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TECHNICAL
REPORT

How the Department of Health Influences healthy living

The use of behaviour change programmes in public health

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Executive summary

Initiatives aimed at influencing the behaviour of citizens to improve individual and societal outcomes have been systematically used by governments (as well as by non-governmental bodies) for decades in many fields including transport, education, crime and health. Such initiatives are very prominent in the public health field, where they typically focus on aspects of people's lifestyles which can lead to adverse health outcomes, such as hazardous alcohol consumption, tobacco smoking, drug use, bad diet, lack of physical exercise, and risky sexual behaviour.

Governments typically use a range of measures to influence or shape the behaviour of citizens, including laws and regulations, fiscal incentives, and the provision of certain infrastructure (such as speed bumps to reduce speed, donor liaison 'sisters' in hospitals to encourage organ donation, cycle paths to encourage cycling). In addition, governments use programmes ranging from media-based information and awareness campaigns to more comprehensive programmes including targeted service delivery, training and so forth to positively influence behaviour. The latter, which are the focus of this study, are very common in the UK and elsewhere, and significant financial resources are spent on them; in the UK, for example, around £115 million is spent annually on public health marketing campaigns (DH, 2009(a)). It is worth briefly noting the distinction between awareness raising and behaviour change, which can be confused or conflated. As discussed in more detail throughout the report, awareness raising activities are one component of behaviour change activities, a tool to promote behaviour change (which may be effective or not, and this varies widely), but not the only one. There is growing recognition that awareness raising is not always sufficient to bring about behaviour change, and that more comprehensive behaviour change initiatives that address other determinants of behaviour than merely knowledge and awareness (such as environmental constraints, subjective opinions, social norms etc) also need to be tackled.

Against this background, the National Audit Office has commissioned a study to examine the use of behaviour change campaigns in today's Department of Health (DH). More specifically, as requested in the research brief, the study aims to improve understanding of the importance, nature and impact of behaviour change programmes in today's DH. This executive summary presents the key findings from the research to address the NAO's research questions.

Existing theoretical models of behaviour and behaviour change can be used to plan, engage critically with, and more clearly articulate, the 'intervention logic' of particular behaviour change initiatives.

The theoretical models of behaviour and behaviour change enable us to understand the underlying link between a particular activity and the mechanism through which it aims to change behaviour. Mapping information about particular behaviour change initiatives onto these theoretical models can be a useful tool to plan, engage critically with, and more clearly articulate, the 'intervention logic' of particular behaviour change initiatives.

This is, of course, only one possible approach to structuring our understanding of how initiatives and programmes aim to influence behaviour. The use of insights from the empirical literature on the effectiveness of behaviour change programmes can also be used in planning, critically examining, and communicating about such activities.

Current health behaviour change initiatives in the UK have varying degrees of comprehensiveness

A preliminary analysis of four DH behaviour change initiatives (*FRANK, Chage4Life, Know Your Limits* and *5-a-day*), using a theoretical model of behaviour change, sheds light on some of the differences between these campaigns. The *Change4Life* programme seems to be the most comprehensive not just in the types of activities it includes but also in the mechanisms through which it aims to effect behaviour change. This may be at least in part a result of this particular programme having been developed following the social marketing approach; because this approach encourages a more thorough understanding of what affects people's choices, it may lead to greater focus on multiple determinants of behaviour. From the data and materials we examined, the other three programmes tend to focus on two or three of the determinants, and not always in a systematic and deliberate way (for instance, *Know Your Limits* addresses perceived behavioural control but from the materials reviewed, it is not clear how it seeks to address this, other than by providing information on units and harms from excessive alcohol consumption). Also, only *5 a day* and *Change4Life* seem to have engaged directly with the actual behaviour control determinant, for example by setting up cooking classes and transport to markets and shops. Why these differences exist, and what their impact might be, are questions that would require further research.

Understanding of behaviour change among practitioners and policy-makers has evolved in the last few years

In 2002, the Wanless report highlighted the importance of understanding the ways in which future demand for health care could be reduced through health promotion activities. The 2006 report *Choosing Health* stated that the persistent and new public health problems affecting the UK call for "a step change in health improvement [that] will involve millions of people making different choices about the things they do in everyday life which impact on their health" (DH, 2006, chapter 1, p.16), and argues for "developing a new demand for health" (ibid, p. 12). Later that year, *It's Our Health* concluded that "continuing with existing methods and approaches was not going to deliver the type of impact on key health-related behaviour that was needed" (NCC, 2006: p. 7) and recommended that the government, and the DH in particular, adopt a *social marketing strategy* for health promotion and improvement. The establishment of the National Social Marketing Centre in December 2006 clearly signaled the government's commitment to developing new approaches to improving and promoting health (although the concept of social marketing has been in use for over two decades now).

In spite of its growing popularity and usage in the international public health community, social marketing is not understood in a uniform way

A review of international literature on health promotion suggests that social marketing is sometimes perceived as a predominantly promotional, or even more narrowly, a communication activity, rather than as a programme-planning process that applies commercial marketing concepts and techniques to promote voluntary behaviour change.

In the UK, social marketing has been defined by the National Social Marketing Centre (NSMC), as "the systematic application of marketing, alongside other concepts and techniques, to achieve specific behavioural goals, for a social good".[1] In addition, the NSMC offers a definition of *health-related* social marketing specifically: "the systematic application of marketing, alongside other concepts and techniques, to achieve specific behavioural goals, to improve health and to reduce inequalities".[2] Most of the key elements of a social marketing approach identified by the NSMC are broadly the same as those in much of the peer-review academic literature; namely, exchange theory, audience segmentation, competition, the 'marketing mix', and consumer orientation.

Not all the elements of social marketing appear to be equally salient, according to interviewees for this research

The definitions and understandings of social marketing did not vary significantly within the group of interviewees, nor were they significantly different from that offered by the NSMC. In particular, interviewees largely recognised and highlighted some of what the NSMC poses as the key features of a social marketing approach, most notably "audience segmentation", a strong "consumer orientation", and a clear understanding of "behaviour and behavioural goals". Nevertheless, other important aspects of the social marketing approach were much less frequently mentioned, for example the use of (commercial) marketing techniques to achieve the desired goals, and the "exchange" element of social marketing, which entails recognising that social marketing offers benefits that customers value, but for which they often incur costs (Grier and Bryant, 2005). The latter point was emphasised by only two interviewees, one of whom argued more broadly that social marketing is also a tool to help design better services which will "please and attract consumers". Social marketing, they argued, goes beyond changing people's behaviour; it is also about helping service providers understand their 'customers' and improve service provision.

The importance of 'regionalising' national behaviour change programmes was highlighted by many interviewees

According to interviewees, 'regionalisation' is key to the effective targeting and delivery of initiatives to influence healthy living because regional and local authorities and agencies are better able to accurately assess the needs and attitudes of people in their communities. However, the resources necessary for effective 'regionalisation' are not uniformly available; it is often easier to mobilize resources for public health issues that are of particular policy or political priority.

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[1] Available at: http://www.nsms.org.uk/public/default.aspx?PageID=10 (last accessed May 2009).

[2] Available at: http://www.nsms.org.uk/public/default.aspx?PageID=10 (last accessed May 2009).

There was widespread agreement among the interviewees that effective behaviour change activities in public health needed to include more than media-based campaigns

Nevertheless, there was little agreement among interviewees regarding what, in addition to information provision, a programme to promote healthy living should consist of. Some interviewees argued that effective behaviour change programmes needed to include initiatives and services that made it easier for people to choose healthier lifestyles. Others highlighted the importance of comprehensive programmes that included a range of measures, from messages delivered through the media, to improvements in the delivery of relevant services, to the provision of incentives (such as increased taxes on alcohol or tobacco, which raise prices and can lead to lower consumption).

There are a number of challenges associated with the widespread implementation of behaviour change initiatives

Most interviewees agreed that funding is an important confounder. Two main issues were identified in this respect. First, annual budgets, which to a large extent are set historically, place serious limitations to the scope and nature of health promotion initiatives. One interviewee gave the example of funding for alcohol-related programmes, which has historically been low (often less than £10 million), whereas *Change4Life*, a comprehensive programme to promote diet and exercise and prevent obesity has an annual budget of £90 million, which this interviewee considered more adequate given the expected impact. A second, related challenge mentioned by interviewees was that funding for regional initiatives within a wider programme for behaviour change is often extremely limited.

Another challenge identified by some interviewees, particularly Regional Directors of Public Health (RDoPH), was the lack of piloting and evaluations that would enable them to more effectively design, implement and target initiatives.

A review of the empirical literature identifies a number of important characteristics of effective public health behaviour change programmes

The literature suggests that behaviour change programmes are most effective when they seek to eliminate or reduce access barriers to healthier lifestyle choices, and when they include a wide range of initiatives. In addition, there is evidence that developing a more accurate understanding of determinants of behaviour change according to each target group can help develop effective programmes. Greater duration and frequency of activities are associated with greater behaviour change and awareness of the messages of a campaign or programme by the target population.

Factors external to a campaign can enhance, or act as barriers to, its success

Research has indicated that factors such as unemployment, lack of social support, living in an unsafe neighborhood, not having enough financial resources to meet food and medical care needs as well as having caring responsibilities all play a part in increasing the likelihood that someone will take up smoking and become regular smokers. Equally, recent research has focused on the role of "obesogenic" environments (i.e. environments encouraging consumption of energy and discouraging expenditure of energy) in increasing the number of dangerously overweight people. Some of the factors that create this type of environment include: easy availability of a wide variety of good-tasting, inexpensive,

energy-dense foods in large portions, reductions in jobs requiring physical labour, reduction in energy expenditures at school and in daily living, and an increase in time spent on sedentary activities such as watching television, surfing the Web, and playing video games. It is clear that some of these factors pose significant hurdles to behaviour change initiatives which are trying to counter their influence.

A key element of effective approaches is programme evaluation, as they enable authorities, practitioners and other stakeholders to learn lessons about what works and what does not, and enables assessments of the returns on investments in such programmes

Evaluations of programmes to influence behaviour are not straightforward, and many considerations need to be taken into account in deciding how best to conduct such an assessment. Some of the issues that need to be considered for the evaluation of behaviour change programmes include: the sustainability of campaigns and programmes, the unintended consequences of campaigns and programmes, the magnitude of campaign and programme effects, influencing contextual factors, the interaction between message content and delivery, and the attribution of programme effects to external factors.