

COMMUNITY HEALTH CHAMPIONS



EVIDENCE REVIEW

Jane South
Gary Raine
Judy White

Centre for Health Promotion Research,
Leeds Metropolitan University

September 2010



Contents

Acknowledgements	3
1. Introduction	4
2. Review methods.....	6
3. What is a 'community health champion' role?	8
4. What are the benefits of being a community health champion?	12
5. What difference do community health champions make to health and well-being?	14
6. Cost effectiveness and economic matters.....	20
7. Implementing community health champion programmes	22
8. What are the research gaps?.....	24
9. What does this mean for practice?	26
References	28
Appendix 1. Glossary of key terms	30
Appendix 2. Community Health Champions update search strategy.....	31
Appendix 3. Inclusion and exclusion criteria.....	37
Appendix 4. Community Health Champions Evidence summary -data extraction form.....	39
Appendix 5. Summary of data extraction of included reviews.....	40

Acknowledgements

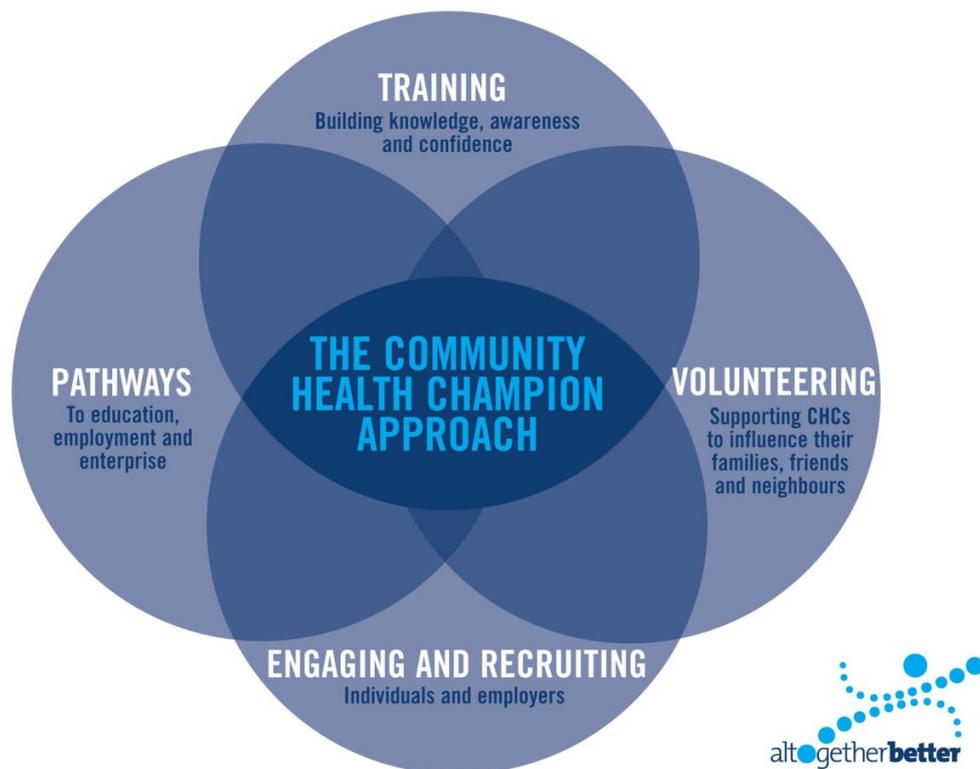
This evidence review was commissioned as part of the evaluation of the Altogether Better programme, which is funded through the BIG Lottery and aims to empower people across the Yorkshire & Humber region to lead healthier lives. A shorter evidence summary is available to accompany this report.

The authors would sincerely like to thank Rachael Dixey, Gianfranco Giuntoli, Karina Kinsella and Sylvia Tilford for their contributions to the report. The authors would also like to thank all those individuals from the Altogether Better programme and Learning Network who have provided constructive feedback on earlier versions.

1. Introduction

This evidence review looks at the evidence base for community health champions and similar roles where community members, either as volunteers or paid community health workers, undertake health promotion activities within the neighbourhoods and communities where they live and work. The evidence review was commissioned as part of the evaluation of the Altogether Better programme, a five-year programme funded through the BIG Lottery that aims to empower people across the Yorkshire and Humber region to improve their own health and that of their families and their communities. The regional programme is made up of a learning network and 16 community and workplace projects with an emphasis on three themes: physical activity, healthy eating and mental health & well-being. Altogether Better is based on an empowerment model and at the heart of this model is the concept that community health champions can be equipped with the knowledge, confidence and skills to make a difference in their communities. Community health champions, from a range of different communities, receive training and support from the projects to enable them to carry out voluntary activities in workplaces and neighbourhoods [1].

Figure 1: Altogether Better Community Health Champion approach



Altogether Better, in its attempt to empower people in communities that are 'seldom heard' or experience high levels of ill-health, draws on a long tradition of community engagement in health [2-4]. Empowerment concerns individuals increasing control over their lives and their health and also communities becoming more organised and ultimately taking action to create social change [5]. Involving members of the public in supporting other people to make positive changes in their lives is based on a sound understanding of the value of life experience and the support systems that can exist within neighbourhoods [6, 7]. In many other countries, both from the developed and developing world, the involvement of community members in promoting health and delivering health services is well established in practice.

Altogether Better has an ambitious vision to develop a common understanding of what it means to be a community health champion that can be applied across different settings, communities and areas. In 2009, the Centre for Health Promotion Research, Leeds Metropolitan University, was commissioned to evaluate the Altogether Better programme. One of the primary aims of the evaluation was to develop understanding of the community health champion role linking to the existing evidence base. This evidence review links with a thematic evaluation on the community health champion approach in practice and two further evidence reviews on:

- Empowerment and health & well-being
- Mental health and employment.

What is this review for?

The main purpose of this evidence review is to provide an overview of relevant evidence on community health champions and similar roles. It has been written to help inform those commissioning, managing and supporting programmes involving community health champions. It is hoped that the evaluation will help build a strong body of evidence for 21st century UK public health practice.

The findings presented in this report are based on a rapid review of evidence on:

- definitions of community health champions
- types of role and activities
- impact on the health & well-being of community health champions
- impact on individuals and communities
- key issues for programme implementation.

The evidence review includes a brief description of the methods used in the review and also discusses the implications for applying the evidence in practice. A short evidence summary is also available. A list of key terms is found in Appendix 1.

2. Review methods

This evidence review is based on a rapid review of evidence on community health champions and similar roles. This section briefly describes the approach adopted and the review methods. The key objectives of this evidence review were to:

- undertake a review of existing evidence, both published academic work and grey literature;
- provide an accessible synthesis of relevant evidence on definitions, processes and impact of community health champions and similar roles.

It was important that evidence from different sources was selected and reviewed in a systematic way so that the results can be used to inform practice, but it was not possible to undertake a full systematic review process in the time available. The evidence review needed to synthesise evidence and be directly relevant for practitioners and strategic leads.

How was the review done?

A common approach and methods were used for all three evidence reviews (community health champions, empowerment and mental health & workplace). This involved a series of stages from searching to review (see Box 1). A hierarchy of evidence was used to make sure that the strongest and most relevant evidence was reviewed. This meant that systematic reviews, reviews of published evidence and practice-based reviews, along with key conceptual papers and reports, were included. The search strategy and inclusion/exclusion criteria are found in Appendices 2 and 3.

In the community health champions evidence review, the research team were able to draw on the results from the 'People in Public Health' study, which was funded through the National Institute of Health Research and conducted by the same team at Leeds Metropolitan University. The study involved a systematic scoping review of the literature around lay roles in public health from 1992-2007. As 'People in Public Health' offered a comprehensive and recent review of service and organisational issues, it was possible to update searches and to include selected findings from the study as part of the review process. The People in Public Health database was used as part of the search strategy [see <http://www.leedsmet.ac.uk/health/piph/review.htm>].

In total 21 publications were reviewed as part of this evidence review. In addition, results from the People in Public Health systematic scoping review [8] and a short paper on cost-effectiveness prepared by the National Institute of Health and Clinical Excellence (NICE) [9] were included. To make sure that the rapid review process was as rigorous as possible, a common analysis framework was developed across the three reviews. Findings from each selected publications were summarised using a data extraction framework (Appendix 4). These results were then brought together and written up for this evidence review. A final stage involved the draft report being sent for peer review to academic and other experts.

Box 1: Stages of the rapid review process

1. Search strategy developed. This involved identifying key terms and synonyms, inclusion and exclusion criteria and agreeing relevant databases and web sites.
2. Searches conducted using major databases, including: MEDLINE, CINAHL, ASSIA, PsycLIT, The Cochrane Library and relevant websites such as Department of Health, NICE, King's Fund etc.
3. Screening to identify the most relevant papers and reports based on a hierarchy of evidence and relevance to Altogether Better.
4. Gaps in evidence identified and additional web searches conducted.
5. Development of data extraction forms and framework for synthesis of results.
6. Review of major papers, reports and other significant texts. Information extracted on key fields using a common data extraction framework.
7. Synthesis of findings in relation to roles, processes, outcomes at individual and community level.
8. Peer review of draft report and evidence based statements.

Limitations of the review

The evidence review was able to bring together a good number of research and practice-based reviews. International reviews and expert evidence were included as well as 14 systematic reviews. This enabled some clear evidence-based statements about the role and impact of community health champions to be produced. A summary of all the publications included in the review can be found in Appendix 5.

There were some limitations with the rapid review process as the focus had to be on reviews rather than evaluations of single projects. This means that many studies and reports that may contain very relevant information were not able to be included. In making evidence based statements in this review, we recognise that while systematic reviews help draw conclusions about what really works, they can end up with very limited recommendations based on a tiny number of studies [10]. We have tried to counter that limitation by including some practice-based reviews. The issues about translating this evidence into practice are discussed further in the final section of this report.

3. What is a 'community health champion' role?

The idea that people can become leaders, motivators, educators and helpers around health issues in their communities is not new. There are people who do this naturally without the help of services, at the same time programmes can support this process through recruiting and training 'community health champions' to promote health. Altogether Better is developing a shared model for community health champions but one which can be adapted and developed in different ways for different communities and settings. Altogether Better describe community health champions as individuals from communities or businesses who are 'engaged, trained and supported to volunteer and use their understanding and position of influence to help their friends, families and work colleagues' [1:10]. There is a commitment to recruit people from communities with high levels of poor health, often facing barriers to traditional services and wider opportunities.

'Community health champion' is a relatively new term, but the concept is very similar to other types of community and volunteer roles which have been developed through many different programmes with a range of motivations and drivers. This has led to multiple terms and titles which can be confusing and lead to challenges in sharing learning and making comparisons [Box 2]. The People in Public Health study [8] found over 70 names for these kind of roles and an international review on lay health workers found over 40 [11]. This section looks at some of the common models, what people do in these roles and where there are parallels with the Altogether Better approach.

Box 2: Some terms used to describe lay health roles

Activators
Community health educators
Community health advocates
Community health workers
Community mobilisers
Community nutrition assistants
Lay health advisors
Lay health workers
Lay food and health workers
Linkworkers
Peer counsellors
Peer coach
Peer educators
Peer supporters
Popular opinion leaders
Promoters
Outreach workers
Support workers
Volunteers

Community health champions

The use of the word '**champion**' to describe people who formally or informally volunteer to promote health in their communities is relatively recent and is not used in international research. The recent NICE Guidance on Community Engagement recommends recruiting community members 'to plan and deliver health promotion activities and help address the wider determinants of health' [12:28]. It describes both health champions and community champions as people able to inspire and motivate community members but also able to advocate for change and influence local organisations. Contacts made through the People in Public Health study led to one example of community health champions, based in Sussex. This scheme used a community-based approach to address health inequalities. Community members were trained and went on to become health activists¹. There are also health trainer champions. While health trainers are trained to support people on a one-to-one basis and seen as part of the public health workforce, health trainer champions are volunteers who are well networked in their communities and help increase the uptake of the local health trainer services [13].

*"**Health champions** are individuals who possess the experience, enthusiasm and skills to encourage and support other individuals and communities to engage in health promotion activities. They also ensure that the health issues facing communities remain high on the agenda of organisations that can effect change. Health champions offer local authorities and community partnerships short-term support as consultants, encourage them to share good practice and help them develop activities to improve the health of local people."* [12:40].

Volunteers and peers

There are other approaches that are based on broadly similar understandings of how community members can promote health, although not all of them informed by an empowerment model. A mapping of these types of roles was taken as part of the People in Public Health study [8]. Some approaches emphasise people being matched in some way to the target community, typically **peer education** and **peer support** approaches. People can be peers on the basis of sharing characteristics, such as ethnicity or being in the same age group, or shared experience, such as being a new mother or having diabetes. Another type of approach is based on **bridging roles**, where volunteers and community workers provide a link between services and communities, help communicate health messages and help people access resources to improve their health. These approaches, which include community health workers/lay health advisors (discussed later), are often used with communities that are seldom heard or 'hard-to-reach'. Approaches which emphasise **community organising** roles, where community workers mobilise community resources, develop social networks to connect people together and build new activities, are clearly linked to ideas around community development for health [14].

¹ Personal communication with Health Improvement Programme Manager
Public Health, West Sussex Primary Care Trust.

Some approaches emphasise the **volunteer** element and this can include people who have professional qualifications from other walks of life. The accepted definition of volunteering in the UK is:

"an activity that involves spending time, unpaid, doing something that aims to benefit the environment or individuals or groups other than (or in addition to) close relatives." [15:4].

Volunteers take on a range of roles in health and social care, both based in the NHS and other public services and working through the voluntary sector organisations [16]. Service users who have experienced the same condition or circumstances are seen as having a valuable role in peer support [2, 16].

Community health workers

Community health workers (sometimes known as lay health workers or lay health advisors) are one of the most common models and community health worker programmes are seen throughout the world. The term is rarely used in the UK but many of the features of the community health worker role are similar to community health champion roles. There are a number of definitions but they all focus on three aspects of community health workers [4, 11, 17-20].

- They are drawn from the target community
- They have not had training as a health professional but receive some training to do the role
- They carry out a variety of functions related to health promotion and healthcare in their communities.

Community health workers often take on multiple roles within their communities [17-21]. These roles include health education, outreach, acting as role models, peer counselling, social support, referrals, facilitating group-based activities, advocacy to improve services, case management and research. In contrast to Altogether Better, community health workers, depending on the context, can carry out activities related to healthcare and administer treatment as well as providing health education. In many instances they are volunteers but sometimes they receive some form of payment for what they do.

A number of reviews stress the role of community health workers in reaching out to communities that face barriers in accessing traditional services and being able to educate and support people in a culturally sensitive way. Community health workers are able to do this because they are from the community, share the same values and beliefs, understand community needs, and in some cases talk the same language [18, 19]. Community health workers are sometimes used within health services and guided by health professionals but one review also notes that they can be involved in empowering communities to address health needs and develop

"Community health workers should be members of the communities where they work, should be selected by the communities, should be answerable to the communities for their activities, should be supported by the health system but not necessarily a part of its organization, and have shorter training than professional workers." [4:1]

their own solutions [18].

Community health worker programmes have been applied across the world across many health issues, including cancer screening, immunisation, nutrition, long term conditions, maternal and child health, HIV/AIDS prevention to name but a few. There is an extensive evidence base in particular from the United States where a lot of community health worker programmes are run. While this review looks at health promotion and primary prevention because this is the focus of *Altogether Better*, some of the reviews show that the community health worker model can be applied to other areas, including long term conditions. One review on community health workers in the care of people with hypertension (high blood pressure) identified several roles [22]:

- providing health education to patients and families on risk factors and ways to manage and treat high blood pressure
- helping make sure people received the services they needed
- providing direct services, including monitoring blood pressure
- providing social support to individuals and their families
- acting as mediators or links between people and the health and social care system, such as translation services or obtaining information for them.

Flexibility and variation

The *People in Public Health* study found that there are many different aspects to roles and even within common approaches there can be considerable variation in roles. Often it is a matter of emphasis rather than distinct categories. Variation in roles can make it difficult to make general statements about effectiveness. For example, is it possible to compare a drugs intervention for homeless people with a breastfeeding intervention even though they might both use peer support approaches? At the same time the variation in roles shows the versatility and flexibility of these approaches across different health issues, different communities and different types of intervention. It is particularly significant that many of the reviews included interventions focused on populations where health and social inequalities existed; for example with low-income households or minority ethnic populations [17-24]. This highlights that these roles are seen as a key way of tackling health inequalities and improving equity of access.

4. What are the benefits of being a community health champion?

Community health champions work to improve the health of those they come into contact with in their workplaces and communities, at the same time, making a contribution in this way is likely to have a positive impact on their own health and social circumstances. Some of the evidence for this comes from a recent systematic review on the impact of volunteering and health carried out for Volunteering England [2], which found that the act of volunteering is beneficial for volunteers, both in relation to physical and mental health. Positive outcomes included improvements in:

- self-rated health status
- mortality
- adoption of healthy lifestyles
- quality of life
- frequency of hospitalisation
- ability to carry out activities of daily living
- depression
- psychological distress
- self esteem.

Some social benefits were also reported and these included improved family functioning and social support. Involvement in peer support interventions, where people with the same background or experience help each other, was found to be beneficial to the mental health of volunteers and can result in them feeling empowered. The only negative effect was found in a study comparing caregivers with paid workers [2].

Baroness Neuberger, the Government's Volunteering Champion, argues that volunteering is particularly beneficial for the mental health of volunteers because it provides a way for people to contribute. Her 2008 review highlights evidence which suggests that volunteers have higher levels of reported health and well-being and show improvements in measures of physical health, including a stronger immune system and reduced blood pressure [16].

There was surprisingly little evidence in the reviews of community health workers concerning the impact on the individuals who take up these roles. A rapid review, carried out to inform the NICE Guidance on Community Engagement, found a single study where women were trained as community champions and then delivered group sessions in their communities [25]. The community champions were reported to have increased knowledge, skills and confidence following training. The review also found some evidence that involvement in peer education and peer support interventions could help build confidence and self-esteem. Another literature review reported outcomes including increased knowledge of health issues, improvement in listening skills, increased self confidence & self esteem, and changes in health behaviours [26].

Overall the evidence suggests that while the act of volunteering is more often than not done for altruistic reasons, it can be beneficial for those who volunteer. Involvement in health promotion or peer support roles may increase knowledge, confidence and self-esteem. This finding about personal benefits from participation fits with the Altogether Better empowerment model which has the development of community health champions at the centre of the programme. It also complements the findings of the evidence review on empowerment, which suggests that empowering individuals brings health benefits.

" As well as improving health outcomes, volunteering can also be a platform for getting people back into education and employment, or just into becoming more involved in their community. It can be a virtuous circle, leading to more cohesive communities, higher levels of well being, and better use of people's potential" [16:14].

5. What difference do community health champions make to health and well-being?

The majority of the reviews included in this evidence review reported on the impact of community health workers, peers or volunteers. These results have been brought together to provide a body of evidence on the value of engaging community members in promoting health. This section looks first at individual outcomes in relation to knowledge, access, health behaviour and health status before looking at community level outcomes. A table summarising this evidence is found in Appendix 5.

In many parts of the world, community or lay health workers are involved not only in prevention and health education, but also in delivering treatment and care services, which are not covered in this evidence review [11, 27]. It can be difficult to separate out the contribution of community health workers within interventions, and to evaluate the wider effects within communities [27]. So in summarising the evidence base it is important to bear in mind that much of the review evidence is limited to reporting on the direct impact on those individuals who receive interventions (as service users) and on changes that can be easily measured.

Increased knowledge and awareness

A number of the reviews found evidence that lay health workers are able to increase knowledge and awareness of health issues with the populations and groups that they work with [17, 18, 21, 28, 29]. For example, one US review of community health workers working with minority ethnic women found evidence of increased knowledge in relation to topics such as cervical cancer, HIV/AIDS, self care & diabetes [17]. Another systematic review looked at peer approaches for HIV prevention in developing countries, and found that peer education was effective at increasing HIV knowledge with almost all groups studied [28]. Outcomes relating to knowledge, awareness and motivation were not given much attention in other reviews, which is rather surprising given the arguments that community health champions and similar roles can improve communication with communities [18].

Improved access and increased uptake to services

There is some fairly strong evidence about the effectiveness of community health workers and peer supporters in helping people access health services and in promoting increased uptake of preventive measures such as immunisation and screening. Some of these reviews look specifically at community health workers working with different low-income and minority ethnic populations [17, 20, 23]. Improved access was reported in relation to pre and postnatal care as well as other types of primary care services. One US literature review found evidence that community health workers could increase access to care for those who have chronic illnesses, like diabetes or high blood pressure. Some of the best evidence comes from a series of Cochrane Reviews of lay health workers in primary and community care [11, 30, 31] where lay health workers were found to be effective at increasing uptake of immunisation in both adults and children.

A number of the reviews examined uptake of screening [11, 17, 20, 21, 23]. So for example, a systematic review of educational interventions to increase uptake of breast screening (mammography) for women from disadvantaged groups (low-income and/or minority ethnic populations) found that involving peer educators in the delivery of multi-component interventions was more effective than interventions where only health professionals were involved [23]. Seven out of 8 studies using peer educators reported statistically significant changes in rates of breast screening, compared to 5 out of 16 studies that did not use peer educators. There is further evidence supporting the effectiveness of lay workers in promoting uptake of cancer screening [20, 21] but in contrast the Cochrane review of lay health workers only found a small and non-significant effect in promoting the uptake of breast screening [11].

In summary, most of the evidence on access to care and screening comes from outside the UK, however, much of it relates to effective interventions with minority ethnic communities or low-income groups and therefore has relevance in terms of the potential role of community health champions in addressing health inequalities in a UK context.

Health behaviour change

There is a reasonable volume of evidence from systematic reviews indicating that community/lay health workers are effective in supporting positive behaviour changes. In relation to physical activity and nutrition, two priority areas for Altogether Better, there is good evidence from two US systematic reviews. One looked at lay health advisor interventions targeting cardiovascular risk reduction, including stopping smoking, physical activity, weight management and nutrition interventions [18]. Beneficial health outcomes reported include: increased physical activity, improved flexibility, increased consumption of fruit and vegetables, decreased consumption of dietary fat, and also smoking cessation (although this was reported as being difficult to achieve). Often these behavioural changes were only followed up in the short term and because of the differences in populations, interventions and roles within the studies that were included in this review, the results were not conclusive. The other systematic review looked at the impact of peer nutrition education on dietary behaviours and health outcomes among the US Latino population [24]. Interventions involving peer nutrition workers were found to improve: dietary intake (such as significantly lower intakes of saturated fat & increased consumption of fruits and vegetables), food safety knowledge and skills, and levels of physical activity. Evaluation evidence from the Expanded Food and Nutrition Education Programme in the US was also reported (see Box 3). The authors conclude that peer nutrition educators are effective and can make an important contribution to addressing health inequalities with minority ethnic populations.

Many of the reviews point to the need for more research based evidence and better designed studies to be able to draw really firm conclusions about behaviour change but overall these approaches seem to be particularly effective when working with disadvantaged or minority ethnic populations [17, 20, 21, 24, 26, 29]. Positive outcomes in terms of behaviour changes are reported across diverse population groups, including farm workers, homeless minority ethnic woman, and African-American women with diabetes. In relation to maternal-child health, lay health workers can increase breastfeeding rates [24, 30, 31] , but there are mixed results over their effectiveness regarding the prevention of child abuse and promoting mother-child interaction [30]. There is evidence that peer educators are effective at improving adoption of safe sex practices, such as increased condom use [25, 28].

Box 3 - Expanded Food and Nutrition Education Programme, US [24].

The Expanded Food and Nutrition Education Programme (EFNEP) is a major US programme involving lay nutrition education workers who work with families to improve the dietary habits of low-income households with children. Nutrition aides, drawn from the target communities, teach food and nutrition principles to families in their homes. Around a third of participants are drawn from the Latino population in America. National evaluations have been conducted of this major programme over several decades, including a number of RCTs, quasi-experimental studies and cost-benefit analyses. The results from these evaluations have shown positive outcomes in relation to dietary intake, nutrition knowledge, food practices and managing food insecurity and also economic benefits in terms of reduced healthcare costs and increased work productivity.

Improved health status

The recent review of the impact of volunteering discussed earlier found evidence that volunteers made a difference to the health and well-being of service users [2]. Reported outcomes include: increased self esteem, better mental health, improved relationships with health care professionals, better adherence to medical treatments, and improved disease management and acceptance. The review stresses that it was difficult to generalise as many of the results were dependent on the context and how volunteers were trained and managed. Two other reviews highlight a positive impact on mental health [20, 26]. Evidence from a review of research and practice on lay health advisors, peer educators and health advocates reports positive outcomes in terms of feelings of confidence, self esteem and empowerment, as well as other changes in personal health related behaviour [26]. Another systematic review highlights some potential secondary effects of lay health advisor interventions in terms of increasing self-esteem, a sense of empowerment, and perceived well-being. Interestingly these effects were only identified qualitatively as they were not the main focus of the intervention [20].

Most of the evidence on changes in health status comes from community/lay health workers working with people with long term conditions, like diabetes. This reflects the fact that community health workers in other countries are often linked into primary care services. Some interesting findings emerged as part of this rapid review process, although a more thorough review of research evidence on long term conditions would be needed to draw firm conclusions. One review looked at community health workers and care of people with hypertension and concluded that community health workers are an effective strategy [22] (see Box 4). A further two reviews support these findings in relation to diabetes [24, 29]. Here community health workers were involved in education, social support and linking people with services. Positive outcomes included increased knowledge about diabetes and self care, improvements in diet and physical activity levels, improved diabetes control and self management, self-reported health and significant improvements in health status measured through various biometric indicators [24, 29].

Box 4: Community health workers and care of people with hypertension [22].

A systematic review looked at the role of community health workers with people with high blood pressure where CHWs might be involved in education, social support, making sure people received the right services and monitoring blood pressure (BP). This review was based on research done in the US and mainly with disadvantaged and minority groups. Overall it found that community health workers were effective at providing support and this conclusion was based on 7 of 8 high-quality RCTs reporting positive outcomes as well as six studies with other designs. Positive outcomes associated with support from community health workers included: improvements in BP control, improvements in healthcare use such as appointment keeping, and more appropriate use of the emergency department. The conclusion is that programmes involving community health workers appear to be a good way to enhance treatment and help BP control in targeted ethnically diverse, high-risk populations. The authors state that *“CHWs appear to be able to motivate, facilitate, and help empower community members to maintain required behaviours that contribute to their own continuity of care and improved health outcomes”* [22:446].

In contrast to these reviews providing evidence of effectiveness in relation to long term conditions, another review [32] on self management education programmes by lay leaders for people with chronic conditions, like the Expert Patient Programme or its forerunner the Chronic Disease Self-Management Program developed in America, provides less positive evidence. This review found that lay-led programmes resulted in small, short-term improvements in self-efficacy, self-rated health, symptom management and exercise frequency but there was no evidence to suggest that they led to improved psychological health or health-related quality of life or significantly alter healthcare use. A further issue was the challenges around recruitment and uptake which meant that these type of interventions did not reach large numbers of people with long term conditions [32].

Impact on health care services

There is some evidence about the impact on health services. In some instances, as has been discussed before, reported positive outcomes were about increasing uptake of services, like immunisation. In addition, there were some reported outcomes relating to more appropriate use of health care services. The systematic review of community health workers and care of people with diabetes [29] reported on two studies where there was a decrease in emergency attendances in the treatment groups and one where there was a significant decrease in hospital admissions related to diabetes. A literature review of community health workers found evidence of improved appointment keeping, reduced emergency department visits, improved primary care provider visits [19]. Another review focused on the Hispanic-Latino population found some statistically significant outcomes around service use including increased initiation and number of prenatal care visits, increased referral and enrolment of Hispanics/Latinos, and reduced perceived barriers to healthcare [20].

Outcomes for communities

Despite a common understanding about the way that community/lay health workers work within their own communities and build on social networks, there was very little comment in the reviews on community-level outcomes like improved community engagement or increased social capital. This may be because it is not easy to capture these sort of changes or it may be because the intervention did not seek deeper levels of engagement. One review found some qualitative evidence that community health workers successfully promoted social support, cultural competence, and what they describe as 'intangible resources' among minority ethnic women [17]. The authors discuss how community health workers were able to use their grassroots knowledge to provide people with appropriate support and to connect people to other community resources and sources of help. Community health workers also helped develop "*culturally competent health information based on the community's perspective*" [17:363]. None of these outcomes were measured quantitatively in any of these studies.

Very little is known about community mobilisation and the wider cultural and environmental impact of lay health workers. Only one other review comments on community level outcomes [18], reporting on the small number of studies that have evidence of community level outcomes including social network development, community building activities, and the integration of lay health worker programmes with community coalitions to achieve changes in the urban environment.

A small number of reviews support the idea that community health champions and similar roles can have an impact on services. One example is given of an oral health intervention in Manchester for the Bengali population which was reported to have led to changes in dental services making them more accessible and culturally appropriate for service users from minority ethnic communities as well as increasing capacity within the local community, both in terms of promoting health and employment [26:31]. Neuberger's review of volunteering also highlighted how volunteers can provide a source of local knowledge and feedback which in turn makes health and social care services more responsive to community needs [16].

In summary, this section has provided an overview of the evidence base for the effectiveness of community or lay health workers in promoting health. There is strong evidence that these approaches work and a range of health and social outcomes have been reported including:

- Increasing knowledge and awareness of health issues
- Helping people access health services including uptake of preventive measures like immunisation
- Supporting positive behaviour changes, particularly when working with disadvantaged, low income or minority ethnic communities.
- Improving health status including better mental health and improved disease management.
- Supporting appropriate use of health care services.

There is some evidence of benefits for communities, such as increased social networks and community building activities, but the evidence base is more limited.

6. Cost effectiveness and economic matters

It would be reasonable to expect that involving volunteers may offer a 'cheaper' or better value alternative to highly skilled health professionals. Developing a community or volunteer workforce is clearly an option where there is limited service capacity, such as in developing countries.

There was generally very little discussion on economic matters across the papers and reports reviewed. There was evidence that some services pay community members for doing the role, while others involve people on a voluntary basis only [8]. There are costs associated with training, support and professional time to take into account. Three factors which may push up costs are (1) length of training (2) having high turnover of community health champions (3) approaches being labour intensive [21].

In terms of assessing cost-effectiveness, there was a lack of evidence, particularly comparing community-led with delivery by professionals [11], but there were some exceptions to this:

- A US review of community health workers working with minority ethnic women found two examples where interventions had resulted in reduced costs and improved outcomes, such as higher uptake of screening services [17].
- A 2009 review on peer nutrition education with the Latino population in the US found one example of a cost benefit analysis where there were significant savings in long term medical costs (\$14.67 for every \$1 spent) in the Expanded Food and Nutrition Education Programme [24:221].
- A systematic review on the cost-effectiveness of immunisation programmes found that lay health workers were more cost effective than other forms of delivery, but the conclusions were only based on three studies [33].
- A cost effectiveness case study prepared by NICE [9] found that volunteer peer educators were more effective and less costly than experienced paid leaders in a group course promoting safe sex but the authors pointed out that cost-effectiveness would depend on how long behaviour changes lasted (if changes in behaviour only lasted a couple of months then it would not be cost effective).

In many walks of life in the UK volunteers provide essential services to other members of the community. Neuberger argues for the need to fully understand the true economic and social value of volunteering. Her review highlights some research which has tried to quantify this using the Volunteer Investment Value Audit tool. It found that for each £1 of investment in volunteer support, small voluntary organisations gained between £2-8 of value from their volunteers [16:21].

Overall the balance sheet for community health champions is difficult to assess. There is not enough evidence to make firm judgements on economic value and this is partly because it is very difficult to quantify the value of the contribution of community members [22]. What the evidence does show us is that costs need to be taken into account but at the same time there may be real benefits that result from that investment. It also suggests that the balance between costs and benefits is likely to be better in programmes that are sustainable with high volunteer retention rates.

"... how does one place a monetary value on the characteristics and actions of lay people from the community who, in many cases, volunteer to help others?"

[22:44]

7. Implementing community health champion programmes

The Altogether Better programme is ambitious in its scale, with targets of 13,500 community health champions by 2012, and its vision to embed the community health champion model as a way of working. This will require attention to process issues as projects are developed, implemented and evaluated. The evidence review was able to draw on international evidence to identify a number of issues that relate to programme implementation. An overview of some of the common pitfalls and solutions are discussed here.

The success of programmes in **engaging and recruiting people** needs consideration. Recruitment methods are not always discussed in-depth but one review noted that peer educators could be either self-nominated or recruited through community recommendation or nominated by professionals [28]. Formal recruitment methods are less likely to be successful than contact through community projects and adverts in community newsletters [26]. There can be challenges in recruiting people from socially excluded groups [26]. Men tend to be under-represented in these roles [20, 26] and men and young people may face barriers to volunteering in health and social care [16].

Many of the reviews commented on the variation in **training** (from a few hours to months) [4, 11, 17, 22]. This can make comparisons difficult – for example, how do we judge what level of training is most effective when it varies so greatly between programmes? The World Health Organization [4] argue that training is more likely to be effective when it involves practising skills, is competency-based and there are opportunities for ongoing education.

Retention and the problem of high turnover of volunteers or lay health workers, was flagged up (although some of this was drop out from studies rather than from the actual programmes) [4, 17, 22, 28]. It will clearly have an impact on cost-effectiveness if large numbers of people are trained and subsequently drop out. The People in Public Health study found that the main motivation for volunteers and lay health workers was wanting to help people, but payment did offer a way of supporting some people who were on low-incomes. Other incentives include financial incentives, the possibility of employment, gaining recognition and respect, having a clear role, personal development and gaining skills. Disincentives include inconsistent or unfair distribution of financial incentives, excessive demands, lack of respect from health professionals, lack of supervision and lack of refresher training [4].

Low uptake and low use by the target community is seen as a challenge [4, 29, 32]. Community health worker programmes are likely to be more successful where there are good social networks in the community and where the community participates in planning [30]. Indeed the World Health Organization [4] recommends wider community participation as a necessary component for the success of programmes. It argues that:

“By their very nature, CHW programmes are vulnerable unless they are driven, owned by and firmly embedded in communities themselves. ...Evidence suggests that

CHW programmes thrive in mobilized communities but struggle where they are given the responsibility of galvanizing and mobilizing communities” [4:5].

Organisational challenges can include: the time taken to establish programmes [26]; lack of long term funding for sustainability [25]; lack of acceptance by health professionals and managers [4, 16, 26, 30]; risk aversion in the public sector [16]; and lack of professional support for lay health workers [30]. Many of these themes were echoed in findings in the People in Public Health study [8].

Box 5: World Health Organization – what makes for successful community health worker programmes? [4].

- ✓ Community participation – involving the community in all aspects of the programme including identifying priorities
- ✓ Good, careful and sustained programme management
- ✓ Community participation in the selection of community health workers
- ✓ Competence and practice based training relating to how and where community health workers work
- ✓ Availability of supervision and support
- ✓ Government support and adequate resources

Overall the evidence points to challenges but also to the importance of a supportive infrastructure, combined with community involvement in planning as well as delivery. The People in Public Health study has been able to add to this knowledge base from a UK perspective. Findings from the study highlight the importance of building on the skills and experience that people bring and providing ongoing support and development for individuals, as well as investment in a wider infrastructure to support the work.

8. What are the research gaps?

This evidence review has brought together a body of research across different health topics and populations. UK review evidence is sparse and a lot of the published research is focused on peer education and peer support in sexual health and breastfeeding interventions [8]. In America, there is a good evidence base on lay health workers and some of the findings are transferable.

The evidence review found some real research gaps and more needs to be known about:

- The impact on the community health champions themselves (and similar roles)
- The costs and benefits of using community health champions
- How effective these approaches are compared to traditional services
- The wider impact on communities and social networks
- Process evaluation about the best ways to recruit, train and support community health champions.

The evidence review relied heavily on systematic reviews and these may have missed or excluded valuable research, including useful process evaluations. Some of the reviews only searched one or two databases. In general, the reviews concentrated on short term individual outcomes about changes in health behaviour, usually measured quantitatively. Capturing the true impact of community health champions, who are working in a holistic way to educate, influence, support and signpost people they meet through their day-to-day life, is going to be hard. It is difficult to separate out the effects of the community health champions themselves and the interventions they are delivering [27]. This means that there needs to be much more of a focus on understanding processes and how these roles fit within different social contexts.

Some of the evidence relates to minority ethnic communities in the United States where community health workers and lay health advisor approaches are well established. Several papers make the point that more needs to be known about the characteristics of community health workers and whether approaches can be applied to other population groups [20, 24].

Many of the papers recommend more research that 'tests' the effectiveness of these roles on health behaviours. Research studies do not necessarily reflect the realities of practice as demonstration projects can be somewhat artificial and there is a need for research on long term effects and sustainability [11, 30].

How do we build an evidence base?

The evaluation of Altogether Better, through the learning network and the programme evaluation, offers a good opportunity to improve understanding of some of the practicalities of developing the community health champion model in a UK context. The findings of this review suggest that local evaluations need to:

- develop an understanding of the best ways to recruit, train and support community health champions
- look at what works in terms of processes as well as outcomes
- follow up individuals who become community health champions
- use quantitative and qualitative methods to try to capture a range of different types of health outcome
- examine the long term impact on communities and organisations.

"Components of this process evaluation should include recruitment and retention strategies of both participants and community health workers; training and supervision needs of community health workers; frequency, intensity, quality and competency of community health worker interventions; levels of social support and social influence within the community networks; and other intervention characteristics such as barriers, time and costs. These process evaluation measures should be designed, collected and evaluated by all the stakeholders, including the community, community advisory board, participants CHWs, and researchers" [17:364].

9. What does this mean for practice?

In providing an overview of evidence on community health champions and similar roles, such as community health workers and volunteers in health and social care, it is clear that there is a body of evidence which supports the involvement of community members in health promotion. While 'community health champions' is a relatively new term, we have been able to draw on international evidence, which has relevance to Altogether Better because of the focus on addressing health inequalities. It shows that community health workers can be effective in promoting health and improving access to services in socially excluded and disadvantaged communities. It seems reasonable to conclude that similar approaches will work in a UK context to help communities from neighbourhoods or groups that face barriers to achieving health.

Not all of the evidence can simply be applied wholesale as there are differences between approaches and roles; for example, the community health champion role is undoubtedly different from roles that involve delivering care as part of a local health service. Yet this evidence, including from interventions focused on long term conditions, does show that individuals without professional training can make a difference, particularly where people face barriers to services. The mechanism of community members supporting, enabling and influencing people is basically the same whether it is an outreach service for immunisation or a local health walk.

Altogether Better is explicitly based on an empowerment approach. This not only means building the capacity and confidence of individual community health champions, but also empowering communities to work together in developing local solutions and challenging systems in order to improve health. Some of the evidence reviewed here reports on professionally-led interventions that are not necessarily seeking to empower individuals or communities and tend to be focused on delivering health messages or services. For Altogether Better, findings from this review, combined with the empowerment review, indicate that seeking a deeper level of participation can potentially lead to more sustainable programmes with a greater impact on health and the determinants of health. However, there are still research gaps on outcomes at a community-level and the evaluation of Altogether Better will help to build an evidence base on empowerment approaches.

In summary, in developing a community health champion model, Altogether Better is building on an existing evidence base. Overall there are nine **pointers for practice**:

1. There is a sufficiently strong evidence base on the positive impact of lay health workers and volunteers to justify commissioning and establishing community health champion programmes.
2. Community health champions should be seen as a key resource for health because of the qualities and knowledge of the people who take on these roles. This description of lay health advisors sums up what community health champions can offer:
"...members of the community, knowledgeable and successful, good mentors and

teachers, and known within their networks to be caring and understanding”
[20:424].

3. The community health champion model is likely to be most effective with groups that are seldom heard or hard-to-reach. Although this may vary depending on the specific social context, community health champions have the potential to reduce barriers for people and can be expected to contribute to tackling health inequalities.
4. Volunteering brings many social and health benefits for those who volunteer. So people should be encouraged to become community health champions as they may benefit personally.
5. Approaches involving community members in promoting health are versatile and the Altogether Better programme should continue to learn from the application of the community health champion model with different communities and different contexts.
6. Engaging community health champions may make a difference to communities. More evaluation is needed to build the evidence base on the long-term social and economic benefits.
7. There is potential for the community health champion model to be applied in healthcare contexts working with people who have long term conditions.
8. Community health champions need support in their roles. Failure to provide good training, personal development and support is likely to lead to high turnover, and this will raise programme costs.
9. Practitioners should consider engaging communities in developing and implementing community health champion programmes as this will help achieve sustainability.

References

1. Altogether Better, *Altogether Better Programme: Phase 1 development*. 2010, Altogether Better, BIG Lottery.
2. Casiday, R., et al., *Volunteering and health: What impact does it really have?* 2008, Volunteering England: London.
3. World Health Organization, *Community participation in local health and sustainable development. Approaches and techniques, in European Sustainable Development and Health Series No. 4*. 2002, WHO Regional Office for Europe.
4. World Health Organization, *Community health workers: What do we know about them*. 2007, World Health Organization: Geneva.
5. Wallerstein, N., *What is the evidence on effectiveness of empowerment to improve health?* Report for the Health Evidence Network (HEN), 2006.
6. Cooper, C., et al., *The influence of social support*. 1999, Health Education Authority: London.
7. Eng, E., E. Parker, and C. Harlan, *Lay health advisor intervention strategies: A continuum from natural helping to paraprofessional helping*. *Health Education and Behavior*, 1997. 24: p. 413-417.
8. South, J., et al., *People in Public Health - a study of approaches to develop and support people in public health roles*. 2010, NIHR Service Delivery and Organisation Programme.
9. NICE secretariat, *Cost effectiveness vignettes for community engagement. A paper prepared by the NICE secretariat for the Community Engagement Programme*. 2007, NICE.
10. Petticrew, M., *Why certain systematic reviews reach uncertain conclusions*. *British Medical Journal*, 2003. 326: p. 756-8.
11. Lewin, S.A., et al., *Lay workers in primary and community health care*. *Cochrane Database of Systematic Reviews*, 2005. Issue 1, Art.No.: CD0040415. DOI:10.1002/14651858.CD004015.pub2.
12. National Institute for Health and Clinical Effectiveness, *Community engagement to improve health, in NICE public health guidance 9*. 2008, NICE: London.
13. Department of Health, *Choosing health. Making healthier choices easier*. 2004 The Stationary Office: London.
14. Adams, L. and F. Cumming, *Promoting social and community development in Sheffield: A reflection of ten years work, in Promoting health. Policy and practice*. L. Adams, M. Amos, and J. Munro, Editors. 2002, Sage: London.
15. The Commission for the Compact, *Volunteering. Compact code of good practice*. 2005, Commission for the Compact.
16. Neuberger, J., *Volunteering in the public services: Health and social care. Baroness Neuberger's review as the Governments Volunteering Champion*. 2008.
17. Andrews, J.O., et al., *Use of community health workers in research with ethnic minority women*. *Journal of Nursing Scholarship*, 2004. 36(4): p. 358-65.

18. Fleury, J., et al., *The role of lay health advisors in cardiovascular risk reduction: A review*. American Journal of Community Psychology, 2009. 44: p. 28-42.
19. Nemcek, M. and R. Sabatier, *State of evaluation: Community health workers*. Public Health Nursing, 2003. 20(4): p. 260-270.
20. Rhodes, S.D., et al., *Lay health advisor interventions among hispanics/latinos. A qualitative systematic review*. American Journal of Preventive Medicine, 2007. 33(5): p. 418-27.
21. Swider, S.M., *Outcome effectiveness of community health workers: An integrative literature review*. Public Health Nursing, 2002. 19(1): p. 11-20.
22. Brownstein, J.N., et al., *Effectiveness of community health workers in the care of people with hypertension*. American Journal of Preventive Medicine, 2007. 32(5): p. 435-447.
23. Bailey, T.M. et al., *A systematic review of mammography educational interventions for low-income women*. American Journal of Health Promotion, 2005. 20(2): p. 96-107.
24. Perez-Escamilla, R., et al., *Impact of peer nutrition education on dietary behaviors and health outcomes among Latinos: A systematic literature review*. Journal of Nutrition Education and Behavior, 2008. 40(4): p. 208-225.
25. Swainston, C. and C. Summerbell, *The effectiveness of community engagement approaches and methods for health promotion interventions. Rapid review Phase 3 (including consideration of additional evidence from stakeholders)*. 2008, NICE National Collaborating Centre, University of Teeside.
26. Visram, S. and C. Drinkwater, *Health Trainers. A review of the evidence*. 2005, The Primary Care Development Centre, University of Northumbria: Newcastle.
27. Abbatt, F., *Scaling up health and education workers: community health workers*. 2005, DFID Health Systems Resource Centre: London.
28. Medley, A., et al., *Effectiveness of peer education interventions for HIV prevention in developing countries: A systematic review and meta-analysis*. AIDS Education and Prevention, 2009. 21(3): p. 181-206.
29. Norris, S.L., et al., *Effectiveness of community health workers in the care of persons with diabetes*. Diabetic Medicine, 2006. 23(5): p. 544-556.
30. Lewin, S.A., et al, *Lay health workers in primary and community care: A systematic review of trials*. 2006, London School of Hygiene & Tropical Medicine: London.
31. Lewin, S.A., et al., *Lay health workers in primary and community health care for maternal and child health and management of infectious diseases*. Cochrane Database of Systematic Reviews, 2010(3): p. Art No: CD004015 DOI: 10.1001/14651858.
32. Foster, G., et al., *Self-management education programmes by lay leaders for people with chronic conditions*. Cochrane Database of Systematic Reviews, 2007. 4.
33. Corluka, A., et al., *Are vaccination programmes delivered by lay health workers cost-effective? A systematic review*. Human Resources for Health, 2009. 7(81): p. DOI:10.1186/1478-4491-7-81.

Appendix 1. Glossary of key terms

Community	A community is defined as a group of people who have common characteristics. Communities can be a group of people living in the same area or can be defined by having shared interest or identity ² .
Community engagement	Community engagement is the process of getting communities involved in decisions that affect them. This includes the planning, development and management of services, as well as activities which aim to improve health or reduce health inequalities ¹ .
Community health champion	Individuals who are engaged, trained and supported to volunteer and use their understanding and position of influence to help their friends, families and work colleagues lead healthier lives ³ .
Community health worker	Community health workers are individuals who are recruited from local communities and carry out a public health function. Community health workers receive training and/or are supported to deliver the intervention(s) but do not have professional training ⁴ . Community health workers are sometimes called lay health workers or lay health advisors.
Empowerment	Empowerment concerns individuals and communities increasing control over their lives and their health. Individual empowerment is about people having a sense of control over their lives through building people's confidence, boosting their self-esteem, developing their coping mechanisms or enhancing their personal skills. Community empowerment is about allowing people to take control of the decisions that influence their lives and health ⁵ .
Hierarchy of evidence	A hierarchy of evidence is where sources of evidence are graded in order to make statements on the strength of the evidence. Criteria reflect the extent to which evidence is based on a robust research design and methods, or has relevance to practice.
Social capital	Social capital is the degree of social cohesion in communities. It refers to the interactions between people that lead to social networks, trust, coordination and cooperation for mutual benefit ¹ .
Systematic review	Systematic reviews aim to comprehensively locate and synthesise research that bears on a particular research question using organised, transparent and replicable procedures at each step of the process. Good systematic reviews take precautions to minimise error and bias ⁶ .

² National Institute for Healthy and Clinical Effectiveness. 2008. Community engagement to improve health. *NICE public health guidance 9*. NICE, London

³ Altogether Better (2010) Altogether Better Programme: Phase 1 development Altogether Better, BIG Lottery Fund.

⁴ Lewin SA, Dick J, Pond P, Zwarenstein M, Aja G, Van Wyk B et al. Lay health workers in primary and community health care. *Cochrane database of systematic reviews* CD004015. Epub: 2005 Jan 25.

⁵ Wallerstein N. (2006) What is the evidence on effectiveness of empowerment to improve health? Report for the Health Evidence Network (HEN).

⁶Littell, J Corcoran, J & Pillai, V. (2008) Systematic reviews & meta analysis. New York OUP.

Appendix 2. Community Health Champions update search strategy

The key objective of the evidence summary on CHCs will be to:

- provide an accessible synthesis of relevant evidence on definitions, processes and impact of Community Health Champions and similar roles.

***This is an amended update search to build on PiPH from 2007 onwards**

Research questions:

- Q1 -To identify what the Community Health Champion role is in the context of health and well-being (addressed via independent variable search)
- Q2 -To identify what difference Community Health Champions make to the health and well-being of communities and individuals (addressed via the outcomes search)
- Q3 -To identify effective processes to support Community Health Champions in their role (addressed via search of enabling factors)

Databases to search	Target population	Independent variable: What is community health champion role?	Outcomes: Impact of CHC role	Processes/ Enabling factors	Document/Type of study/evidence
Through CSA:	<u>Key words:</u>	<u>Key words:</u>	<u>Key words:</u>	<u>Key words:</u>	Key words
<ul style="list-style-type: none"> ASSIA: Applied Social Sciences Index and Abstracts MEDLINE Social Services Abstracts Social Services Abstract Sociological Abstracts Worldwide 	<ul style="list-style-type: none"> Community OR Member OR Lay OR Participant <p><u>Key areas:</u></p> <ul style="list-style-type: none"> Individuals Communities Community members Residents Participants Lay 	<ul style="list-style-type: none"> (community) (health) Champion <p>Use amended List 1a, 1b, 1c from PIPH original search</p> <p><u>Key areas:</u></p> <ul style="list-style-type: none"> Role Volunteering in health Community action Peer supporters Community health champions Volunteers 	<ul style="list-style-type: none"> Outcome* Impact* Process* Effect* Improve* Benefi* <p><u>Key areas:</u></p> <p><i>Community level:</i></p> <ul style="list-style-type: none"> Improved Community engagement Improved participation Involvement in community activities 	<ul style="list-style-type: none"> Intervention* Promotion Model* Strateg* Program(me) Evaluation Evidence Initiative Mechanism* Training Support <p><u>Key areas:</u></p> <ul style="list-style-type: none"> Process evaluation Empowerment 	<ul style="list-style-type: none"> Systematic review or literature review or evidence review or programme review <p>Include:</p> <ul style="list-style-type: none"> Literature reviews Peer reviews Review articles Systematic reviews Evaluation reports Official

Databases to search	Target population	Independent variable: What is community health champion role?	Outcomes: Impact of CHC role	Processes/ Enabling factors	Document/Type of study/evidence
<p>Political Science Abstracts</p> <p>Through (EBSCO):</p> <ul style="list-style-type: none"> • PSYCIInfo • CINHAL • (IBSS) International Bibliography of the Social Sciences <p>Ad hoc databases:</p> <ul style="list-style-type: none"> • World Health Organisation 		<ul style="list-style-type: none"> • Lay health workers • Skills development & capacity 	<ul style="list-style-type: none"> • Improved community connectedness • Increased social networks • Increased social trust • Increased social capital • Improved capacity <p><i>Individual and psychological level:</i></p> <ul style="list-style-type: none"> • Mastery • Self-esteem • Self-confidence • Increased knowledge • Self-efficacy • Skills development • Improved 	<p>intervention</p> <ul style="list-style-type: none"> • Qualitative evaluation • Models of empowerment • Models of implementation of CHC role • Strategies for skills development & training • Models of CHC role • Application of CHC role • Case studies 	<p>publications</p> <ul style="list-style-type: none"> • Policy documents • Grey literature • Case studies

Databases to search	Target population	Independent variable: What is community health champion role?	Outcomes: Impact of CHC role	Processes/ Enabling factors	Document/Type of study/evidence
<ul style="list-style-type: none"> • Department of Health • Community development federation • DARE • DoPHER • Cochrane Collaboration 			<p>abilities</p> <ul style="list-style-type: none"> • Improved relationships • Improved capacity <p><i>Health related (individual level):</i></p> <ul style="list-style-type: none"> • Health improvements • Health benefits • Increased well-being (emotional, subjective, spiritual) • Promotion of health behaviours • Improved health literacy • Improved health 		

Databases to search	Target population	Independent variable: What is community health champion role?	Outcomes: Impact of CHC role	Processes/ Enabling factors	Document/Type of study/evidence
			<p>related skills</p> <ul style="list-style-type: none"> • Valuing health • Better self-reported health • Better mental health • Better use of health services • Improved quality of life <p>NB: will be direct and indirect outcomes</p>		

Appendix 3. Inclusion and exclusion criteria

	Included	Excluded	Borderline – reviewed again 2nd stage
Type of evidence	<p>Systematic review</p> <p>Literature review</p> <p>Expert evidence review (e.g. World Bank)</p> <p>Practice based review</p> <p>Other evidence review</p>	<p>Evaluation of single programmes/projects</p> <p>Commentary</p> <p>Professional journals</p> <p>No evidence of review process (description of projects only)</p>	<p>Evaluation of large-scale single programmes where appear similar to ATB model and/or on ATB priorities (healthy eating/physical activity/mental health)</p> <p>Policy analysis where relevant</p>
Setting	<p>Community setting</p> <p>Workplace setting</p>	<p>Not community or workplace setting</p> <p>Hospitals and care settings</p> <p>Schools</p>	
Target population	All adults	Children	Young people where outside school setting
Intervention	<p>Empowerment approaches (explicit)</p> <p>CHC role or similar role as part of intervention</p>	No discussion of intervention	Volunteers

Criteria for strength of evidence

Is publication based on a review of evidence?

High-level evidence

Research based evidence (systematic review)

Research based evidence (non-systematic review)

Expert evidence (review)

Practice based evidence (from review of programmes)

Synthesis of evidence from different sources

Lower-level evidence

Practice-based evidence (from more general review of practice)

Research based evidence (single large scale or LT programme)

Research based evidence (single programme – high relevance to ATB)

Criteria for of evidence to ATB

High relevance

UK context

Related to promoting health around

- healthy eating
- physical activity
- mental health
- addressing health inequalities

Uses community health champion/lay health worker approach

Uses community volunteers or activists

Lower relevance

Non-UK

Developing countries

Other health issues

Appendix 4. Community Health Champions Evidence summary -data extraction form

Publication:	
Type of study/evidence:	
Target community & settings	
Definition of roles (summary)	
Roles & activities	
Implementation	(any relevant issues)
Individual level outcomes for community health champion roles	
Individual outcomes for programme participants	
Community level outcomes (social capital; community capacity etc.)	
Costs/economic matters	
Key process issues - Influences on outcomes (enablers, constraints) Ethnicity? Gender? Deprivation?	
Comments on strength of evidence. Evidence quality/hierarchy	
Evaluation issues – any research gaps?	
Comments on relevance of evidence to ATB	
Summary statement of evidence (2-3 lines max)	

Appendix 5. Summary of data extraction of included reviews

Publication	Type of review	No of studies included	Target population & settings	Outcomes - CHCs	Outcomes - individuals	Outcomes - community	Cost-benefits	Summary statement of evidence	Comments on relevance of evidence for Altogether Better
Abbatt (2005) Scaling up health and education workers: Community health workers. DFID.	Synthesis of evidence from different sources.	-	International Review.	✗	✓	✓	✓	The literature reviewed shows that CHWs can have a positive impact on health. However, they require proper training and a supportive health system.	This review had a strong focus on developing countries, but some elements still may be of relevance.
Andrews et al (2004) Use of community health workers in research with ethnic minority women. Journal Of Nursing Scholarship, 36:4, 358-365.	Literature Review (non-systematic review).	24	BME women in US.	✗	✓	✓	✓	Some evidence that CHWs can be effective in increasing access to health services, increasing knowledge, and behaviour change. 9 studies reported positive outcomes in relation to improving access to cancer screening. However searching undertaken for this review was limited in scope.	Potential relevance in relation to addressing health inequalities. Only 1 study focused on other elements of Altogether Better work (physical activity). Not UK based.
Bailey et al (2005) A systematic review of mammography educational interventions for Low-income Women. American Journal of Health Promotion, 20(2), 96-107.	Systematic review.	24 8 on peer educators	Low income or BME women.	-	✓	✗	✗	Review concludes that the most effective program for increasing mammography screening among low-income women uses peer educators as the primary means of delivering the health message. But this conclusion was based on a small number of studies.	Potential relevance in relation to addressing health inequalities. Not UK based.
Brownstein (2007)	Systematic	14	Primary	✗	✓	✗	✗	CHW interventions can have	Many of the studies

Effectiveness of community health workers in the care of people with hypertension. American Journal of Preventive Medicine, 32(5), 435-447.	review.		focus BME populations in US (most commonly African Americans). 4 studies on African-American men.					positive outcomes including improvements in mortality, healthcare utilization, and systems outcomes. Use of CHWs appears to be an efficient way of enhancing treatment and sustaining BP control in targeted ethnically diverse, high-risk populations.	comprising the review focused on poor, urban, minority populations. Potential relevance in relation to addressing health inequalities. Not UK based.
Casiday et al (2008) Volunteering & health: What impact does it really have. Volunteering England	Systematic review.	87	Volunteers in any sector Recipients of volunteering in health care.	✓	✓	✗	✗	Review reported evidence that volunteering can have a range of potential benefits for volunteers. Evidence was also found to suggest that interventions delivered by volunteers have a beneficial effect on the health of service users.	The majority of the studies examined the health impacts of volunteering on volunteers related to volunteering in general, rather than a lay health worker role. Some of the studies reviewed in relation to the potential benefits of volunteering on the health of service users did not involve volunteers in lay health worker role. Therefore, it is unclear the extent to which the benefits reported in the review apply to individuals in a community health champion role.
Corluka et al. (2009) Are vaccination programmes delivered by lay health workers cost-effective? A	Systematic review.	3	2 studies on child immunisation 1 older	✗	✓	✗	✓	The results of the 3 studies in the review found that lay health workers were more cost effective than comparative delivery options.	No UK studies included. 2 of the 3 included studies based in US where there are different costs associated with welfare system.

systematic review. Human Resources for Health. 7:81.			people.					Difficult to draw firm conclusion because of diversity of populations and settings. Studies did not address affordability and sustainability.	
Fleury et al (2009). The role of lay health advisors in cardiovascular risk reduction: A review. Am J Community Psychol (2009) 44:28-42	Systematic review.	20	Most studies related to vulnerable and underserved populations in US.	x	✓	✓	x	LHA interventions targeting cardiovascular risk reduction were found to result in positive outcomes. However, differences in populations targeted, outcomes, interventions & roles make it difficult to draw firm conclusions about the overall effectiveness of LHA interventions	Review included studies using LHA targeting CHD risk reduction primarily in low income & ethnic minority groups. Potential relevance in relation to addressing health inequalities. Not UK based.
Foster (2007) Self management education programmes by lay leaders for people with chronic conditions. (Cochrane Review)	Systematic review.	17	13 studies took place in the community, 3 in primary care and 1 in a hospital outpatient department. Most of the participants were middle to older aged females.	x	✓	x	✓	Evidence found of small, short-term improvements in self-efficacy, self-rated health, cognitive symptom management, & exercise frequency. No evidence to suggest that lay-led interventions improve psychological health, symptoms or health-related quality of life, or significantly alter healthcare use.	Review examined outcomes related to mental health & physical activity/exercise. Included 4 UK based studies.
Lewin et al (2005) Lay health workers in	Systematic	43	International	x	✓	x	✓	LHWs show some benefits in promoting immunisation	Around 50% of the included studies involved low income

primary and community health care (Cochrane Review).	review.		review.					uptake and improving outcomes. There is also evidence that they may be effective in promoting the uptake of breastfeeding.	or minority populations. Potential relevance in relation to addressing health inequalities. Some UK based studies.
Lewin et al (2006) Lay health workers in primary and community health care: A systematic review of trials (Cochrane Review).	Systematic review. Update of (Lewin et al, 2005)	48 25 from 2005 review.	International review. Focus on maternal and child health high burden diseases.	✘	✓	✘	✘	Overall, this review highlighted evidence of moderate to high quality of the effectiveness of LHWs in promoting immunisation uptake in children; promoting breastfeeding; reducing mortality and morbidity from common health conditions in children; when compared to usual care. For other health issues, evidence is insufficient to draw conclusions regarding effectiveness.	Many of the interventions evaluated in this review were directed at low income groups (37 of the 48 studies), even where the studies were conducted in high income countries. Potential relevance in relation to addressing health inequalities.
Lewin et al (2010) Lay health workers in primary and community health care for maternal and child health and the management of infectious diseases (Cochrane Review)	Systematic review. Update of (Lewin et al, 2005).	82 21 from original review.	International review Two thirds of included studies from high income countries.	✘	✓	✘	✘	Overall findings support the Lewin et al. 2005 review. LHWs effective at promoting immunisation uptake; promoting breastfeeding; reducing child mortality and morbidity when compared to usual care.	This review was an update of the 2005 review but with a focus on maternal & child health and infectious diseases. A later review will cover interventions for chronic diseases.
Medley et al (2009) Effectiveness of peer education interventions for HIV prevention in	Systematic review.	30	Developing countries	✘	✓	✘	✘	Despite generally weak study designs, combined data from the studies showed an overall positive effect of peer	Some studies in the review focused on populations that are potentially hard to reach. Potential relevance in

developing countries: a systematic review and meta analysis. AIDS Education and Prevention 21(3): 181-206.								education on behavioural outcomes including increased HIV knowledge, reduced equipment sharing and increased condom use.	relation to addressing health inequalities. All studies were conducted in developing countries. No comparable review has been undertaken in developed countries.
Nemcek et al (2005) State of evaluation: Community health workers. Public Health Nursing, 20 (4) 260-270.	Literature review (non-systematic review).	10	US studies High risk and under-served populations.	x	✓	x	✓	No conclusions regarding effectiveness.	Useful review of roles & activities.
Neuberger (2008) Volunteering in the public services: Health & social care.	Expert evidence review.	Not reported. Consulted with over 1,000 volunteers and organisations.	Not reported.	✓	x	x	✓	No conclusions regarding effectiveness.	Focus is on volunteers in UK health & social care.
Norris et al (2006) Effectiveness of community health workers in the care of persons with diabetes. Diabetic Medicine, 23, 544-556.	Systematic review.	18	BME populations in 16 of the 18 studies.	x	✓	x	x	There are some data to support CHWs effectiveness in improving knowledge levels & satisfaction, but data on health, quality-of-life and economic outcomes are sparse.	All but 2 of the studies comprising the review focused on minority populations. Potential relevance in relation to addressing health inequalities.

									1 study UK based.
Perez-Escamilla et al (2008) Impact of peer nutrition education on dietary behaviors and health outcomes among Latinos: A systematic literature review. Journal of Nutrition Education and Behavior 40(4): 208-25.	Systematic review.	22	Latino population in US.	x	✓	x	✓	Review reports evidence that peer nutrition education has a positive influence on diabetes self management and breastfeeding outcomes, as well as on general nutrition knowledge and dietary intake behaviours among Latinos in the United States.	Potential relevance in relation to addressing health inequalities. Not UK based.
Rhodes et al (2007) Lay health advisor interventions among Hispanics/Latinos. American Journal of Preventive Medicine, 33(5), 418-427.	Qualitative systematic review.	37	Hispanic/ Latino communities in US.	x	✓	x	x	Some evidence was found that LHA interventions can be effective in promoting health/preventing disease amongst US Hispanic/Latino communities, but a general paucity of studies means a stronger empirical basis is needed.	Potential relevance in relation to addressing health inequalities. Not UK based. Only 1 study focused explicitly on physical activity. Some of the studies focused on cardiovascular risk factors, diet related cancers, and those on general health promotion & disease prevention, could be relevant in relation to healthy eating and physical activity.
Swainston (2008) The effectiveness of community engagement approaches and methods for health	Systematic review.	21 Peer educators	International review (not developing countries).	✓	✓	x	x	Review found evidence that the use of various forms of community engagement methods/ approaches in the planning, design and/or delivery of primary health	Studies often focused on minority, underserved & hard to reach groups. Potential relevance in

promotion interventions. Rapid review		- Community champions 1	Various groups.					promotion interventions may contribute to positive outcome in relation to health & well-being.	relation to addressing health inequalities. Only 4 studies were UK based.
Swider (2002) Outcome effectiveness of community health workers: An integrative literature review. Public health Nursing, 19(1), 11-20.	Literature review (non-systematic review).	19	Low-income, underserved women & children, high-risk and BME populations in US.	x	✓	x	✓	CHWs most effective in the area of increasing access to care, particularly in underserved populations. Data on their effectiveness in terms of increased health knowledge, improved health status outcomes & behaviour changes were inconclusive.	Potential relevance in relation to addressing health inequalities. Not UK based.
Visram & Drinkwater (2005) Health trainers: a review of the evidence.	Synthesis of evidence from different sources (practice-based).	- Data from 45 projects.	-	✓	✓	✓	x	Relatively few details provided about evaluation outcomes.	Focused on UK and CHC/lay health approaches. The review focused mainly on describing projects/process issues.
World Health Organization (2007) Community health workers: What do we know about them? WHO.	Synthesis of evidence from different sources.	-	International review.	x	✓	x	✓	CHW programmes can be effective in improving access to healthcare and health outcomes. For CHWs to be able to make an effective contribution, they need to be carefully selected, appropriately trained and adequately and continuously	Appears to be oriented more towards CHWs in developing countries, but elements could be potentially be useful.

								supported.	
Other studies included									
People in Public Health (forthcoming).	Systematic scoping study.	224	International review with focus on UK.	✓	✗	✗	✗	N/A	Scoping study focused on mapping literature and process issues.
NICE SECRETARIAT (2007) Cost effectiveness vignettes for community engagement.	Cost-benefit case studies.	3	UK based.	✗	✓	✗	✓	One case study found that volunteer peer educators were more effective and less costly than experienced paid leaders but cost-effectiveness was dependent on how long behaviour changes lasted.	Provides most detailed work on economic analysis.



www.altogetherbetter.org.uk

South J., Raine G. and White J. (2010)
Community Health Champions: Evidence Review.
Centre for Health Promotion Research, Leeds Metropolitan University.