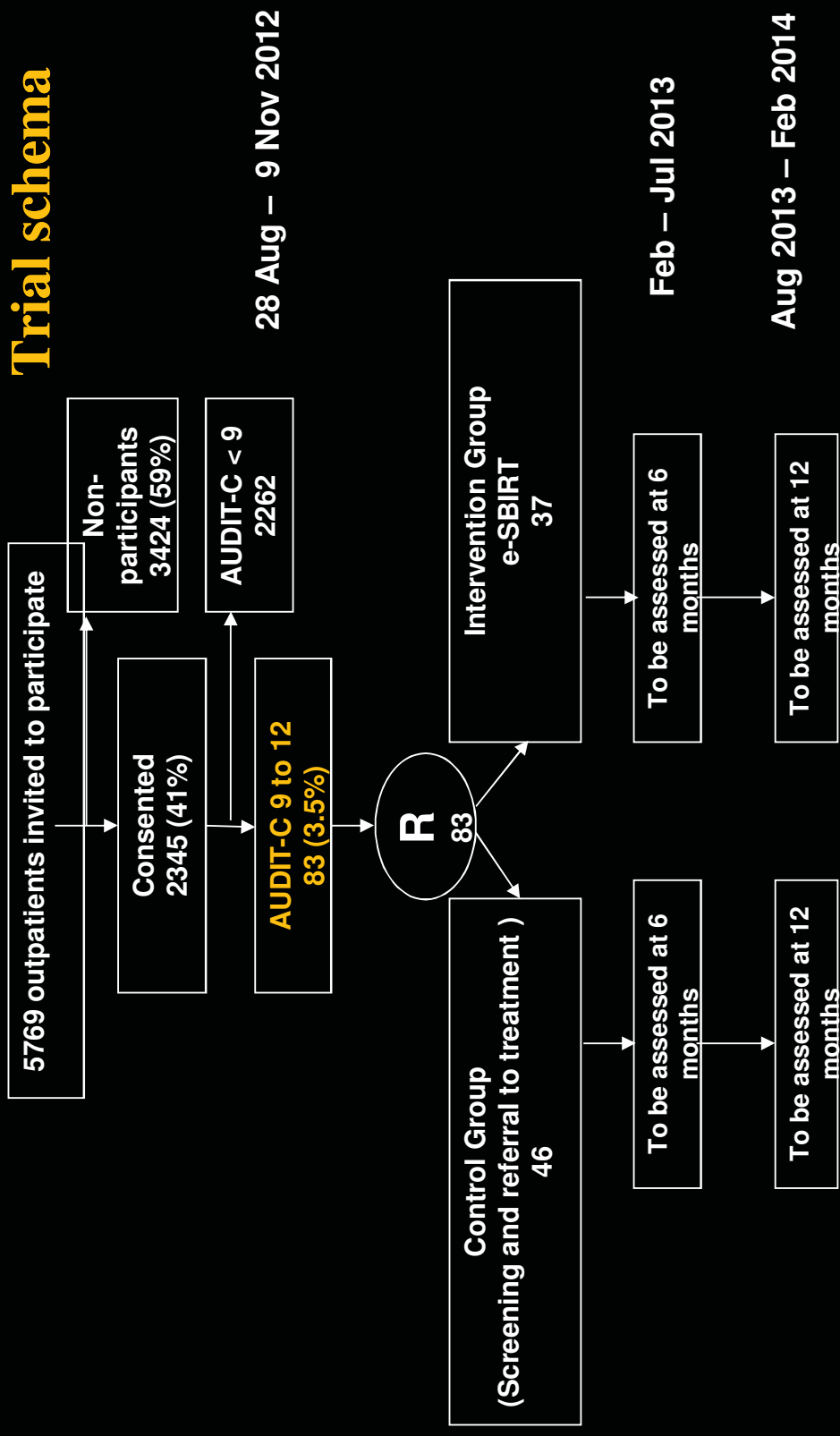
- Modifications:
 - ~ Use of handheld device (iPads)
 - ~ Mechanism for sending intervention to participants who do not complete it
 - ~ Electronic entry of email addresses
- NHMRC funded RCT underway...



HOAP Trial Schema



HOAP Extension Trial schema



Double Blind Randomised Controlled Trial of Electronic Alcohol Screening and Brief Intervention (e-SBI) for Hospital Outpatients

Investigators (NHMRC Project Grant APP1023734):

- **Kypros Kypri *** • **Jim McCambridge, LSHTM (UK)**
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- **John B Saunders, USyd** • **Chris Doran ***
- **Richard Saitz, BU (USA)** • **Patrick McElduff ***
- **John Attia *** • **Luke Wolfenden ***

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