Institution: Newcastle University

Unit of Assessment: UoA2

Title of case study: Screening and brief interventions reduce alcohol consumption in England.

1. Summary of the impact

Newcastle research into practical methods to reduce alcohol-related risk and harm has underpinned national policy, including the Government's Alcohol Strategy and a National Audit Office report. This has shaped public health practice concerning alcohol across England. A UK-specific screening and brief intervention (SBI) programme was developed by Newcastle University for use by GPs and nurses in primary care. This programme, which was designed to reduce alcohol-related problems, has been widely recommended and adopted. An evidence review commissioned by the National Institute for Health and Care Excellence (NICE) found that the use of SBI reduces alcohol consumption, mortality, morbidity and alcohol-related injuries. Department of Health figures show that SBI provides an estimated annual healthcare saving of around £100 million.

2. Underpinning research

Key Newcastle research staff
(Where individuals left or joined the university in the period 1993-2013, years are given in brackets)

Professors Eileen Kaner: MRC Research Fellow 1997-2000, Department of Health Career Scientist 2000-2006, Senior Lecturer 2005-7, Professor of Public Health Research 2007 onward, Brian McAvoy: Professor of Primary Health Care (1994-2000), Dr Paul McNamee: Lecturer in Health Economics (1997-2002), Amy O'Donnell, PhD student and Research Assistant 2012-date, Dr Katie Haighton (née Lock): Lecturer 2008-date.

Newcastle research into screening and brief intervention
Newcastle research has focused on identifying practical and evidence-based methods of identifying and reducing alcohol-related risk and harm across the population, for wider public health benefit. In 1995, Professor Kaner coordinated the English arm of a World Health Organization (WHO) Collaborative Study on Implementing and Supporting Early Intervention Strategies in Primary Health Care. Newcastle led two aspects of the study:

(i) a postal survey of 430 general practitioners (GPs) in the Midlands, which showed low GP involvement in screening and brief intervention (SBI) activity and identified a range of barriers and incentives for such work (R1)
(ii) a large randomised controlled trial that focused on evaluating social marketing strategies to promote uptake of the Drink-Less SBI programme (originally developed by the WHO), and training and support strategies to encourage its use in general practice (R2).

The survey (R1) was included in an influential British Medical Association Board of Science report from 2008 entitled "Alcohol misuse: Tackling the UK epidemic" (EV a) as evidence demonstrating why there was *"no system for routine screening and management of alcohol misuse in primary or secondary care settings in the UK*" (pg 64).

The finding that GPs delegated much of this SBI work to practice colleagues, to nurses in particular, led to national pioneering work with primary care nurses between 1997 and 2000 (R3). This involved: (i) qualitative interviews to identify opportunities for SBI use in nurses' health promotion work; (ii) the development of new materials to support nurse-led SBI delivery; and (iii) a randomised controlled trial of strategies to promote SBI delivery by nurses (R4). The development of the new UK specific SBI programme (called '*How Much is Too Much'*) was led by Kaner, in collaboration with Gateshead Primary Care Trust and Northumbria University. The work was funded by Sunderland Teaching Primary Care Trust, and Professor Nick Heather from Northumbria

University was the study Principal Investigator.

Kaner's subsequent five-year Department of Health funded primary care career scientist award (2000-2006) enabled further development of this research via: (i) a pragmatic randomised controlled trial to evaluate the cost-effectiveness of '*How Much is too Much'* when delivered by nurses in routine practice (R3), and (ii) a Cochrane Collaboration systematic review of the wider evidence on SBI effectiveness in primary care settings (R5).

In 2004, Kaner was part of a team that tested various aspects of alcohol screening and brief intervention in 12 general practices (R6) to ensure that '*How Much is Too Much'* could be readily integrated into routine primary care, an essential requirement for wide scale and sustainable adoption.

3. References to the research

(Newcastle authors in bold type, citation counts from Scopus, July 2013**.**)

R1. Kaner EFS, Heather, N, **McAvoy BR**, **Lock CA**, Gilvarry E. Intervention for excessive alcohol consumption in primary health care: attitudes and practices of English general practitioners. *Alcohol & Alcoholism* 1999; 34: 559-566. DOI: 10.1093/alcalc/34.4.559. **Cited by 122.**

R2. Kaner E, **Lock C, McAvoy B**, Heather N, Gilvarry E. A randomised controlled trial of three
training and support strategies to encourage implementation of screening and brief alcohol intervention by general practitioners. *British Journal of General Practice* 1999; 49: 699-703. DOI: 10.1186/1471-2458-9-287. **Cited by 67.**

R3. Lock C, **Kaner E**, Heather N, **Doughty J**, **Crawshaw A**, McNamee P, **Purdy S**, **Pearson P**. Effectiveness of nurse-led brief alcohol intervention: A cluster randomised controlled trial. *Journal of Advanced Nursing* 2006; 54: 426-439. DOI: 10.1111/j.1365-2648.2006.03836.x. **Cited by 30.**

R4. Kaner E, **Lock C**, Heather N, **McNamee P**, **Bond S**. Promoting brief alcohol intervention by nurses in primary care: a cluster randomised controlled trial. *Patient Education & Counselling* 2003; 51: 277-284. DOI: 10.1186/1471-2458-9-287. **Cited by 29.**

R5. Kaner EFS, **Dickinson HO**, **Beyer FR**, Pienaar EDE D, Campbell F, Schlesinger C, Heather N, Saunders JB, Burnand B. Effectiveness of brief alcohol interventions in primary care populations. *Cochrane Database of Systematic Reviews* 2007; 2: CD004148. DOI: 10.1002/14651858.CD004148.pub3. **Cited by 470.**

R6. McCormick R, Docherty B, Segura L, Colom J, Gual A, Cassidy P, **Kaner E**, Heather N. The research translation problem: Alcohol screening and brief intervention in primary care. Real world evidence supports theory. *Drugs: Education, Prevention and Policy* 2010; 17: 732-748. DOI: 10.3109/09687630903286800. **Cited by 9.**

Relevant funding awards, by funder

- Alcohol Education Research Council. Four awards totalling £314,124
- Department of Health. Three awards totalling £5,322,083
- European Commission. Three awards totalling £687,937
- Economic and Social Research Council (ESRC). One award of £17,430
- Medical Research Council (MRC). One award of £98,001

- National Institute for Health Research (NIHR). Six awards totalling £2,247,899
- NHS Executive Regional Commissioned R&D. Two awards totalling £464,978
- Primary Care Trusts. Three awards totalling £162,364
- Tyne & Wear Health Action Zone. One award of £90,525

4. Details of the impact

Alcohol misuse presents a considerable problem in England, with over 10 million adults drinking more than Government-set lower-risk limits, and 2.6 million drinking more than higher-risk limits (EV b). Alcohol-linked hospital admissions were 1.2 million during 2010-11 (EV c). In financial terms, alcohol-related harm costs the UK economy up to £25.1 billion annually (EV b, d), and costs the health service £2.7 billion (EV b, d). Newcastle research on reducing alcohol-related risk has influenced national policy, practice and patients themselves, specifically by introducing and promoting methods of screening and brief intervention (SBI). The first step involves screening, via a short questionnaire, to identify which individuals would benefit from brief intervention, in the form of specific advice or counselling to help a patient reduce their drinking behaviour.

Impact of Newcastle research on policy

This has been demonstrated through specific citation of Newcastle-led work in a wide range of national policy documents and reports.

A 2008 National Audit Office report (EV d) cites the Cochrane Collaboration systematic review (R6), stating that: "*a meta-analysis of 22 randomised control trials concluded that, overall, brief interventions lowered alcohol consumption*." This Cochrane review was also included in the March 2009 House of Commons Select Committee on Alcohol (EV b), in which Kaner represented an expert source of evidence. This report states: "*Since excessive drinking is responsive to even brief intervention in community-based settings* [the reference given is R5]*, it is imperative that the public health community acts to prevent alcohol-related risk and harm across the population*."

Impact of Newcastle research on practice

Since 2008, the Newcastle-developed SBI programme '*How Much is Too Much'* has been included in six annual Directed Enhanced Service documents (EV e). These are commissioned by the Department of Health and delivered to patients via their Primary Care Trust. Each refers to R7, stating: "*The recommended brief advice is the basic five minutes of advice used in the* [World Health Organization] *clinical trial … using a programme modified for the UK context by the University of Newcastle: 'How Much is Too Much?'.*" (R6).

The Department of Health's Alcohol Policy Team states: "*I can confirm that your reports and the advice you provided for consideration by the Quality Outcomes Framework Expert Group certainly made its way into the thinking that informed the development of the Directed Enhanced Service. In addition, the advice you produced in the reports and the material you developed from the 'How Much is Too Much?' programme went on to be the basis of the Primary Care Service Framework that we use to support the Directed Enhanced Service and local variations in the form of Local Enhanced Services*." (EV f)

Professor Kaner brought the results of Newcastle-led research on SBI to the NICE Programme Development Group, which she chaired in 2009-10. In June 2010, this group published an extensive set of evidence-based recommendations (NICE guidance 24, EV g, page 34) to guide policy and practice in this area. These guidelines specifically cite '*How Much is Too Much?',* along with the Drink-Less pack, as "*coordinated collections of evidence-based materials for use when screening and carrying out a brief intervention*". The Government's 2012 Alcohol Strategy (EV c, page 24) is informed by these NICE guidelines: "[NICE] *recommends that NHS health professionals routinely carry out alcohol screening as an integral part of their practice*".

In terms of reducing costs, the Department of Health estimates that screening and brief advice can save a primary care trust £650,000 annually. At the time of the document's publication in December 2009, this figure applied to over 150 primary care trusts, representing annual saving of nearly £100 million across the UK (EV h).

Impact of Newcastle research on patients

Screening and brief intervention have already started to improve patient health: a 2010 report commissioned by the Centre for Public Health Excellence on behalf of NICE (EV i, page 17) included R5 as part of "*a considerable body of evidence supportive of the effectiveness of brief interventions for alcohol misuse in reducing alcohol consumption, mortality, morbidity, alcohol-related injuries, alcohol-related social consequences, healthcare resource use and laboratory indicators of alcohol misuse*".

Using GP Read code data as a measure of delivery, recent Newcastle work showed an increase in the use of formal screening tools, from 0.8% in 2008 to 7.5% in 2011 (EV j). Since screening and feedback may be sufficient to reduce drinking, by alerting patients to their drinking levels, this increase in screening indicates that a growing number of patients are receiving targeted help to reduce alcohol consumption.

In summary, Newcastle work that developed a UK-specific screening and brief intervention programme has influenced national policy, been widely recommended and has seen increased use in general practice.

5. Sources to corroborate the impact

EV a. British Medical Association Board of Science, *Alcohol misuse: Tackling the UK epidemic* 2008. http://www.dldocs.stir.ac.uk/documents/Alcoholmisuse.pdf

EV b. House of Commons Select Committee on Alcohol 2009. (Expert 27, pg 93-102) http://www.publications.parliament.uk/pa/cm200809/cmselect/cmhealth/368/368ii.pdf

EV c. The Government's Alcohol Strategy, March 2012. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/98121/alcohol-strategy.pdf

EV d. National Audit Office Reducing alcohol harm: health services in England 2008. http://www.nao.org.uk/wp-content/uploads/2008/10/07081049.pdf

EV e. Direct Enhanced Services, published by the British Medical Association and NHS Employers April 2008: www.alcoholpolicy.net/files/clinical_directed_enhanced_services.pdf. Others (2009-2013) available on request.

EV f. Statement from the Alcohol Policy Team, Department of Health, London. Contact details available on request.

EV g. NICE guidance 24, 2010. http://guidance.nice.org.uk/PH24/Guidance/pdf/English

EV h. NHS 2010–2015: from good to great. Preventative, people-centred, productive. December 2009. http://www.official-documents.gov.uk/document/cm77/7775/7775.pdf

EV i. Screening and Brief Interventions for Prevention and Early Identification of Alcohol Use Disorders in Adults and Young People, http://www.nice.org.uk/nicemedia/live/11828/45665/45665.pdf

EV j. *Alcoholism*: Clinical and Experimental Research Vol. 37 No. 6, June 2013 Supplement. Abstract number 554.