

## **Com-BI-ne:** preliminary results of a feasibility trial of brief intervention to improve alcohol consumption & co-morbid outcomes in hypertensive or depressed primary care patients

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## Background

Heavy drinking, the second greatest risk to public health in developed countries, affects many physical and mental health problems.<sup>1,2</sup>

Brief interventions (BIs) consisting of structured advice and counselling help patients reduce hazardous or harmful drinking by about 7 drinks each week,<sup>3</sup> but research has excluded patients diagnosed with other health problems.<sup>4</sup>

Many people with raised blood pressure and/or depression drink over medically recommended levels; reducing their alcohol consumption should improve symptoms of these conditions.<sup>5,6</sup>

**Com-BI-ne** aims to assess the feasibility of conducting a definitive future RCT exploring BI in primary care for hazardous or harmful drinkers with co-morbid hypertension or depression.



<sup>1</sup>World Health Organization. *Global Health Risks*. Geneva: WHO; 2009.
<sup>2</sup>Ezzati M, et al, *The Lancet*. 2002;360:1347-60.
<sup>3</sup>Kaner, E.F.S., et al. *Cochrane Database of Systematic Reviews*, 2007(2): p. CD004148.
<sup>4</sup>Whitlock EP, et al. *Am Jnl Prev Med*. 2002;22(4):267-84.
<sup>5</sup>Xin X, et al. *Hypertension*. 2001 Nov;38(5):1112-7.
<sup>6</sup>Manninen L, et al. *Alcohol & Alcoholism*. 2006 May-Jun;41(3):29

## **Method - prevalence**

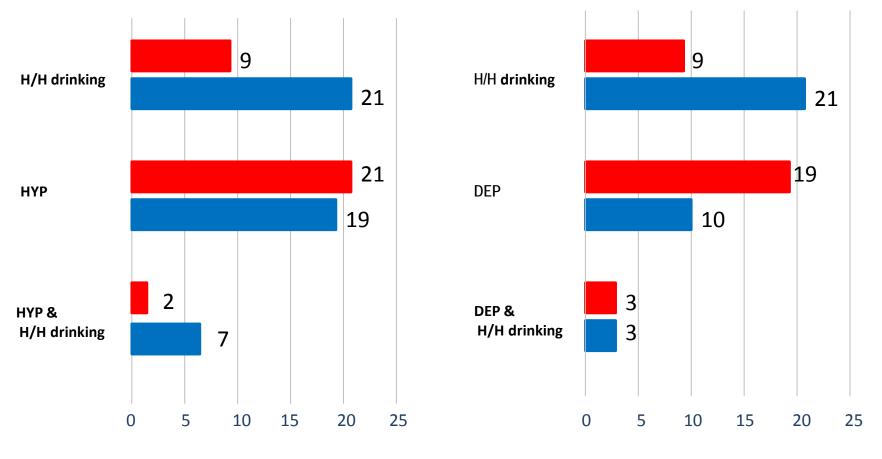
- 25 primary care practices in North-East England visited to assess acceptability of trial procedures & software for storing patient data.
- Practice records interrogated for extent of recording alcohol consumption, depression and hypertension information electronically; and to identify numbers of adult patients with hypertension or mild to moderate depression and hazardous/harmful alcohol consumption.



## **Results - prevalence**

Rates of hazardous or harmful drinking and hypertension

Rates of hazardous or harmful drinking and mild/ moderate depression



#### Median % of adult patients at 25 practices

Median % of adult patients at 25 practices



H/H = hazardous/harmful

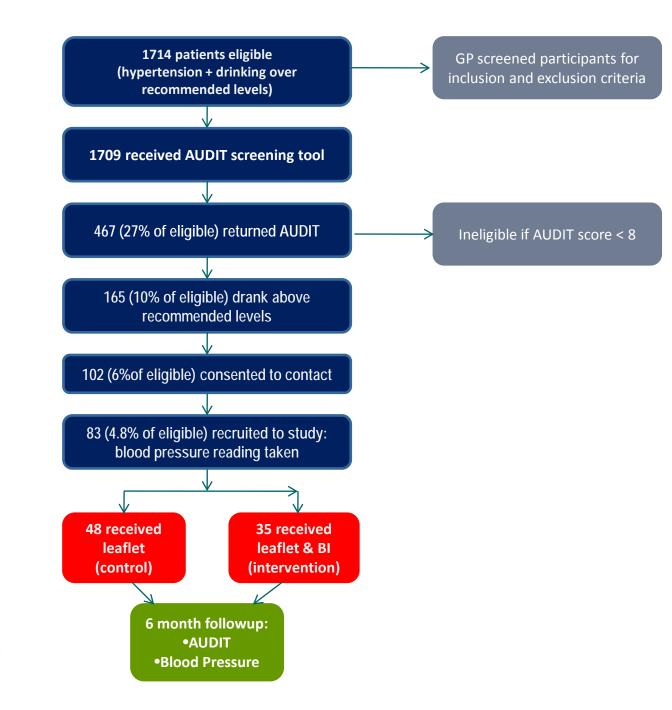
**HYP** = hypertension

DEP= mild/moderate depression

# Method - trial

- AUDIT screening tool for alcohol consumption was sent to all co-morbid adult patients at practices randomised to hypertension (3) or depression arm (10), then control or intervention condition.
- Consenting respondents scoring positively on AUDIT (>7) are screened for co-morbid conditions (PHQ-9 or blood pressure) and receive BI or control condition (patient information leaflet).
- Follow-up screening at 6 months for alcohol use and co-morbid condition is currently in progress.

<u>Results:</u> <u>participants in</u> <u>hypertension arm</u> (3 GP surgeries)

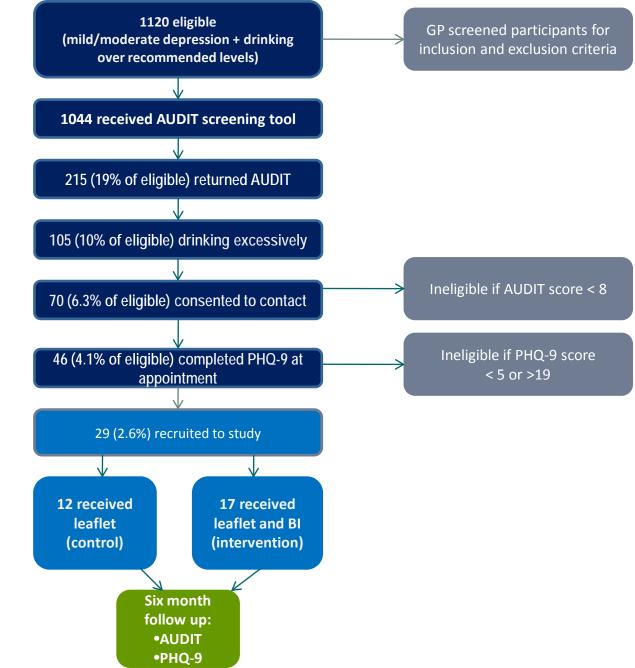




#### <u>Results: participants</u> <u>in depression arm</u> (10 GP surgeries)

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# Cases in hypertension (n=83) and depression (n=29) arms

	Hypertension	Depression
Mean age in years (SD)	64 (8)	51 (13.9)
% male	72	69
% not in paid employment	71	55
Mean AUDIT score (sd)	11.7 (4.7)	18.3 (8.9)
Mean Systolic BP (sd)	151 (18)	
Mean Diastolic BP (sd)	88 (10)	
Mean PHQ-9 score (sd)		10.6 (4.9)



## Discussion

- 5% of adult patients are diagnosed with hypertension AND have consumed alcohol above recommended guidelines; 5% of such eligible patients at trial practices were recruited as cases.
- 3% of adult patients are identifiable as suffering mild to moderate depression AND have consumed alcohol above recommended guidelines; 3% of such eligible patients at trial practices were recruited as cases.
- Overall, practices can identify more eligible patients for a hypertension/alcohol study than for a depression/alcohol study.
- The eligibility criteria for depression (PHQ score of 5-19 at the point of recruitment into the study), appears to have contributed to a much lower rate of cases from potential participants in the depression arm, which cannot be explained by participant response or practice size.
- The depressed patients interviewed seem more likely to make the association between their alcohol intake and mood whereas hypertension patients seem to understand it is better for their health and blood pressure to drink less but do not experience a change in how they feel.



## Summary

- Patients eligible for a RCT of BI for co-morbid heavy drinking and hypertension or mild/moderate depression were identifiable in primary care records although there was variation among practices.
- Almost a quarter of these patients could be screened by post for current alcohol use.
- More patients screened positively for heavy drinking in the depression arm than in the hypertension arm.
- Recruitment rates suggest that a RCT with patients suffering from hypertension seems most feasible.







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#### **NHS North of Tyne**



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