Brief interventions in primary care on smoking and excessive alcohol consumption in England: Findings from a population survey

Dr Jamie Brown, UCL

Professor Robert West, Dr Emma Beard, Professor Alan Brennan, Professor Colin Drummond, Professor Matthew Hickman, Dr John Holmes, Professor Eileen Kaner, Professor Susan Michie

Brief intervention: smoking

- Is effective and cost-effective public health intervention
  - NICE 2006; Stead, Bergson et al. 2008; Aveyard, Begh et al. 2012
- Provided opportunistically by clinicians to unselected smokers can lead to a 1 – 3% increase in stopping
  - Stead, Bergson et al. 2008
- Traditional model involves asking patients about their smoking, advising them to stop, and offering assistance
  - UK Department of Health 2009

Brief intervention: alcohol misuse

- Effective in reducing excessive alcohol consumption
  - reduced intake by 4-5 UK units a week (Kaner et al. 2007)
  - cost-effective under all but most pessimistic modelling assumptions (Purshouse et al. 2013)
- Requires screening and providing high-risk drinkers with structured brief advice or extended brief intervention
  - brief advice is usually 5-min conversation with feedback on screening result and a self-help leaflet, together with practical advice on how to reduce (Purshouse et al. 2013)
  - extended brief intervention is longer (~ 25 min) & based on principles of motivational interviewing (McCambridge et al. 2014)
  - recent pragmatic trial indicated that neither 5 min brief advice nor 20 min session focussed on motivational interviewing conferred additional benefit over screening followed by simple feedback and written information (Kaner et al. 2013)

How does the delivery compare?

- NICE guidelines support the routine delivery of both interventions
- Analyses of GP recording databases indicate:
  - ~ 50% of all smokers received cessation advice in 2009 (Szatkowski et al. 2011, Taggar et al. 2012)
  - In contrast, previous assessments suggested clinicians rarely undertake screening and brief intervention to reduce excessive drinking (Cheeta et al., 2008)

Reasons for the discrepancy?

- More substantial financial incentives to intervene on smoking than alcohol

Smoking	Alcohol
Quality and outcomes framework	Directed and local enhanced services
Part of GMS contract for performance management	Optional service
~£4500 per practice	£2.38 per newly registered patient screened
Robust monitoring	Less established monitoring

- Concern that lack of QOF indicator represents important missed opportunity to reduce alcohol-related health harms (Alcohol Health Alliance UK 2012)

The need for the current study

- Figures derived from GP recording may over-estimate the delivery of smoking brief interventions
  - Prior to QOF incentives there was good correspondence between GP recording and proportion of patients recalling advice in the national 'Patient Survey'
  - Since introduction in 2004 the rate of recording has exceeded that of patient recall (Szatkowski et al. 2011)
  - While, patient survey is limited as represents a self-selected sample of patients who chose to return the survey
- Estimates of delivery for alcohol may also be inaccurate because based on the rate at which GPs record screening rather than conduct intervention
  - There are read codes for delivery but rarely used (O'Donnell et al. 2013)

The need for the current study

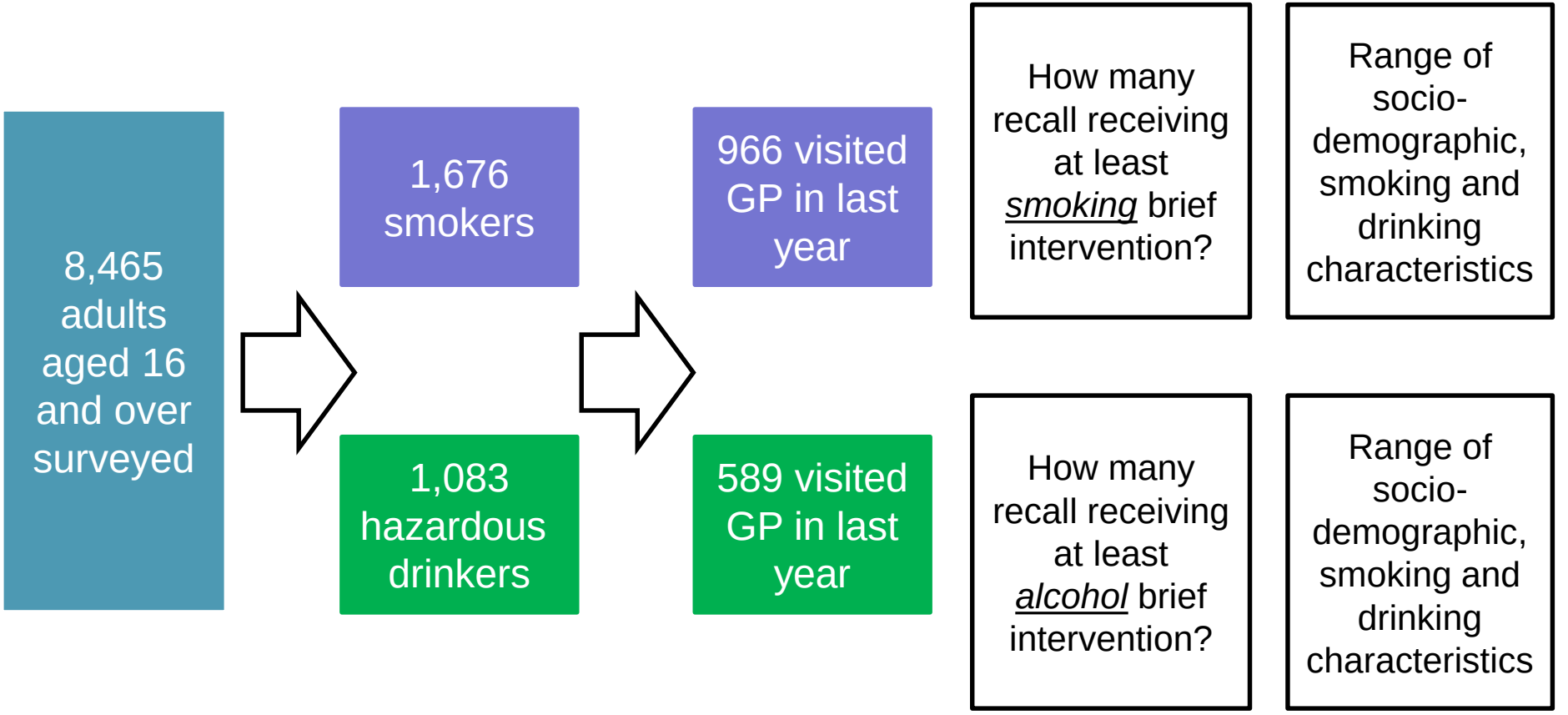
- In the context of differential financial incentives for their delivery within primary care in England, up-to-date and representative data from the perspective of patients are needed on the prevalence and characteristics of people who smoke or drink excessively and who receive a brief intervention

Study design and sampling

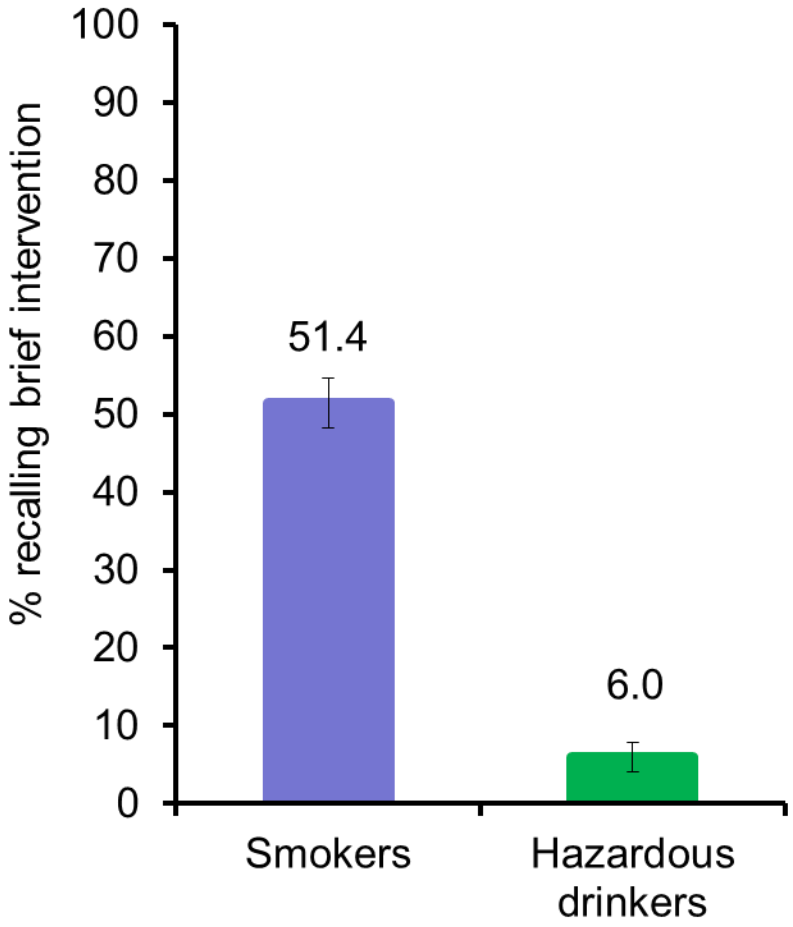
- Cross-sectional household surveys of representative samples of adults in England
- Each month new sample of ~ 1800 adults (16+) selected by random location sampling
  - Fidler et al. 2011, Beard et al. in preparation

Study population and measures

Between March to August 2014

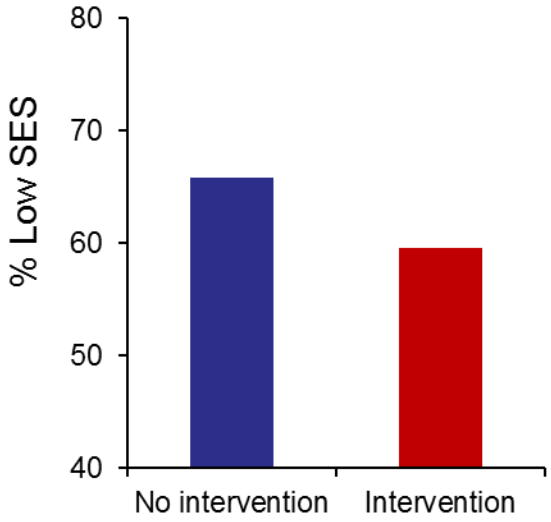


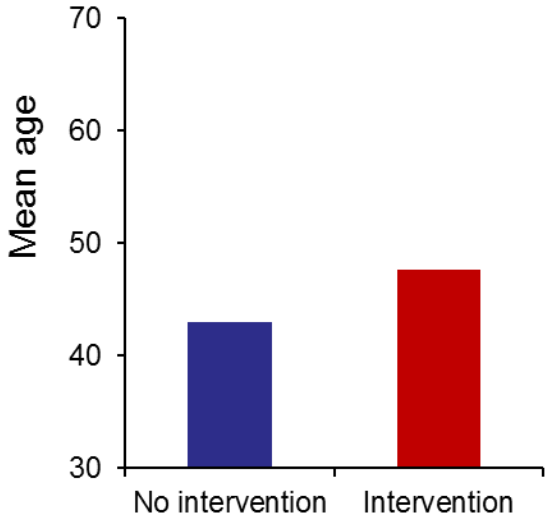
Delivery of brief intervention

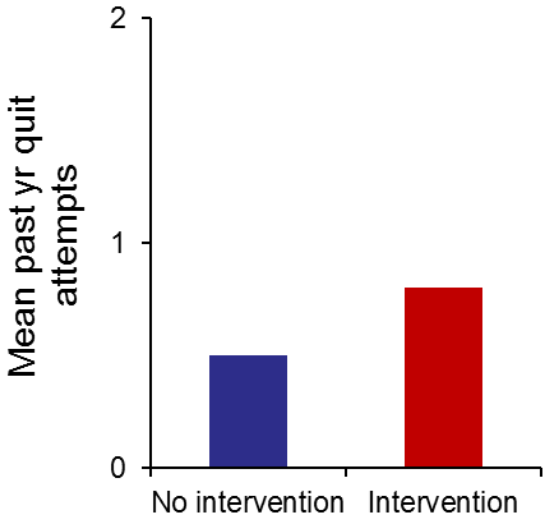


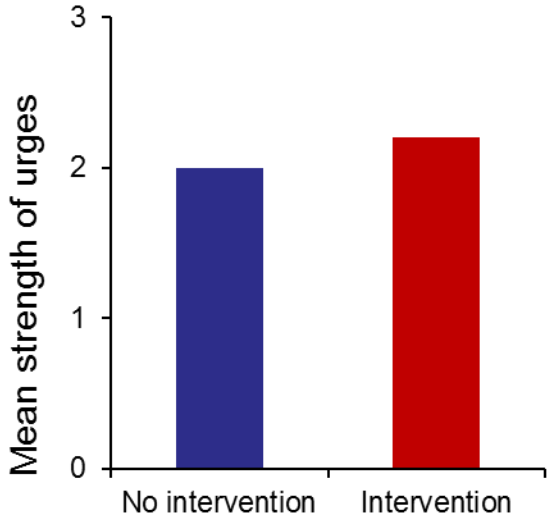
Smokers in England who reported visiting their GP appeared more than eight times more likely to receive advice on their smoking than hazardous drinkers were to be advised about their alcohol consumption

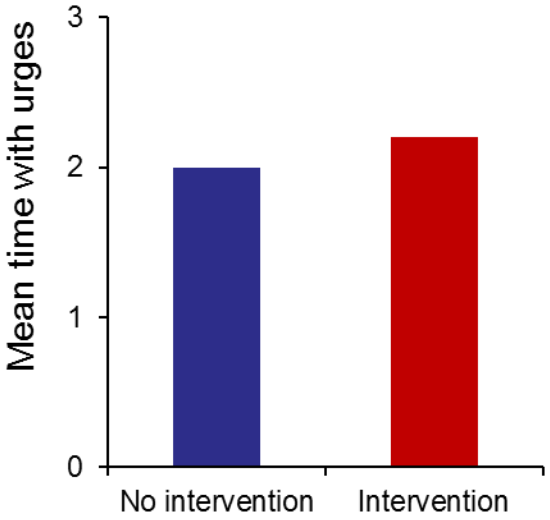
Univariable associations with smoking brief intervention









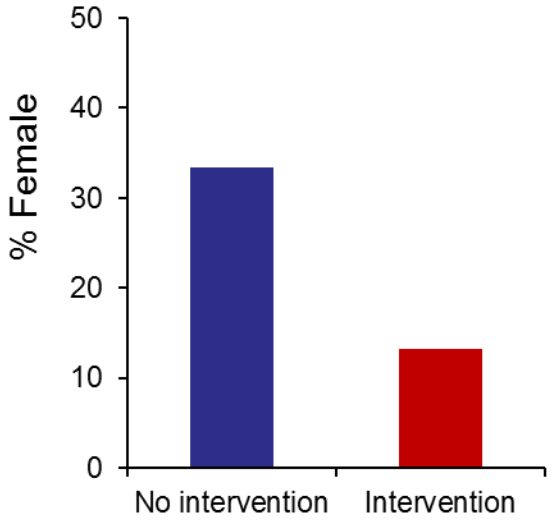


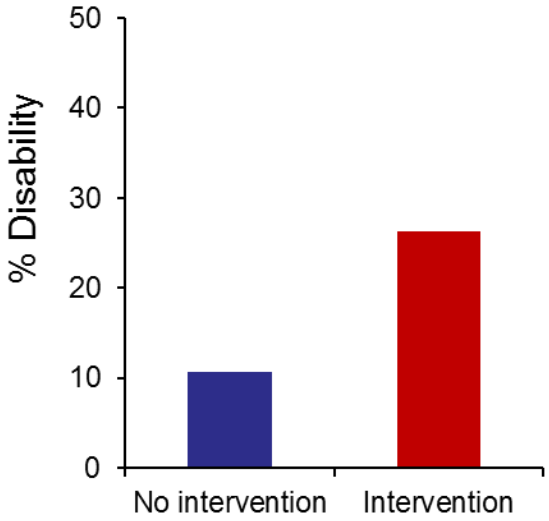
No univariable associations with sex, region, educational attainment, children in household, ethnicity, disability or hazardous drinking.

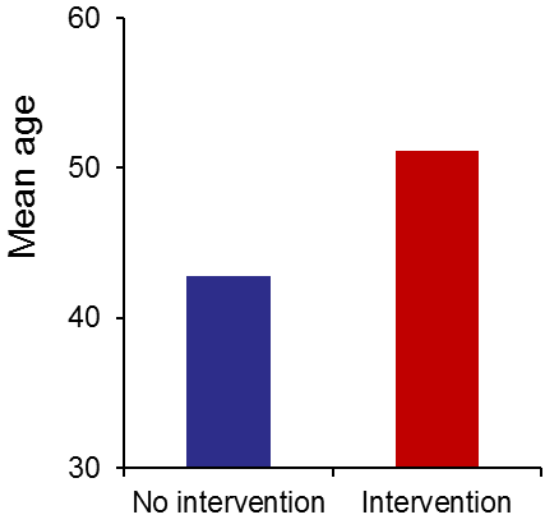
Multivariable associations with smoking brief intervention

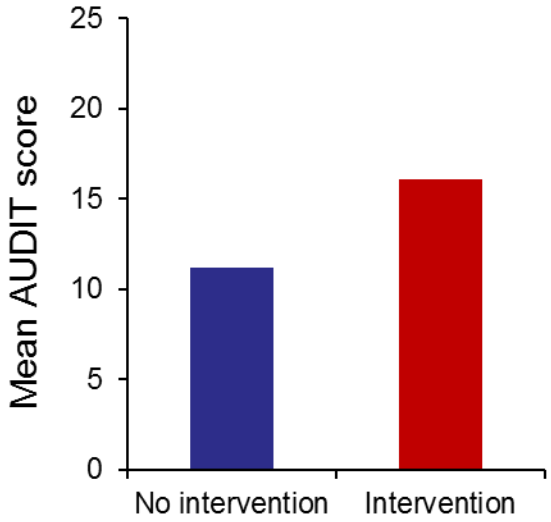
Characteristic	Adj. OR (95% CI)
Age	1.02 (1.01-1.03)*
Women	1.40 (1.06-1.85)*
Social grade C2DE	0.72 (0.54-0.96)*
Region	
North (reference)	-
Central	1.33 (0.95-1.87)
South	0.83 (0.61-1.13)
No post 16 qualifications	0.83 (0.63-1.10)
Children in household	0.99 (0.72-1.37)
White	1.13 (0.71-1.81)
Disability	1.16 (0.80-1.68)
Hazardous drinking (AUDIT ≥ 8)	1.14 (0.82-1.59)
Past year quit attempts	1.39 (1.20-1.61)*
Time with urges to smoke (0-5)	1.15 (1.00-1.33)
Strength of urges to smoke (0-5)	1.00 (0.85-1.18)

Univariable associations with alcohol brief intervention









No univariable associations with social grade, region, educational attainment, children in household, ethnicity, or smoking status.

Multivariable associations with alcohol brief intervention

Characteristic	Adj. OR (95% CI)
Age	1.02 (1.00-1.05)
Women	0.40 (0.14-1.12)
Social grade C2DE	1.12 (0.49-2.56)
Region	
North (reference)	-
Central	1.14 (0.44-2.94)
South	0.79 (0.33-1.89)
No post 16 qualifications	0.70 (0.29-1.69)
Children in household	1.16 (0.39-3.46)
White	0.83 (0.10-7.14)
Disability	2.07 (0.82-5.26)
% (N) Smoking status	
Never smoker (reference)	-
Ex-smoker	1.17 (0.47-2.91)
Current smoker	0.61 (0.22-1.73)
Mean (SD) AUDIT score	1.19 (1.12-1.28)*

Discussion

- Findings similar to estimates from GP recording databases
  - Szatkowski et al. 2011, Taggar et al. 2012, Khadjesari et al. 2013
  - Current figures are up-to-date and from the perspective of patients in a representative sample
- People who scored more highly on AUDIT were more likely to recall a brief intervention
  - Consistent with analysis indicating GPs worse at identifying hazardous/harmful drinkers compared with those who were dependent (Cheeta, Drummond et al. 2008)

Discussion

- Association of smoking brief intervention with age, sex and past quit attempts reflects the profile of treatment-seeking smokers
  - likely related to GPs focussing on smokers who express interest in stopping (Kotz, Fidler et al. 2009)
  - suggest GPs are not yet following the latest national guidance from the NCSCT recommending GPs go straight to the offer of support rather than assess interest in quitting (National Centre for Smoking Cessation and Training , Aveyard, Begh et al. 2012)
- Smokers from a lower social grade appeared less likely to receive an intervention, which is a concern for health inequalities

Implications

- In view of the more substantial financial incentives to intervene on smoking, this study adds to the evidence suggesting that greater incentives (e.g., QOF indicator) would likely be associated with greater delivery of alcohol brief intervention (Michaud et al. 2007; Lapham et al. 2012, Hamilton et al. 2013, 2014)
  - Clearly other possible reasons but magnitude of difference suggests number of factors could be important and there would remain scope for a significant impact of greater financial incentive

Conclusion

- This study highlights the discrepancy between delivery of smoking and alcohol brief interventions in England
- Hazardous drinkers who visit their GP appear more than eight times less likely to receive advice about their alcohol consumption than smokers are to be advised on their smoking

Funders: The ATS is funded by the NIHR School for Public Health Research; The STS is primarily funded by Cancer Research UK; JB is funded by a fellowship from the Society for Study of Addiction. UCL research team is part of UKCTAS.

Co-authors: Robert West, Emma Beard, Alan Brennan, Colin Drummond, Matthew Hickman, John Holmes, Eileen Kaner, Susan Michie. Other ATS collaborators: Karen Lock, Crispin Acton, Matthew Walmsley

For further details:
www.alcoholinengland.info (soon), www.smokinginengland.info

jamie.brown@ucl.ac.uk