



NHS health trainers: a review of emerging evaluation evidence

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Abstract

Recent years have seen a change in focus in UK public health policies towards an emphasis on individual lifestyle choices. As part of this shift, NHS health trainers were introduced in disadvantaged communities in England, to provide peer support to people 'at risk' of developing lifestyle-related health problems and to help them to self manage their behaviour. Concerns have been expressed, however, about the strength of the evidence supporting the initiative.

This paper outlines a number of gaps between the theory and rhetoric underpinning the NHS health trainer initiative, and the reality in practice. The paper critiques the evaluation evidence, questions the assumption that engaging lay people in health promotion activities in place of health professionals is necessarily a preferable option, identifies inconsistencies in the evidence supporting individually-based health improvement initiatives, and suggests that interventions which target deprived areas but neglect the social determinants of health may be limited in their effectiveness.

Keywords: health, evaluation, evidence

Introduction

Recent years have seen significant reforms in UK public health policies which one commentator has characterised as a shift from a public to a private conception of public health (Hunter 2005), and another as neglecting the need to address both individual and wider determinants of health (Trayers and Lawlor 2007). This shift moves the focus of public health policies away from factors that affect individual health that are (largely) outside the control of the individual (poverty, employment, education etc.) and focuses instead on the role of individual lifestyle choices as the key to promoting better public health (Hunter *et al* 2010). As part of this shift, the UK government's 2004 White Paper *Choosing health: making healthy choices easier*, signalled the intention to introduce NHS health trainers into disadvantaged areas of England, to provide one-to-one support to encourage people in 'at risk' groups to make healthier lifestyle choices (Department of Health 2004). Launched in 2005 in twelve pilot sites, a commitment was made by the government to establish the initiative in Spearhead Group Primary Care Trusts (the fifth of areas with the worst health and deprivation indicators compared to England) from April 2006 and throughout the country from 2007 (Department of Health 2004).

Focused on providing 'advice from next door' to people within disadvantaged communities 'at risk' of developing health problems and supporting them to set behavioural goals and to self manage their behaviour, it was anticipated that one of the

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3 outcomes of the initiative would be to reduce health inequalities (Department of Health
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5 2008a, 2008b).
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11 The evidence base supporting the introduction of health trainers is not clearly
12 defined and is, at best, limited (Gould 2009). The main body of research that appears to
13 have influenced the introduction of the scheme is drawn from a range of programmes
14 across the world involving trained lay people, such as community health workers, lay
15 health workers or advisors typically involved in providing primary health care to local
16 populations (Oxford Policy Management 2002, Visram and Drinkwater 2005, Zhang and
17 Unschuld 2008). Although we do not wish to explore the usefulness of this evidence as a
18 base for the health trainer initiative, a key point about this evidence needs emphasising.
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20 Much of this evidence relates to providing basic health care in situations where little or
21 no formal health services exist or are unavailable to the majority of the population. In
22 contrast, health trainers' role is to provide advice and motivation for their clients.
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39 In this paper, we outline and unpack the underlying theory of change or
40 programme logic of NHS health trainer programme to explore the assumptions
41 underpinning the programme. We then examine this theory and rhetoric in the light of the
42 available evaluation evidence, and contextualise these findings within some of the wider
43 critiques of individual behavioural approaches to health improvement. We conclude by
44 asking to what extent the NHS health trainer initiative is able to improve health outcomes
45 and reduce health inequalities in disadvantaged communities without the support of
46 efforts to tackle more macro-level structural inequalities.
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THEORY and RHETORIC

The programme logic underpinning the NHS health trainer scheme

Social interventions, such as the NHS health trainer initiative, can be viewed as having an underlying programme logic or theory of change (Whitehead 2007). Often not explicitly stated, this theory (or theories) links the definition of the problem to the proposed outcomes of the programme that will address the problem. In this section, we unpack the underlying programme logic of the health trainer initiative to examine how the programme defined the ‘problem’ it was designed to address and how it proposed (theoretically) to address this perceived ‘problem’. In a following section, we describe the limitations of the evaluation evidence and examine the extent to which it evaluates the initiative in terms of these logic models.

The logic models invoked in the health trainer initiative are underpinned by three perceived problems, which are then addressed by the theory of change embedded in the initiative. The first perceived problem is that people living in more deprived areas or from more vulnerable groups have more risky health behaviours and make ‘poorer’ health choices. This leads to the theory that targeting of the initiative, and thus the provision of advice, education, and signposting to services, in more deprived areas and on ‘harder to reach’ populations, will be of more benefit to those who most need the service, and thereby have the potential to reduce health inequalities.

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The second perceived problem is that ‘harder to reach’ individuals, that is those from disadvantaged areas or belonging to vulnerable groups, do not access mainstream health services in sufficient numbers, and ignore, do not trust, or do not believe in existing health promotion efforts. The theory of change here is that individuals who are from these areas/groups, who understand the experiences and concerns of the target individuals and have a shared interest in improving their health, will be able to effect change. From this perspective, a non-health professional drawn from the local area is a more acceptable source of information and better able to engage with clients from harder to reach groups; moreover, their ‘localness’ may mean that people in disadvantaged communities perceive them as more approachable.

The third perceived problem is that undesirable health outcomes are largely the result of the ‘poor’ health behaviours and choices of individuals. This leads to a theory of change which posits that health trainers can motivate and train individuals to set their own improved behavioural goals, manage their own health behaviours and the events and circumstances in their lives which they would like to change. This approach reflects the ‘fully engaged scenario’ proposed by Wanless (2002, 2004), which portrays citizens as actively involved with the notion of healthy living, and perceives health-related lifestyle advice as part of a ‘concerted effort to increase focus on individual responsibility in health management’ (Lhussier and Carr 2008, p301). From this perspective, this can be achieved using techniques drawn from behavioural psychology, such as (amongst others) social cognitive theory (Bandura 1989, 1998) and the influential transtheoretical (or stages of change) model (Prochaska and DiClemente 1982). The assumption is that

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3 influencing individuals to make ‘better’ health and lifestyle choices will improve both
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5 individual and overall public health.
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10 **PUTTING THEORY INTO PRACTICE: THE REALITY**

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12 Whether the theory underpinning these initiatives is borne out in practice is an
13 important question. To address this question we carried out a scoping review of evidence
14 relevant to the NHS health trainer initiative, using methods adapted from the framework
15 described by Arksey and O’Malley (2005), as part of a wider mapping study of public
16 investment in policies and interventions aimed at addressing the social determinants of
17 health and tackling health inequalities. Two main sources of evidence regarding the NHS
18 health trainer programme were identified: first, from a series of annual audit reports of
19 national data, and reports from the national Health Trainer Data Collection and Reporting
20 System (DCRS). National audits provide information collated annually about health
21 trainer personnel and clients, stage of development of local services, and funding
22 (Wilkinson *et al* 2007, 2008, Smith *et al* 2008, 2010): together with local evaluation data
23 (Wilkinson *et al* 2008). DCRS reports include data on the number of clients using the
24 service, health trainers’ characteristics, and client-centred questions regarding access to
25 the service, behaviours targeted, goal setting and outcomes (Hopkinson and Fidan 2009,
26 Fidan *et al* 2009). Second, a limited number of stand-alone local evaluations of NHS
27 health trainer schemes were identified (See Table 1).
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Evaluation findings

National reports chart the rapid growth of the NHS health trainer programme: in 2008-2009, 169 health trainer services were in operation across 115 Primary Care Trusts (Smith *et al* 2010). A broad range of disadvantaged communities and groups perceived as vulnerable to the risk of experiencing poor health were targeted by services (Smith *et al* 2010). The most frequent topics on which health trainers were consulted were diet (61%) and physical exercise (27%) (Fidan *et al* 2009). Positive outcomes reported include good uptake of the service, increased access to preventative services for clients, psychological, emotional and social benefits and achievement of behavioural goals (in particular smoking cessation) (Wilkinson *et al* 2008).

Local evaluations of the scheme are also broadly positive in their findings (Visram and Geddes 2007), suggesting that health trainers can provide the type of support necessary to help individuals make desirable lifestyle changes (Ball *et al* 2008, 2009b, Kime *et al* 2008, Meah and Guest 2010). Across a number of initiatives, clients spoke positively about their experiences of the service (Kime *et al* 2008, Ball *et al* 2008, 2009b, Meah and Guest 2010). In one area, health trainers were seen as a way of facilitating communication between community members and the Primary Care Trust, and thus as a means of translating key health messages (Kitchen 2009). Health trainers were also perceived as filling a gap in services in disadvantaged communities (Visram *et al* 2006, Kitchen 2009). From health trainers' perspectives, the role was described as a source of personal fulfilment and career development (South *et al* 2006, 2007, Visram *et al* 2006, Kime *et al* 2008). However, the introduction of the scheme was not without its tensions,

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3 especially where there was a perceived overlap between the roles of health trainers and
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5 existing workers (South *et al* 2006, 2007, Visram and Geddes 2007, Ball *et al* 2008,
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7 2009b).
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10 11 12 **Limitations of the evaluation evidence**

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15 Taken overall, the evidence base concerning the health trainer initiative has
16
17 important limitations. There is a notable lack of research evaluating the impact of the
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19 NHS health trainer role, the extent to which the initiative leads to health improvements
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21 for clients, and whether it is cost effective, although it is acknowledged that it is
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23 relatively early in the life of the scheme for robust outcome evidence to be available (a
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25 number of studies, including a national evaluation, are ongoing) (Ball *et al* 2009b).
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32 Although national reports contain a good deal of descriptive data concerning the
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34 NHS health trainer scheme, there is a paucity of data in the public domain about its
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36 effectiveness in bringing about health improvement or reducing health inequalities in
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38 disadvantaged communities. There are a number of problems inherent in the evidence
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40 base. Firstly, the national data set is incomplete. In 2008 to 2009, 62% of NHS health
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42 trainer services were included in the DCRS (a further 30% were planning to use the
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44 system), while information concerning completion of Personal Health Plans (a health
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46 ‘stock-take’ which records clients’ goals and achievements) was limited (Smith *et al*
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48 2010). Secondly, the focus of national reports is primarily on *outputs* (e.g. the number of
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50 clients reached by services) rather than *outcomes* in terms of delivering behaviour change
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52 (Smith *et al* 2008). Thirdly, whether health trainers are successfully tackling inequalities
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3 in the areas they serve is inferred by the approach and reach of initiatives, rather than
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5 substantive outcomes (Wilkinson *et al* 2008). Finally, there are limitations in the national
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7 evidence base regarding data quality. For example, local evaluations synthesised in
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9 national reports were typically non-experimental, observational studies of the processes
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11 and/or outcomes of health trainer services, usually collected at a single time point (i.e.
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13 cross-sectionally) (Wilkinson *et al* 2008). Behaviour or health outcome measures were
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15 not stated clearly in the majority of evaluations and few studies employed comparison or
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17 control groups or localities.
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25 Local evaluations of the NHS health trainer scheme also have notable
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27 weaknesses. Firstly, there are problems with the generalisability of findings, as service
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29 models vary both between and within sites (because of differing local priorities) (South *et*
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31 *al* 2006, Visram *et al* 2006, Kitchen 2009). Secondly, no local evaluations included in
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33 this paper employed comparison areas or groups; the majority involved relatively small
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35 samples of stakeholders, often self selected, whose views may not be representative of
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37 wider constituencies (Visram *et al* 2006, Visram and Geddes 2007, Ball *et al* 2008,
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39 2009a, Meah and Guest 2010). Typically, only clients who agreed to be followed up were
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41 asked for their views of the health trainer service (South *et al* 2006, 2007, Kime *et al*
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43 2008), and it is possible that such samples were biased towards those with more positive
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45 experiences. Thirdly, the collection of service performance data is inconsistent, meaning
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47 that assessing client outcomes over time is difficult (Ball *et al* 2008, 2009a, 2009b, Kime
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49 *et al* 2008); importantly, therefore, we learn little about the *sustainability* of behaviour
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51 change.
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6 Although this type of approach to evaluation provides a great deal of valuable
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8 contextual detail regarding the *process* of implementing health trainer services, it is less
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10 useful in assessing the *outcomes* in terms of lifestyle change and health improvement.
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15 It is also clear that evaluations have not addressed the logic models underpinning
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17 the health trainer initiative in any depth. Apart from some limited discussion about the
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19 desirability of employing a local person with community knowledge in the health trainer
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21 role (cf. South *et al* 2006, Visram and Geddes 2007, Ball *et al* 2008, Kime *et al* 2008,
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23 Kitchen 2009), the assumptions on which the scheme is based remain unexamined. In
24
25 contrast, the adoption of a theory-based or realist approach to evaluation would place the
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27 emphasis on identifying the underlying programme logic – articulating in advance *how*
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29 intervention activities would be expected to lead to outcomes for recipients, and crucially,
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31 in what contexts (Judge and Bauld 2001, Parry and Judge 2005).
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39 **WIDER CRITIQUES OF THE LOGIC MODELS**

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41 One of the assumptions underpinning the NHS health trainer initiative is that a
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43 knowledgeable local person, who understands the experiences and concerns of clients, is
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45 likely to prove a more effective agent of change than a health professional, who may be
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47 perceived as remote by the community they serve. However, findings from studies of the
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49 effectiveness of engaging lay peers in health promotion activities, in comparison to health
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51 professionals, are inconsistent, and vary for different groups of people, by age, gender,
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53 ethnicity and risk-group membership (Durantini *et al* 2006). There is a need, therefore,
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3 for further research comparing the relative effectiveness of lay people and professional
4 health care providers in bringing about health improvement (Lewin *et al* 2005), and to
5 identify populations in which lay helper models work most successfully, in order to tailor
6 interventions to individuals and groups from diverse cultures and backgrounds (Durantini
7 *et al* 2006, Norris *et al* 2006, Brownstein *et al* 2007).

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17 NHS health trainers' practice draws heavily on techniques from behavioural
18 psychology to deliver sustained health improvement through individual behaviour
19 change (Department of Health, 2008a). However, the research literature evaluating
20 the relevance and use of individual behaviour change models is inconsistent and
21 does not support any particular approach or strategy (NICE 2007). To take one
22 example, the 'stages of change' theoretical model (Prochaska and DiClemente
23 1982) has been found to lack evidence of effectiveness (West 2005), particularly in
24 relation to bringing about *lasting* behavioural change (Moore and Charvat 2007). A
25 systematic review of the effectiveness of interventions based on a stages-of-change
26 approach found that there was little evidence to suggest that stage-based behaviour
27 change interventions are more effective than non-stage-based interventions
28 (Riemsma *et al* 2002, 2003). A number of randomised trials of individual-level
29 interventions to increase physical activity have also failed to demonstrate their
30 long-term effectiveness (Harland *et al* 1999, Foster *et al* 2005, NICE 2006,
31 Kinmonth *et al* 2008).

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55 The NHS health trainer initiative is informed by an individual-responsibility model
56 of health inequalities, which broadly sees undesirable adult health behaviours, such
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3 as smoking, as primarily the result of poor personal choices (McGinnis and Foege
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5 1993, Patterson *et al* 1994, Wayland 2002, Morgan and Ziglio 2007). Public health
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7 initiatives influenced by this philosophy seek to address lifestyle management
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9 issues mainly through health education (Lynch *et al* 1997). An alternative model
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11 for addressing health inequalities emphasises the effects of socio-economic status,
12
13 social conditions and social relations on health (Dahlgren and Whitehead 2007,
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15 Trayers and Lawlor 2007), arguing that policies which focus on individual health
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17 education alone and fail to engage with the material conditions in which people live
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19 are unlikely to improve the health of disadvantaged populations (Butterfoss *et al*
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21 1993, Lynch *et al* 1997). Rather, policies which aim for a modest redistribution of
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23 wealth are seen as more likely to have an impact on health inequalities (Mitchell *et*
24
25 *al* 2000). According to this model, the primary role of social policy should be to
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27 shape an environment, for example through methods such as increasing
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29 employment opportunities or the accessibility of healthy foods, which *enables*
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31 individuals to make healthier choices (Exworthy *et al* 2003). There is scant
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33 evidence, however, to suggest that NHS health trainers are working with
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35 communities to address the social determinants of health.
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45 **Conclusions**

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48 In this paper we have outlined a number of gaps between the theory and rhetoric
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50 underpinning the NHS health trainer scheme, and the reality in practice. Deficiencies in
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52 the evidence base have been discussed, and it is suggested that further research is needed
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54 to test the assumption that lay people are more effective than health professionals in
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3 promoting health improvement for ‘at risk’ populations. Questions have been raised
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5 about the strength of the evidence supporting individual behaviour change strategies, and
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7 the limitations of introducing individually-based interventions into disadvantaged
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9 communities while neglecting the social determinants of health. Evidence that health
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11 inequalities can be decreased by initiatives that target disadvantaged groups or areas is
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13 lacking (Lynch *et al* 1997), primarily because of a failure to take the effect of social
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15 circumstances into account (Lee *et al* 2008).
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23 A lack of evidence has not precluded the national roll out of the NHS health
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25 trainer scheme, however. Critics suggest that there is a tendency for health policy to
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27 advance in *parallel* with the development of the evidence, introducing interventions
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29 based on *assumptions* of effectiveness, in place of evaluation data from pilot initiatives
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31 (Bonner 2003, Sowden and Raine 2008). Policymakers argue, however, that action often
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33 needs to be taken whether or not ‘strong’ evidence is available, and that pragmatic
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35 considerations, such as cost, may prevail over the perceived weight the UK government
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37 places on evidence-based practice (Petticrew *et al* 2004).
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45 Although the health trainer scheme has adopted a number of different service
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47 models (Visram and Drinkwater 2005, Visram *et al* 2006), over time there has been a
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49 notable shift towards focusing on individual behavioural change (Smith *et al* 2008),
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51 reflecting the thrust of public health policy in general (Graham 2009). Doubts have been
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53 expressed about the effectiveness of interventions which concentrate on changing
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55 individual behaviour, while ignoring or sidelining the social determinants of health
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3 (Macintyre 2007). A major stumbling block to the introduction of initiatives which target
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5 health inequalities more broadly, however, particularly in times of economic cutbacks, is
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7 that while schemes that utilise lay people in advisory roles are relatively easy and
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9 inexpensive to implement – hence their popularity with governments - tackling the social
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11 determinants of health is comparatively costly and time consuming (Wayland 2002).
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Table 1: Evaluation studies

Author(s) and date	Focus of study	Study methods	Sample	Limitations of study
Ball <i>et al</i> 2008	Evaluation of the North East Lincolnshire health trainer service.	Secondary analysis: client data set 2007-2008; post-engagement client satisfaction survey (at 3 and 6 months). Qualitative methods: interviews (face to face and telephone), and focus groups.	Interviews with 8 key stakeholders and 4 clients. Focus groups with 10 health trainers. Client satisfaction survey - 59 respondents (46% response rate).	Consistency of data collection e.g. follow-up data at 3 and 9 months difficult to capture; sample may be biased in favour of service. Service performance comparison data pre- and post-intervention (2007-2008) included a high proportion of missing cases, making statistical comparisons difficult.
Ball <i>et al</i> 2009a	Evaluation of health trainers working in primary care in North East Lincolnshire.	Qualitative methods: interviews.	Convenience sample of 8 health care staff and 2 health trainers across 3 primary care practices.	Service performance data lacking; no client data included; no comparison areas/groups used.
Ball <i>et al</i> 2009b	Evaluation of the North East Lincolnshire health trainer service.	Secondary analysis: synthesis of published data on the effectiveness of the health trainer scheme and lay health promotion workers; service performance data 2008-2009 (reporting on work by 15 health trainers); published data, guidance and pilot schemes relating to the NHS Cardio-vascular Health Check	As above.	Paucity of published impact evidence. Comparison of performance data for 2007-2008 and 2008-2009 affected by limitations outlined above for Ball <i>et al</i> 2008.

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5			Programme; synthesis of	
6			qualitative data from 2 previous	
7			evaluations (Ball <i>et al</i> 2008,	
8			2009a).	
9				
10	Kime <i>et al</i>	Evaluation of the	Secondary analysis of monitoring	Interviews with 20
11	2008	Bradford district	data concerning client	health trainer clients, 9
12		health trainers	characteristics, health issues and	health trainers, 11 key
13		programme phase	outcomes Jan 2006-Oct 2007.	informants, 3 senior
14		2.		health trainers and 4
15			Qualitative methods: in depth case	project leads. Focus
16			studies of 3 localities using	group with senior
17			interviews and a focus group.	health trainers ($n=3$),
18				project leads ($n=4$).
19				
20	Kitchen	Evaluation of	Secondary analysis of regional hub	18 interviews with
21	2009	health trainer	activity report 2008-2009.	provider agencies,
22		schemes in		service commissioners
23		Cheshire and	Qualitative methods: semi-	and directors of public
24		Merseyside.	structured interviews with key	health. Supplementary
25			personnel in 8 Primary Care Trust	interviews with health
26			areas (4 of which were currently	trainers (number not
27			operating a health trainer service);	specified) and
28			supplementary interviews with	fieldwork visits.
29			health trainers in 3 Primary Care	
30			Trusts.	
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33	Meah and	Evaluation of a	Analysis of secondary sources:	Questionnaires
34	Guest	health trainers	national policy documents, Greater	completed by 99 health
35	2010	scheme in 10	Manchester strategy and service	trainers (82% response
36		Primary Care	documents (reported activity),	rate), 10 financial leads
37		Trusts across	literature search and review.	and 39 service users
38		Greater		(9% response rate).
39		Manchester.	Quantitative methods: survey of	
40				Response rate to the health
41				trainer survey inconsistent
42				between Trusts. Response rate for
43				service users low (9%). Possible
44				sample bias towards those with
45				more positive experiences.
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5		health trainers, financial leads and	Telephone interviews	
6		service users.	with 10 service	
7			commissioners (one in	
8			each PCT).	
9		Qualitative methods: non-		
10		participant observation of health		
11		trainers; semi-structured telephone		
12		interviews with service		
13		commissioners.		
14	South <i>et al</i>	Analysis of secondary sources -	2 focus groups	Transferability of findings:
15	2006, 2007	client monitoring data; health	involving 15 health	intended to provide formative
16		trainer feedback forms.	trainers; telephone	feedback to service; limited in-
17			interviews with 16 key	depth exploration of issues;
18			informants from	potential bias in client sample –
19		Qualitative methods: semi-	placement	only those who attended follow-
20		structured telephone interviews,	organisations	up and agreed to be interviewed
21		focus groups, group interview and	(purposive sample);	(a minority of those eligible);
22		learning event.	group interview with	sustainability of client behaviour
23			project leads; learning	change not evaluated.
24			event with key	
25			stakeholders; 22 clients	
26			followed up by	
27			telephone interview.	
28				
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31	Visram	Analysis of secondary sources –	Purposive sample of 8	Relatively small sample from one
32	and	literature review of use of lay	health trainers across 3	strategic health authority;
33	Geddes	workers in health promotion	different models of	volunteers not recruited for the
34	2007	activities.	service provision. The	study; descriptive nature of
35			intention was to recruit	reflective diaries.
36			members of the original	
37		Qualitative methods - unstructured	cohort from early	
38		interviews, field notes, health	implementer sites but	
39		trainers' reflective diaries.	recruitment problems	
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			meant that later cohorts were included.	
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Visram *et al* 2006

Evaluation of an early adopter scheme in the North East of England -across 3 sites.

Secondary analysis of implementation documentation.

Qualitative methods - semi-structured telephone interviews

Semi-structured interviews with 17 key informants (identified by project manager) including project managers, health trainers' line managers and supervisors, community health manager and a director of public health.

Views of health trainers not included in the study; respondents may not be a representative sample; tendency for respondents to reiterate 'Choosing Health' messages.

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