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**Community engagement to reduce inequalities in health: protocol for a  
systematic review**

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# Community engagement to reduce inequalities in health: protocol for a systematic review

## 1. Aims/Objectives:

The overarching aim of this project is to identify community engagement approaches that are effective in reducing inequalities in health, and to describe the approaches in terms of the circumstances in which they 'work' and the costs associated with their implementation. We will do this by achieving the following objectives:

1. Consulting with relevant stakeholders in order to ensure that our study is based on their perspectives and experiences.
2. Identifying a set of primary research studies that evaluate the effectiveness of interventions with a community engagement component in terms of their impacts on inequalities in health.
3. Making contact with researchers in the field who have investigated the issues relevant to this study in order to enhance the dataset we draw upon.
4. Describing and synthesising the data we identify.
5. Drawing conclusions, verifying our findings with stakeholders, and writing up and disseminating our results.

## **Review questions**

Our overarching review question is:

*Can specific approaches to community engagement help to reduce inequalities in health; for whom, under what circumstances, and with what resources?*

In order to answer this question, the following, more focused research questions (RQ) will form the basis of our enquiry:

- RQ1. What are the range of models and approaches underpinning community engagement?
- RQ2. What are the mechanisms and contexts through which communities are engaged?
- RQ3. Which approaches to community engagement are associated with improved health outcomes among disadvantaged groups? How do these approaches lead to improved outcomes?
- RQ4. Which approaches to community engagement are associated with reductions in inequalities in health? How do these approaches lead to reductions in health inequalities?
- RQ5. Which types of intervention work best when communities are engaged?
- RQ6. Is community engagement associated with better outcomes for some groups when compared to others? (In particular, does it work better or less well for children and young people?)
- RQ7. How do targeted and universal interventions compare in terms of community engagement and their impact on inequalities?
- RQ8. What are the resource implications of effective approaches to community engagement?
- RQ9. Are better outcomes simply the result of increased resources, or are some approaches to community engagement potentially more cost effective than others?

RQ1 and RQ2 will be addressed through a narrative synthesis of the models and mechanisms reported in the available literature, RQ3 to RQ9 will be addressed through narrative and quantitative (where appropriate) syntheses of the evidence, and RQ8 and RQ9 will be further explored through cost-effectiveness analyses.

## 2. Background:

### ***Community engagement in health care in the UK***

Historically, interventions and actions to promote health were driven by professionals with little or no input from the targeted populations (Harden & Oliver, 2001). More recently, 'community engagement' has become central to guidance and national strategy for promoting public health (e.g., Department of Health, 2008). Community engagement has been broadly defined as "Involving communities in decision-making and in the planning, design, governance and delivery of services" (Swainston & Summerbell, 2008, p 11). Community engagement activities can take many forms; examples of some initiatives in the UK include<sup>1</sup>:

- service user networks,
- healthcare forums,
- volunteering,
- courses delivered by trained peers (e.g., Dudley Primary Care Trust's 'Expert Patient Programme'), and
- interactive websites that enable the submission of views and opinions on various surveys, polls and public consultations.

Community engagement can be provided alone or in combination with other initiatives. In studies where community engagement is provided as the sole intervention, evidence of effectiveness can be determined because there is a **direct** link between community engagement and the outcomes being measured. In contrast, **indirect** community engagement initiatives are multi-faceted, including community engagement as one of a number of intervention features. In such cases, an association between the multi-faceted initiative and population outcomes may be seen, but it is not possible to discern with confidence how the community engagement aspect of the intervention may have contributed to this effect (Popay et al., 2007: p. 1-2).

Community engagement can also be seen to operate on different levels, depending on the degree to which community engagement occurs. Wilcox et al (1999) describe five levels of increasing community engagement:

1. information-giving, in which people are merely told what is planned;
2. consultation, where people are offered some options and ideas, and organizers listen to feedback, but do not allow new ideas;
3. deciding together, in which organizers encourage additional options and ideas, and provide opportunities for joint decision-making;
4. acting together, to not only decide together on what is best, but forming a partnership to carry it out; and
5. supporting independent community interests, where local groups or organizations are offered funds, advice or other support to develop their own agendas within guidelines.

A more condensed scale exists for involvement in health research: consultation, collaboration, and community control, with information provision not included as a sufficient level of engagement (Boote et al 2002).

There is strong policy support for involving people in developing public services and evaluation (e.g., the creation of the Health Inequalities National Support Team, Department of Health, 2011). Various national publications, including *Shifting the Balance of Power* (Department of Health, 2002); *Commissioning a Patient-led National Health Service* (Department of Health, 2005); the *Our Health, Our Care, Our Say* White Paper (Department of

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<sup>1</sup> Examples from Dudley Primary Care Trust. Dudley PCT website <http://www.nhsdudley.nhs.uk/sites/your-nhs-community-engagement/index.asp?id=9070> (accessed 18 May 2011).

Health January 2006); *A Stronger Local Voice* (Department of Health July 2006); and *Health reform in England: update and commissioning framework* (Department of Health July 2006) have provided a framework for the engagement of the public in the planning, design, and delivery of public health services. Primary care trusts (PCTs) throughout the country have community engagement and public and patient involvement strategies.

Given the increasing policy support for community engagement, it is critical to consider whether such strategies are effective and under what circumstances. The following section outlines the state of research on community engagement in health care.

### ***The evidence base for community engagement***

There is some evidence that public involvement in UK health services can be effective (Daykin et al., 2007). Community engagement is thought to improve health via its impact on the development and delivery of more appropriate and accessible interventions, as well as a direct positive impact on social cohesion and individual self-esteem and self-efficacy for those who are engaged (Popay, 2006).

Community involvement can be seen as a goal in itself as it encourages public accountability and transparency (Nilsen et al., 2006; Wallerstein, 2006). Through public involvement, communities can have the potential to promote health from the bottom up (MacDonald & Davies, 1998). Listening to, hearing, and acting upon the views of the community—particularly those from socially and economically disadvantaged groups—can both empower communities and lead to the co-production and implementation of interventions that are more likely to be feasible, acceptable and ultimately effective in improving health (Popay et al., 1996, 2007). Importantly, community engagement can “give a voice to the voiceless” (Whitehead & Dahlgren 2006). People with the greatest health needs are often socially excluded and disengaged from services, and their circumstances can make it difficult for organisations to address their needs appropriately. Opportunities to work with their peers via community engagement initiatives may improve the social inclusion of marginalised people.

While there is a recognised literature recommending community engagement (Popay et al., 2007; Swainston & Summerbell, 2008), there is much uncertainty about how communities might be best engaged; what the results of such engagements are; and how the results should be recorded, analysed, and used (Graham, 2009; Popay et al., 2007; Sheridan et al., 2010). The theory behind recommendations for community engagement is often not linked to empirical evidence.

One of the problems with the current evidence base is a lack of robust synthesis of the research. This makes it difficult to assess the empirical basis for claims about community engagement, as research is scattered across disciplinary and topic-focused boundaries and not pulled together in a coherent way. The few syntheses that have been conducted are helpful, though have acknowledged limitations, having been completed rapidly from relatively small datasets (Popay et al., 2007; Swainston & Summerbell, 2008). Limited synthesis in this area also makes it difficult to discern whether community engagement might be an appropriate strategy in any specific situation, as the available evidence is based only on a handful of studies (e.g., Popay et al., 2007, p. 62).

The same lack of high quality evidence is apparent when looking at the cost effectiveness of different community engagement strategies, particularly with respect to the UK context. Guidance on community engagement produced by NICE (2008) highlighted a dearth of information in this regard. A review of economic studies on community engagement for health promotion found eight studies, none of which focused specifically on the cost effectiveness of the community engagement component (Mason et al., 2006). A companion systematic review of the economic evidence for community engagement and development strategies to address the wider determinants of health also failed to identify any studies that reported the costs and

health benefits of a community engagement approach relative to a comparator (Mason et al., 2007); some information on the resources required to deliver interventions was, however, reported in twenty studies. A final output of this work for NICE was economic modelling of some community engagement strategies to look at the potential cost effectiveness of community engagement strategies (Carr-Hill & Street, 2008). However, this was not included in the final guidance because of a lack of robust information on costs and effects; only two vignettes on the role of trained peer educators and community engagement as a way of gaining support for flood defences were included (see also Fischer, 2007).

In summary, the evidence base supporting the effectiveness and cost-effectiveness of community engagement strategies is fragmented and of uncertain quality. The review described in this protocol aims to make sense of the research literature through a map of the available research and analyses of the relevant evidence.

A particular focus of the review will be placed on the ways in which community engagement can help to reduce health inequalities. The rationale for focusing on health inequalities is presented in the following section.

### ***The challenge of health inequalities in the UK***

The quality of health varies from person to person as a result of biological, environmental, social, economic, and lifestyle factors. The term ‘health inequalities’ refers to gaps in the quality of the health of different groups of people based on differences in social, economic, and environmental conditions (Marmot, 2010). Health inequalities are evident where disadvantaged groups (e.g., people with low socioeconomic status, socially excluded people) tend to have poorer health than more affluent members of society. Importantly, health inequalities refer to differences in modifiable health determinants, such as housing, employment, education, income, access to public services, and personal behaviour (e.g., use of tobacco) (Greater London Authority Act, 2007), as opposed to fixed determinants such as age, sex, and genetics<sup>2</sup>. The fact that many health determinants are modifiable lies at the very heart of all health inequalities strategies—if they are modifiable, then something can be done to improve them. By improving modifiable determinants of health, it is hoped that health inequalities can be reduced and health outcomes enhanced.

Health outcomes that are typically considered when examining health inequalities include life expectancy/mortality rates, disability-free life expectancy, and limiting long-term illness. Other health outcomes and health-related indicators can include (but are not limited to) low birth weight, infant mortality, hospital admissions, teenage pregnancy, and uptake of health services. In the UK, taking into account variations between local authorities, the average male in the lowest deprivation decile (i.e., the poorest males) will have a life expectancy that is 6.7 years shorter than the average male in the highest deprivation decile (i.e., the most affluent)<sup>3</sup>. The poorest females will have a life expectancy that is 4.7 years shorter than the most affluent females. When looking at specific local authorities, some of these differences become even larger. For example, Westminster local authority has the widest within-area inequality gap for males, with almost 17 years longer life expectancy for the most affluent males compared to the poorest (London Health Observatory, 2011). The widest gap for females is in Halton and Newcastle upon Tyne at just over 11 years difference in life expectancy (LHO, 2011). The average difference in disability-free life expectancy in England—regardless of area or gender, is 17 years. Clearly the life expectancy and quality of health across the lifespan are much lower, on average, for the most deprived than the most affluent.

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<sup>2</sup> However, social inequalities are often associated with fixed determinants (age, sex, and genetics), and so these fixed factors might have indirect effects on health status.

<sup>3</sup> Figures calculated by Alison O’Mara-Eves using multilevel modelling of data from the London Health Observatory available at [http://www.lho.org.uk/LHO\\_Topics/national\\_lead\\_areas/marmot/marmotindicators.aspx](http://www.lho.org.uk/LHO_Topics/national_lead_areas/marmot/marmotindicators.aspx).

There is no dispute in the UK that health inequalities exist (Marmot, 2010), and as a result, health inequalities have been an increasing focus of policy interest. For instance, in 2004, tackling health inequalities was one of the aims underpinning the eleven standards promoted within the National Service Framework (NSF) (Department of Health 2004). More recently, the Marmot Review of health inequalities, *'Fair Society, Healthy Lives'*, has afforded even greater attention to the issue of health inequalities (with a particular focus on England). The Review identified the evidence relating to health inequalities in England; developed actionable recommendations for practice; produced guidance on possible objectives and measures of inequalities; and developed a starting point for a post-2010 health inequalities strategy. The key recommendations made in the report to address health inequalities fall under the following six broad themes:

- giving children the best start in life,
- enabling all children, young people and adults to maximise their capabilities,
- creating fair employment and good work for all,
- ensuring a healthy standard of living for all,
- developing healthy and sustainable places and communities, and
- strengthening the role and impact of health prevention.

The Review has received broadly positive responses from both public sector (e.g., NICE) and user and community groups (e.g., Citizens Advice Bureau). Key to the Review, and to the ensuing responses, is the belief that reducing health inequalities is a critical social and political issue of our generation.

Reducing health inequalities is often referred to as 'narrowing the gap' or 'reducing the social gradient'. The social gradient of health suggests that the lower a person's social position, the worse his or her health. Understanding whether the gradient has reduced involves analysing the gradient over time. Recent analyses released by the Office of National Statistics (ONS, 2011) suggest that, although the quality of health in the population has improved across all social classes from 1982 to 2006, differences in life expectancy between the least and most deprived social classes has increased during that period. That is, improvements in life expectancy have risen at a higher rate for more affluent people than the most deprived during that 25 year timeframe—this finding was particularly true for males.

Considering the social gradient over time raises questions about how best to reduce inequalities. As the Marmot Review emphasised,

It is tempting to focus limited resources on those in most need. But... we are all in need – all of us beneath the very best-off. If the focus were on the very bottom and social action were successful in improving the plight of the worst-off, what would happen to those just above the bottom, or at the median, who have worse health than those above them? All must be included in actions to create a fairer society (Marmot Review, 2010, p. 16).

This leads one to conclude that, to reduce the social gradient of health, we need to improve the plight of the most disadvantaged (through targeted interventions) as well as improve the overall health of the population (through universal interventions). The issue of targeted versus universal approaches to health has received much consideration from the National Institute for Health and Clinical Excellence (NICE). In 2002, NICE invited 30 members of the public throughout the UK to join a "Citizens Council". According to NICE (2011), "The Citizens Council was established to ensure that the views of those who fund the NHS - the public - are incorporated into the decision-making process". Still in existence today, the Council meets twice a year for three days at a time, and has produced 13 reports to date. NICE then issues a formal response to the recommendations made in the report and any actions that they will

take as a consequence. At one meeting in 2006, the Council was asked to discuss how health inequalities should be taken into account when developing national guidance (NICE Citizens Council, 2007). According to the report of the meeting, they were asked which of the following strategies NICE should follow:

- “whether to issue guidance that concentrates resources on improving the health of the whole population (which may mean improvement for all groups) even if there is a risk of widening the gap between the socio-economic groups;
- or whether or to issue guidance that concentrates resources on trying to improve the health of the most disadvantaged members of our society, thus narrowing the gap between the least and most disadvantaged, even if this has only a modest impact on the health of the population as a whole. (NICE Citizens Council, 2007, p. 4).”

The Citizens Council was presented with information from various experts (university academics, service providers, etc.), they engaged in discussions, and they participated in practical exercises. On the final day, they were asked to vote on which of the two broad strategies seemed more appropriate. They were unable to reach unanimous agreement but concluded that

despite our many and varied reservations, a majority of the Citizens Council would look with sympathy on NICE strategies intended not only to improve public health for all, but to do so in a way that offers particular benefit to the most disadvantaged (NICE Citizens Council, 2007, p. 5).

The Marmot Review (2010) referred to this approach as ‘proportionate universalism’. Whilst the NICE Citizens Council is an excellent demonstration of the way in which the public can be engaged in the development of national health guidance, the conclusions of their 2007 report also emphasises the difficulty that policymakers and service providers face when deciding how to address health inequalities. One possibility for addressing the social gradient, discussed below, is through engaging the community in service design and delivery.

### ***Reducing health inequalities through community engagement initiatives***

One of the priority objectives advocated in the Marmot Review (2010) is to “Improve community capital and reduce social isolation across the social gradient” (p. 126). By improving social capital and reducing isolation, the social inequalities that underpin health inequalities could be improved—which would have a flow-on effect to health outcomes. The Review summarised evidence that suggested that interventions to reduce social isolation are more effective when communities and individuals are included in the design of the intervention.

Other researchers have advocated community engagement and participation as a strategy to reduce health inequalities (e.g., Rifkin et al., 2000; Wallerstein, 2006), yet it is difficult to find empirical evidence to support this. Like the Marmot Review, an international literature review for the World Health Organisation found that participatory empowerment (a facet of community engagement) has been linked to positive outcomes such as social capital and neighbourhood cohesion for socially excluded groups (Wallerstein, 2006). However, the author noted that links to health outcomes are more difficult to identify. The few examples of the effect of participatory empowerment on health outcomes identified in the review were mostly in developing countries, which have limited transferability to the UK context.

Similarly, Popay et al.’s (2007) rapid review found some evidence for improvements in social capital, social cohesion, and empowerment as a result of community engagement, but little evidence of improvements for mortality, morbidity/health behaviours, or impact on inequalities. The authors noted that the small number of studies addressing the relationship, plus problems

with the designs of the primary studies (e.g., the time to follow-up in the mortality studies was too short to expect any change), were the reasons for not observing a relationship.

Rather than searching for evidence of community engagement effectiveness, Arblaster et al. (1996) searched for evaluations of health service interventions designed to reduce health inequalities. They included 94 studies in their systematic review, and found that successful interventions often had one or more of the following characteristics:

- systematic and intensive approaches to delivering effective health care;
- improvement in access and prompts to encourage the use of services;
- strategies employing a combination of interventions and those involving a multi-disciplinary approach;
- ensuring interventions address the expressed or identified needs of the target population; and
- the involvement of peers in the delivery of interventions.

The last two recommendations echo the general principles underlying community engagement. Although these characteristics alone were not sufficient for success, it is clear that community engagement is a promising approach to reducing health inequalities.

In summary, it seems that community engagement is likely to have a positive effect on social inequalities (Marmot, 2010; Popay et al., 2007; Wallerstein, 2006), which might in turn reduce health inequalities (Marmot, 2010), although the direct effect on health inequalities is still uncertain (Popay et al., 2007; Wallerstein, 2006). The present review will attempt to examine both direct and indirect pathways to reducing health inequalities through community engagement approaches.

### ***Conceptual framework for this research***

The commissioning brief for this project defined community engagement as 'approaches to involve communities in decisions that affect them'. Mason et al. (2008) have defined community engagement for health promotion as engaging groups of people who share geographies, interests or identities with the aim of improving health and/or reducing health inequalities; these are the 'groups with distinct health needs and/ or demonstrable health inequalities' of the commissioning brief. The commissioning brief refers to engagement with any organisations that can provide activities for improving public health. Some non-NHS organisations may be directly health-related, such as sports clubs or food retailers. A Healthy Public Policy approach recognises that organisations with other aims, such as public transport, workplaces or schools, may also consider their influence on health. For the purposes of this systematic review, we will define community engagement as a direct or indirect process of involving communities in decision-making and/or in the planning, design, governance and delivery of services, using methods of consultation, collaboration, and/or community control. Information-giving was not seen as an empowering type of engagement.

Involving people in decisions that affect them is justified both by ethical and political arguments and by instrumental arguments asserting that involvement will lead to decisions more relevant to the people being served. Community members are motivated to participate for their own personal material or health benefits, for the gains anticipated for their community, or by their own ideologies (Darbas et al., 2007).

There are a broad range of community engagement models for engaging people in developing strategy or implementing services. Key differences in these models include who initiates the engagement (public service organisations or communities); the degree to which people are engaged (consulted, in collaborative partnerships, or in control); and whether it is individuals or organised community members who are engaged (Hashagen, 2002; Oliver et al., 2004).



Communities may be engaged in consultations, group support and advocacy, service development, controlling local facilities and human resources, and community tier government; any such engagement may be supported by education and networking (Hashagen, 2002). Success depends on sound implementation of both the community engagement and any interventions resulting from this engagement.

The impact of community engagement can be considered at the level of individuals (personal development), communities (social capital), services (development, delivery, access) and health (population health, health of disadvantaged groups, health inequalities (extended from Slater et al 2008). Ideally economic analyses would take into account costs incurred by community engagement, subsequent service development, and the potential costs that might be incurred/costs saved as a result of an increased uptake of services that improve health. These are all issues we propose to explore in our analyses, and their relationships are summarised in Figure 1.

Figure 1: Conceptual framework



### 3. Need:

Previous work has shown that if communities are 'signed up' to an intervention or programme that they are receiving, people are more likely to participate and that better outcomes can result. Community engagement is likely to have a positive effect on social inequalities (Marmot, 2010; Popay et al., 2007; Wallerstein, 2006), which might in turn reduce health inequalities (Marmot, 2010), although the direct effect on health inequalities is still uncertain (Popay et al., 2007; Wallerstein, 2006). However, without a synthesised evidence base, it is

not clear whether specific approaches to community engagement help to reduce inequalities in health; for whom, under what circumstances, and with what resources. As it would be difficult and expensive to conduct a very large research project that tests multiple approaches to community engagement in different topic areas with different populations, we propose to conduct a synthesis of existing evidence and thereby make use of the investment already made in many published research studies.

Systematic reviews pull together all the available research on a given topic. Through rigorous, structured approaches to identifying, selecting, and analysing the evidence, systematic reviews reduce the biases inherent in more traditional reviews of the literature. They are valuable because they enable us to 'take stock'; when based on the entirety of evidence in a given field they are able to tell us what we do, and do not, know. They are efficient, because they valorise previous investments in research and, by virtue of the consistent way they treat included studies, they are able to 'recast' our view of research in a field, challenging existing assumptions and suggesting new areas for investigation. They also facilitate generalisability by looking for knowledge and findings across individual (and possibly atypical) primary studies.

Synthesising research systematically is recognised internationally as being a valuable and necessary activity for helping us to make sense of existing research and ensure that recommendations for policy and practice are based on the best, and most comprehensive view, of the available evidence. However, there is a clear gap in evidence synthesis in the case of community engagement in general, and its impact on health inequalities in particular. There is currently no synthesis of research that is able to identify specific approaches to community engagement that are able to reduce inequalities in health – and what are the resource implications of adopting them. Given the current concerns about health inequalities in the UK (Marmot, 2010) and the policy emphasis on community engagement as a vehicle for facilitating change (e.g., Mayor of London, 2010), it is timely to explore what works in engaging the community to reduce health inequalities.

#### **4. Methods:**

##### *a. Setting*

The systematic review will include studies of interventions conducted in community settings.

##### *a. Design*

The project is a systematic review of known existing research. There are two components to the review:

1. A map of the literature that will describe the scale and range of CE interventions. This will serve to address RQs 1 and 2.
2. Analyses of a final selection of studies that will be determined by our advisory groups. The analyses will address RQs 3-9.

In order to focus our activities on our analyses, rather than searching exhaustively for primary studies, we will compile our data set for analysis from specially-selected registers of primary studies and systematic reviews. These registers have been populated using rigorous systematic review search methods. In order to compile a data set rich in contextual detail, we will also contact authors and intervention implementers to supplement the information available in published form.

We anticipate that a broad range of research will be relevant to answering our review questions and thus propose to include two types of research: outcome and process evaluations. In the process of identifying the evidence to be synthesised, and prior to conducting the synthesis itself, we will describe the evidence with respect to the range of models and approaches underpinning community engagement (RQ1) and the mechanisms and contexts through which communities are engaged (RQ2). This is the mapping component of the review.

In the analysis component (RQs 3-7), we aim to analyse many evaluations of community engagement interventions; identify approaches that are most often associated with reductions in inequalities in health; and pay particular attention to the context of the research and the mechanisms by which communities are engaged and the ways this is thought to impact on intervention effectiveness. After we have identified a range of effective approaches, we will consider their relative resource requirements in order to draw conclusions as to their potential cost implications for different stakeholders (RQs 8 and 9). The methods selected for analysis are driven by our review questions and comprise:

- i. theoretical narrative synthesis;
- ii. quantitative synthesis (if data permit); and
- iii. economic analysis.

#### *b. Data collection*

Searching such a broad topic raises particular challenges. Approaches to community engagement cut across many disciplines, topic areas and outcome domains including, for example, housing, transport, social inclusion, accident prevention and substance abuse (Popay et al., 2007). Additionally, searching broadly requires the location and screening of many reports in order to identify a much smaller amount of research evidence that is specifically relevant. This can make exhaustive searching costly and time-consuming. Given these challenges, we have identified two practical strategies for identifying relevant studies. First, we will make use of systematic searches that have already been carried out for other reviews, using the studies identified by existing systematic reviews. These reviews will be identified through searching various websites and databases that devoted to systematic reviews. Second, we will use a database of studies in health promotion and public health that the EPPI-Centre has built up over many years as a result of carrying out systematic reviews (known as TRoPHI). The studies in this database are the product of systematic searches and have already been systematically classified and outcome data calculated; they thus represent a valuable 'short cut' to evidence. Both approaches to searching are detailed below. The search syntax that will be used in the search process is presented in the Appendix.

#### **Identifying systematic reviews**

We will search a range of registers, websites, and databases for systematic reviews that discuss how some or all of their included studies contain interventions which utilise community engagement. The reviews will be used to identify included primary studies that are relevant to the scope of this project; the systematic reviews themselves will not be included in the synthesis in this project (see section on "Evidence selection").

The systematic review registers, websites, and databases that we will search are:

1. *Database of promoting health effectiveness reviews (DoPHER)*. DoPHER is

developed and maintained by the EPPI-Centre. It has focussed coverage of systematic and non-systematic reviews of effectiveness in health promotion and public health worldwide. It currently contains details of over 2,500 reviews of health promotion and public health effectiveness. All reviews are assessed and coded for specific characteristics of health focus, population group and quality<sup>4</sup>.

2. *Cochrane database of systematic reviews (CDSR)*. The CDSR includes all Cochrane Reviews (and protocols) prepared by Cochrane Review Groups in The Cochrane Collaboration. As of Issue 5, 2011, the CDSR includes 6641 articles: 4622 reviews; and 2019 protocols<sup>5</sup>.
3. *Database of abstracts of reviews of effects (DARE)*. DARE is developed and maintained by the Centre for Reviews and Dissemination (CRD), and currently contains over 21,000 systematic reviews. It is focused primarily on systematic reviews that evaluate the effects of health care interventions and the delivery and organisation of health services. The database also includes reviews of the wider determinants of health such as housing, transport, and social care where these impact directly on health, or have the potential to impact on health<sup>6</sup>.
4. *Campbell Library*. The Campbell Collaboration's library of systematic reviews includes reviews and protocols prepared by Campbell review groups under any of the six coordinating group themes: crime and justice, education, international development, methods, social welfare, and review users.<sup>7</sup>
5. NIHR Health Technology Assessment (HTA) programme website. The HTA programme produces research about the effectiveness of different healthcare treatments and tests for those who use, manage and provide care in the NHS. The HTA website houses all the reviews published through the HTA programme in the HTA journal series and holds in excess of 550 titles.<sup>8</sup>
6. Health Technology Assessment (HTA) database hosted by CRD. This database currently holds over 10,000 summaries of completed and ongoing health technology assessments from around the world. Database content is supplied by the 52 members of the International Network of Agencies for Health Technology Assessment (INAHTA) and 20 other HTA organisations worldwide<sup>9</sup>.

### **Identifying primary research through TRoPHI and NHS EED**

Searches of the systematic reviews resources will be supplemented by searches of the *Trials Register of Promoting Health Interventions (TRoPHI)* database and the *NHS Economic Evaluation Database (NHS EED)*.

TRoPHI has focussed coverage of trials of interventions in health promotion and public health worldwide. It covers both randomised and non-randomised controlled trials and currently contains details of over 4,500 trials and is updated four times a year.<sup>10</sup> This source will be searched to ensure that relevant trials published outside of the timeframe or scope of the reviews identified in the review databases listed above are detected. All the studies were in systematic reviews carried out by the EPPI-Centre and other collaborators including the Cochrane Collaboration between (1996 and 2009) in the following areas: sexual health, workplace health promotion, peer delivered health promotion, incentive-based interventions, young people, pregnancy and social exclusion, smoking cessation in pregnancy, and the promotion of mental health, physical activity and healthy eating.

Part of the TRoPHI dataset was used in a comparison of randomised and non-randomised

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<sup>4</sup> <http://eppi.ioe.ac.uk/webdatabases/Intro.aspx?ID=2>

<sup>5</sup> <http://www.thecochranelibrary.com/view/0/AboutTheCochraneLibrary.html#CDSR>

<sup>6</sup> <http://www.crd.york.ac.uk/CMS2Web/AboutDare.asp>

<sup>7</sup> <http://www.campbellcollaboration.org/library.php>

<sup>8</sup> <http://www.hta.ac.uk/project/htapubs.asp>

<sup>9</sup> <http://www.crd.york.ac.uk/crdweb/AboutHTA.asp>

<sup>10</sup> <http://eppi.ioe.ac.uk/webdatabases/Intro.aspx?ID=5>

trials (Oliver et al 2010), though we propose to add additional studies from reviews that were carried out since this study. The approximately 300 studies in this dataset have already been classified using one of two data collection tools that capture detailed information about their methodology, participants, planning and process measures (if any), intervention and outcomes. We will need to code for their strategies of community engagement (where present) in addition to this, but the presence of this database means that we are able to accomplish far more with the resources requested than would otherwise be possible.

NHS EED includes records of economic evaluations of health care interventions, including cost-benefit analyses, cost-utility analyses, and cost-effectiveness analyses. the database currently includes over 11,000 economic evaluations<sup>11</sup>. The database is maintained through weekly literature searches that are conducted by CRD.

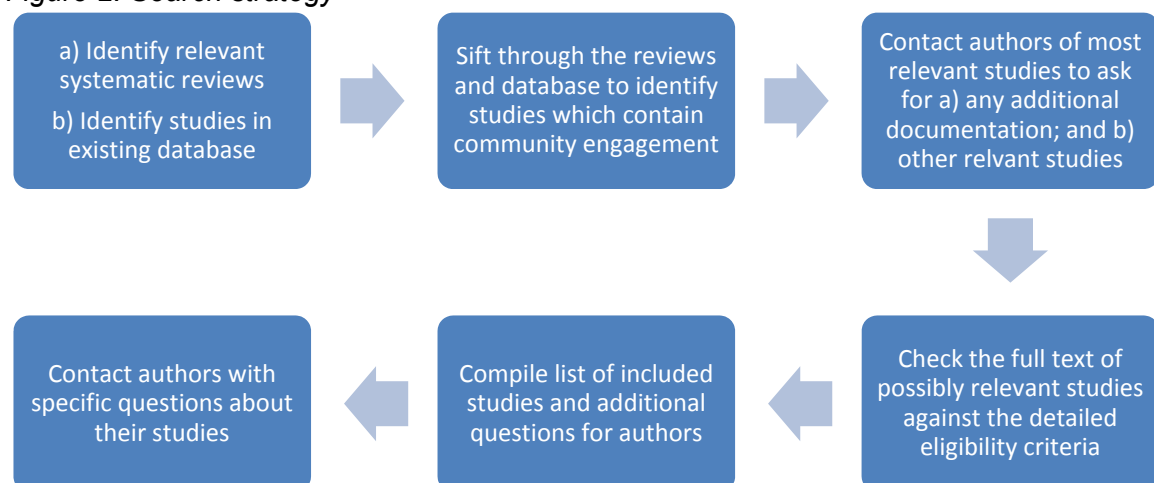
### **Other search sources**

To further ensure wide coverage of the evidence base, we will check the bibliographies of the rapid evidence assessments conducted to support the National Institute for Health and Clinical Excellence's 2008 Public Health Guidance 'Community Engagement to Improve Health' (NICE, 2008).

The final component in our search strategy is contact with authors and intervention implementers. We will contact authors of key included studies to ask them if they know of any other studies of interventions utilising community engagement (preferably including an analysis which examines inequalities in some way). As part of this process, we will also ask whether they would be willing to supply additional information about the study which we have included. In particular, we anticipate that we may need further information concerning resource use and costs of community engagement actions. A questionnaire will be developed on resource use and costs incurred in the implementation of community engagement strategies. This questionnaire would also provide an opportunity to explore additional resources required to adapt interventions to different contexts from those where they originally implemented.

At the end of the above process, summarised in Figure 2, we will have a dataset of primary studies which we are able to classify and interrogate according to the structure set out in our conceptual framework: i.e. *who* is engaging, *how*, *why*, *the dimension(s) of engagement*, and the *outcomes* assessed.

*Figure 2: Search strategy*



<sup>11</sup> <http://www.crd.york.ac.uk/crdweb/>

### ***Evidence selection (inclusion criteria)***

The outcome of the search will be a database of references and documents which will be screened using the review's inclusion criteria. The inclusion criteria are a list of statements about what the study should contain to be relevant to the review question; studies must meet all of the criteria to be eligible for inclusion in the review. The criteria will be applied twice; first, to identify systematic reviews; and second, to identify relevant primary studies.

The criteria will be piloted on a sample of studies before being applied. An early sample of screening will be double checked by the lead reviewer. The reviewers will regularly discuss screening to ensure consistency in the way that studies are being included and excluded.

### ***Identifying reviews***

The following criteria will be applied to titles and abstracts of reviews, which will be included if they:

1. Are published after 1990;
2. Are a systematic review (i.e. describe search strategies and inclusion criteria used);
3. Include outcome or process evaluation studies;
4. Describe at least one intervention potentially relevant to community engagement;
5. Include at least one study in the results section;
6. Are written in English; and
7. Measure and report health outcomes.

Each systematic review will be assessed against these criteria in a stepwise fashion, such that any review excluded because it failed a criterion later in the list must have passed any preceding criteria. We will retrieve the full-text copy of all reviews that pass these inclusion criteria. Then, a brief screening of the full-text document will be conducted to check that the review is, in fact, systematic, and that the review includes some primary studies of relevance to our review<sup>12</sup>.

### ***Identifying trials***

Once the final set of systematic reviews is obtained, we will screen within each review to identify relevant-sounding primary studies (trials). This will involve scanning the evidence tables and reference lists of the reviews for relevant trials. We will then locate the abstracts for these trials.

The titles and abstracts of the trials identified during this process will then be assessed for inclusion in the review. Studies will be included if they meet all of the following criteria:

1. Study is published after 1990 (the date of the other reviews on which we are building, e.g., Popay et al 2007);
2. The study is primary research, in that data have been collected during that study through interaction with or observation of study participants, but is not a Masters thesis;
3. Study includes outcome and/or process evaluations of interventions;
4. Community engagement is the main focus of the study;
5. Study is published in English;
6. For outcome evaluations: study has a control or comparison group (i.e., it must be a controlled trial, either randomised or non-randomised);

Once all studies have been screened on title and abstract, full reports will be obtained for those studies that appear to meet the criteria or where there is insufficient information to be certain. The retrieved articles will then be screened based on the full-text article.

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<sup>12</sup> Relevance at this stage will be judged according to the criteria presented in the section "Identifying trials", although the criteria will not be applied stepwise and will not be recorded.

Two additional criteria will be applied at full-text screening that will allow critical appraisal and ensure that the documents are relevant to the issue of inequalities. Investigations of inequalities are often framed in terms of PROGRESS (Place of residence, Race/ethnicity, Occupation, Gender, Religion, Education, Socio-economic position and Social capital (Evans & Brown, 2003), the mnemonic for broader determinants of health. Kreiger (1999) has drawn attention to other characteristics that attract discrimination (e.g., age, disability, sexual orientation). These concepts have been combined with other determinants of health or sources of social exclusion within family or community contexts relevant to particular research (e.g., smoking parents, being 'looked after' or excluded from school) to extend PROGRESS-Plus (Kavanagh et al., 2009). Thus PROGRESS-Plus provides a useful framework to scope the review and analyse the included studies.

The additional criteria to be applied at full-text are:

7. Study reports their methods in sufficient detail to allow critical appraisal (i.e., must clearly report both data collection and methods of analysis); and
8. Reports characterise study populations or report differential impacts in terms related to social determinants of health that can be captured by the PROGRESS-PLUS framework.

Those that pass the inclusion criteria on the basis of full-text screening will be included in the description of engagement models and synthesis. The methods for the mapping and analysis components of the review follow.

### *c. Data analysis*

#### **Mapping stage**

The mapping stage of the review aims to describe the scale and range of community engagement interventions and will address RQs 1 and 2. Studies that meet our inclusion criteria will be stored electronically and classified according to a standardised data extraction framework. Information will be collected on: models of community engagement (consultation, collaboration, and community control); approach to community engagement (e.g., formation of community coalition, volunteer intervention provider); mechanism of engagement (how the community were recruited/involved); area of health concern (e.g., breastfeeding, smoking cessation); participants' PROGRESS-plus characteristics; and geographical and other contextual details.

After the relevant data have been extracted, we will produce tables and cross-tabulations to show the frequency of different types of engagement and the contexts in which they occur. We will also provide a description of the similarities and differences across interventions. We will focus on trends and gaps in the evidence base, rather than detailing each intervention.

#### **Analysis stage**

The map will provide a broad picture of the types of community engagement covered in the research literature and will complement the development of the theoretical framework. However, we also want to gain a more detailed understanding of what works and does not work, for whom, and under what circumstances. For this, we will conduct a series of analyses addressing RQs 3-9. In the event that the studies identified throughout the search and screening process are either too numerous or too heterogeneous to allow sensible analysis, we will select a subsample of studies on which to focus the analyses. The refinement of the inclusion criteria for the analyses will be determined in consultation with our advisory groups.

We will extract further data for those studies included in the analysis component of the review. Additional information will be collected on: the intervention, study participants, the dimensions, models, context and outcomes of community engagement, and health outcomes.

Data extraction for the theoretical synthesis will take the form of a narrative that describes the context and mechanisms of the participants, interventions and approach to community engagement. Synthesis and data extraction for this part of our analysis will run in parallel: each time data are extracted from a study, its mechanisms and contexts will be compared with our initial conceptual framework and data already extracted from other studies. In this way, we plan to build up an iterative framework of mechanisms of community engagement which can be applied to subsequent studies with increasing efficiency.

For the quantitative synthesis (meta-regression), effect sizes will be calculated to summarise the impact of the intervention. Since we expect that many of the outcomes will have used different scales and different combinations of continuous and dichotomous data, we will use the standardised mean difference (White & Thomas, 2005) to enable us to compare and combine results. EPPI-Reviewer software will be used to calculate effect sizes from a variety of data types (means and standard deviations, *t*-values, etc.).

Following the approach we took in a similar analysis (Oliver et al., 2010), outcomes will be classified as being in either 'engagement outcome' domains (personal development, community development, programme development) or 'health outcome' domains (knowledge, attitudes, behaviour and health state). For studies which report more than one outcome per domain, we will include in our analysis only the outcome which was most commonly reported across all studies in the review in which the study was identified. Thus each study can have up to seven outcomes calculated, though many will not report outcomes in all our domains.

To help inform the economic analysis, data on resources used in community engagement strategies to encourage behaviour change and/or uptake of interventions will be extracted from studies. This will include categorisation of funded and in-kind resource use, as well as the time of volunteers. Where possible, resource use (e.g. units of equipment, hours of paid staff and volunteers) will be reported separately from costs. We will also categorise the budgets from which resources are supported if data are available. Cost data will be reported in one base price year; where necessary costs will be converted to Pounds sterling (£) using international purchasing power parity rates. If a breakdown of cost data for population sub-groups can be identified this will also be recorded.

Data will be extracted by two members of the team working independently before meeting to discuss their findings in order to ensure quality, and consistency of interpretation.

### **Quality assessment**

As specified in the eligibility criteria, we plan to include two types of study in this review (which are frequently combined within the same research project): outcome and process evaluations.

The outcome evaluations (controlled trials) will be assessed for methodological quality using an instrument that has been used in many reviews by the EPPI-Centre and others (most recently in Shepherd et al., 2010). Like the Cochrane *risk of bias* assessment (Higgins and Green, 2009), this tool examines the studies in a range of dimensions including: methods of assignment; the comparability of groups at baseline; attrition; selective reporting; validity of assessment tools; length of follow up; and unit of data analysis.



The tool we will use to assess the quality of the process evaluations was refined in a recent review (Shepherd et al., 2010) and assesses whether or not: steps were taken to minimise bias and error/increase rigour in sampling, data collection and data analysis; findings were grounded in/supported by the data; there was good breadth and/or depth achieved in the findings; the perspectives of intervention participants were privileged.

Outcome evaluations which do not meet a minimum level of quality will not be included in the meta-regression. The findings from process evaluations which do not score well will still be included, but a sensitivity analysis will be conducted to assess their impact on the overall analysis; findings which depend solely on the evidence of poorer quality process evaluations will be more provisional than those coming from stronger evaluations.

In addition to analysis of outcomes and process evaluations, we may also identify economic evaluations through our review. The quality of these studies will be assessed using the Consensus on Health Economic Criteria (CHEC) criteria list for assessment of methodological quality of economic evaluations (Evers et al., 2005).

### **Synthesis**

As described in the overview above, there will be three syntheses (theoretical, quantitative, and economic), which build upon one another sequentially.

The **theoretical synthesis** will be the first analysis to be completed. This analysis builds on Pawson's work on 'realist synthesis' (Pawson, 2002) and will examine in particular the *mechanisms* and *contexts* of community engagement in each study in two dimensions: how the particular strategy of engagement is purported to engage the community in question; and how the particular strategy of engagement will result in better intervention outcomes. Thus, while community engagement interventions might 'look' quite different in different contexts, there may be a common theoretical thread running through them that it will be useful to identify and take forward in the meta-regression.

The **quantitative synthesis**, or **meta-regression** (Thompson et al., 1999), will address review questions 3-8 statistically, by testing whether any observed differences in the results of included studies might be associated with the type of community engagement they employed, by comparing different types and levels of community engagement between different communities. Possible moderating or confounding factors will include the topic or review that a study was found from; the design of the study; the intervention in question; the outcome assessment tool etc. Moderators and confounders notwithstanding, we will be able to identify the amount of variance (if any) that is explained by different approaches to community engagement with participants within each review, each topic domain, and finally across all studies in the analysis.

The outcome of the first two analyses will be strategies for community engagement with particular groups of people that have been shown to be particularly effective. In the final component of our study, the **economic analysis**, we will answer research questions 7 and 8, and investigate resource implications of these approaches to community engagement and consider the extent to which they may be considered cost effective. Crucially, and where possible, we aim to estimate only the resource use, including volunteer and in-kind contributions, involved in that aspect of any intervention that is devoted to community engagement, rather than resources for any actual health promoting intervention. This will enable us to compare the relative costs of approaches, without this being confounded by the total costs of different interventions (McDaid & Sassi, 2010).

To address review question 8 we will, using information extracted from our review of the literature and supplemental information from study authors and community engagement

implementers, undertake some limited decision modelling to explore the potential cost utility and cost effectiveness of investing in selected different approaches to community engagement to increase uptake of health promoting interventions in several settings and contexts. We will use Treeage Pro software to build these decision models. This will include a range of sensitivity analysis to account for uncertainty in our estimates of resources, cost and effectiveness, as well as threshold analysis to identify the minimum level of effectiveness / maximum level of cost at which engagement approach would be considered cost effective.

## 5. Contribution of existing research:

The work will: build on the evidence that underpins the current NICE guidance on Community Engagement; draw on new and existing data sets of effectiveness in aspects of health demonstrating inequalities; incorporate measures of inequalities, engagement, cost and health; identify effective strategies for improving health and reducing inequalities.

The findings will be disseminated through open access academic publication, relevant practitioner journals and conferences, and published on the websites of each partner institution (including non-technical brief summaries of findings). We will also seek to produce a policy brief as part of the WHO Health Evidence Network policy brief and host a seminar for public health practitioners, policy makers and researchers. A database of the studies we identify will be placed online for others to use.

## 6. Plan of Investigation:

The project will take 12 months. Key milestones of the project are presented in the table below.

Activity	Milestones	Expected completion
Project initiation; protocol	<ul style="list-style-type: none"> <li>• Set advisory group meetings</li> <li>• Obtain ethics approval from faculty panel</li> <li>• Write protocol</li> </ul>	<ul style="list-style-type: none"> <li>• November 2011</li> <li>• May 2011</li> <li>• October 2011</li> </ul>
Searching & identification of studies; advisory group meetings	<ul style="list-style-type: none"> <li>• Identify relevant studies on database</li> <li>• Screen relevant reviews</li> <li>• Identify relevant studies</li> <li>• Contact authors</li> <li>• Finalise list of included studies</li> <li>• Meet advisory groups (professionals and young people)</li> </ul>	<ul style="list-style-type: none"> <li>• August 2011</li> <li>• August 2011</li> <li>• October 2011</li> <li>• November 2011</li> <li>• November 2011</li> <li>• November 2011</li> </ul>
Data extraction / collection	<ul style="list-style-type: none"> <li>• Finalise extraction tools</li> <li>• Complete data extraction &amp; quality assessment and independent checks for quality and consistency</li> </ul>	<ul style="list-style-type: none"> <li>• December 2011</li> <li>• January 2012</li> </ul>
Data analysis	<ul style="list-style-type: none"> <li>• Complete analyses</li> </ul>	<ul style="list-style-type: none"> <li>• February 2012</li> </ul>
Dissemination	<ul style="list-style-type: none"> <li>• Complete technical report, summaries and briefing notes</li> <li>• Meet advisory groups (professionals and young people)</li> <li>• Submit final report</li> <li>• Hold seminar(s)</li> </ul>	<ul style="list-style-type: none"> <li>• November 2011</li> <li>• March 2012</li> <li>• April 2012</li> <li>• After submission, 2012</li> </ul>

## **7. Project Management:**

This project is a collaboration between a multidisciplinary team from the Institute of Education, University of London; University of East London; and London School of Economics. The team has collective experience in evidence synthesis and primary research across a range of disciplines. The project is based at the Evidence for Policy and Practice Information and Co-ordinating Centre (EPPI-Centre) is part of the Social Science Research Unit at the Institute of Education, University of London, under the supervision of the Principal Investigator, Dr James Thomas.

The co-investigators are:

- Mr David McDaid, London School of Economics
- Professor Sandy Oliver, Institute of Education, University of London
- Dr Adam Oliver, London School of Economics
- Ms Josephine Kavanagh, Institute of Education, University of London
- Professor Angela Harden, University of East London

The co-investigators will have strategic input into all aspects of the project and participate directly in some project tasks.

The research team also comprises:

- Dr Alison O'Mara-Eves, Institute of Education, University of London
- Mrs Ginny Brunton, Institute of Education, University of London
- Dr Katherine Twamley, Institute of Education, University of London
- Other researchers as required.

The research team will be involved in strategic planning of aspects of the project and systematic review activities (including screening, data extraction, and data synthesis).

The full project team will meet at least three times in person to discuss progress, upcoming milestones, strategic directions of the project, and assign tasks. An advisory group will meet twice to provide feedback on the progress and direction of the review.

### ***Information management***

All records of research identified by searches will be uploaded to the specialist systematic review software, EPPI-Reviewer 4, for duplicate stripping and screening (Thomas et al. 2010). This software will record the bibliographic details of each study considered by the review, where studies were found and how, reasons for their inclusion or exclusion, descriptive and evaluative codes and text about each included study, and the data used and produced during synthesis. The software enables us to keep track of electronic documents (e.g., pdf files) and take advantage of emerging 'text mining' technologies to help us identify relevant research and identify commonalities within the studies we find efficiently. The data from the existing reviews that we plan to use are already in this software.

### ***Ethical arrangements***

This project has been approved by the Faculty Research Ethics board at the Institute of Education (ethics approval reference number FCL 283; copies of the ethics application are available from the report authors). The project complies with the ESRC Research Ethics Framework.

## 8. Service users/public involvement:

The **Public Health Research steering group** will provide feedback on the research throughout the project. The steering group includes public health policy and practitioner members. We will have regular contact via email, phone, and face-to-face meetings with the steering group to ensure that the research is meeting the stated needs of the research consumers.

In addition, young people, practitioners, and local authority representatives will be involved in consultations about interim findings to improve the review's validity and enable us to frame the review in a way that is accessible to the target audience. This will entail:

- Exploring the review's interim findings through *consultations with young people* via the National Children's Bureau's Young Research Advisers group (NCB, 2011) and the Islington Borough Council's Children's Active Involvement Service (CAIS) (Islington Borough Council, 2011).
- Convening an *advisory group of professionals* (practitioners and local authority representatives) that will meet twice to discuss shaping the project and interpreting the emerging findings.

The people we will approach for consultation, and the nature of the consultations, are described below.

The **young people's consultations** with NCB Young Research Advisers and CAIS members will involve one workshop session for each of the two groups, likely to be two hours total in length. We shall visit the groups at their own venues. Sessions will be timed, in consultation with the groups' convenors, to fit in as part of the two groups' existing meeting plans. Sessions will include practical exercises to introduce the project and help group members discuss what helps or hinders them engage with community activities to improve health or reduce inequalities. There may also be small-group discussion of the research team's preliminary findings and use of post-it notes and stickers to record preferences/interpretations. Group activities will be audio recorded if participants give their consent.

- *NCB Young Research Advisers* is a group of 18 young people from all over England aged 10 to 17 years that was established by the NCB to engage young people in the research process. Membership of the group is voluntary and the NCB provide expenses, food and appropriate accommodation where required. In recognition of the young person's time in taking part in meetings, the NCB also gives members gift vouchers.
- *CAIS* is a service offered to looked-after children, disabled children, and young people receiving services from Islington Borough Council. It is designed for young people experiencing social disadvantage to participate in civic activities. The service offers a range of activities including a newsletter, helping to select and train staff, giving presentations to senior staff and councillors, and events such as drama and dance. CAIS also offers support and advocacy service if the child is unhappy with any aspect of their placement, carer, or social worker. Children can refer themselves and the application or procedure is via telephone, text, or email.

The **advisory group of professionals** – consisting of both practitioners and local authority representatives - will meet twice to discuss shaping the project (meeting one) and interpreting the emerging findings (meeting two).

- The *local authority organisations* to be invited to the advisory group of professionals

include:

- the Local Government Association, which provides a voice in the national arena about policy, legislation and funding on behalf of our member councils and the people and communities they serve;
  - Local Authorities Research Consortium, a collaboration between 30 local authorities;
  - the National Foundation of Education Research, which aims to improve education nationally and internationally by undertaking research and dissemination activities;
  - Research in Practice, which aims to build the capacity for evidence-informed practice in children’s services; and
  - Local Government Improvement and Development, which supports improvement and innovation in local government by working with local authorities and their partners to develop and share good practice.
- The *practitioners* to be invited to the advisory group of professionals will be contacted through the London Civic Forum’s Community Development Network, which is the evolving informal network for peer support, policy discussion and campaigning by and for community development practitioners in London.

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*This protocol refers to independent research commissioned by the National Institute for Health Research (NIHR). Any views and opinions expressed therein are those of the authors and do not necessarily reflect those of the NHS, the NIHR, the PHR programme or the Department of Health.*

## **Appendix: Search strategy for bibliographic databases**

### ***Search Strategy: DoPHER***

Keyword search:

Health promotion OR inequalities AND (Aims stated AND search stated AND inclusion criteria stated)

### ***Search Strategy: TRoPHI***

“disadvantage” OR “disparities” OR “disparity” OR “equality” OR “equity” OR “gap” OR “gaps” OR “gradient” OR “gradients” OR “health determinants” OR “health education” OR “health inequalities” OR “health promotion” OR “healthy people programs” OR “inequalities” OR “inequality” OR “inequities” OR “inequity” OR “preventive health service” OR “preventive medicine” OR “primary prevention” OR “public health” OR “social medicine” OR “unequal” OR “variation”

AND

“change agent” OR “citizen” OR “community” OR “champion” OR “collaborator” OR “disadvantaged” OR “lay community” OR “lay people” OR “lay person” OR “member” OR “minority” OR “participant” OR “patient” OR “peer” OR “public” OR “representative” OR “resident” OR “service user” OR “stakeholder” OR “user” OR “volunteer” OR “vulnerable”

AND

“capacity building” OR “coalition” OR “collaboration” OR “committee” OR “compact” OR “control” OR “co-production” OR “councils” OR “delegated power” OR “democratic renewal” OR “development” OR “empowerment” OR “engagement” OR “forum” OR “governance” OR “health promotion” OR “initiative” OR “integrated local development programme” OR “intervention guidance” OR “involvement” OR “juries” OR “local area agreement” OR “local governance” OR “local involvement networks” OR “local strategic partnership” OR “mobilisation” OR “mobilization” OR “neighbourhood committee” OR “neighbourhood managers” OR “neighbourhood renewal” OR “neighbourhood wardens” OR “networks” OR “organisation” OR “panels” OR “participation” OR “participation compact” OR “participatory action” OR “partnerships” OR “pathways” OR “priority setting” OR “public engagement” OR “public health” OR “rapid participatory assessment” OR “regeneration” OR “relations” OR “support”

### ***Search Strategy: Cochrane Databases***

- Cochrane Database of Systematic Reviews (Cochrane Reviews)
- Database of Abstracts of Reviews of Effects (Other Reviews)
- Health Technology Assessment Database (Technology Assessments)
- NHS Economic Evaluation Database (Economic Evaluations)

“disadvantage” OR “disparities” OR “disparity” OR “equality” OR “equity” OR “gap” OR “gaps” OR “gradient” OR “gradients” OR “health determinants” OR “health education” OR “health inequalities” OR “health promotion” OR “healthy people programs” OR “inequalities” OR “inequality” OR “inequities” OR “inequity” OR “preventive health service” OR “preventive medicine” OR “primary prevention” OR “public health” OR “social medicine” OR “unequal” OR “variation”

AND

“change agent” OR “citizen” OR “community” OR “champion” OR “collaborator” OR “disadvantaged” OR “lay community” OR “lay people” OR “lay person” OR “member” OR “minority” OR “participant” OR “patient” OR “peer” OR “public” OR “representative” OR “resident” OR “service user” OR “stakeholder” OR “user” OR “volunteer” OR “vulnerable”

AND

“capacity building” OR “coalition” OR “collaboration” OR “committee” OR “compact” OR “control” OR “co-production” OR “councils” OR “delegated power” OR “democratic renewal”

OR "development" OR "empowerment" OR "engagement" OR "forum" OR "governance" OR "health promotion" OR "initiative" OR "integrated local development programme" OR "intervention guidance" OR "involvement" OR "juries" OR "local area agreement" OR "local governance" OR "local involvement networks" OR "local strategic partnership" OR "mobilisation" OR "mobilization" OR "neighbourhood committee" OR "neighbourhood managers" OR "neighbourhood renewal" OR "neighbourhood wardens" OR "networks" OR "organisation" OR "panels" OR "participation" OR "participation compact" OR "participatory action" OR "partnerships" OR "pathways" OR "priority setting" OR "public engagement" OR "public health" OR "rapid participatory assessment" OR "regeneration" OR "relations" OR "support"

**Search Strategy: Campbell Library**

"disadvantage" OR "disparities" OR "disparity" OR "equality" OR "equity" OR "gap" OR "gaps" OR "gradient" OR "gradients" OR "health determinants" OR "health education" OR "health inequalities" OR "health promotion" OR "healthy people programs" OR "inequalities" OR "inequality" OR "inequities" OR "inequity" OR "preventive health service" OR "preventive medicine" OR "primary prevention" OR "public health" OR "social medicine" OR "unequal" OR "variation"

AND

"change agent" OR "citizen" OR "community" OR "champion" OR "collaborator" OR "disadvantaged" OR "lay community" OR "lay people" OR "lay person" OR "member" OR "minority" OR "participant" OR "patient" OR "peer" OR "public" OR "representative" OR "resident" OR "service user" OR "stakeholder" OR "user" OR "volunteer" OR "vulnerable"

AND

"capacity building" OR "coalition" OR "collaboration" OR "committee" OR "compact" OR "control" OR "co-production" OR "councils" OR "delegated power" OR "democratic renewal" OR "development" OR "empowerment" OR "engagement" OR "forum" OR "governance" OR "health promotion" OR "initiative" OR "integrated local development programme" OR "intervention guidance" OR "involvement" OR "juries" OR "local area agreement" OR "local governance" OR "local involvement networks" OR "local strategic partnership" OR "mobilisation" OR "mobilization" OR "neighbourhood committee" OR "neighbourhood managers" OR "neighbourhood renewal" OR "neighbourhood wardens" OR "networks" OR "organisation" OR "panels" OR "participation" OR "participation compact" OR "participatory action" OR "partnerships" OR "pathways" OR "priority setting" OR "public engagement" OR "public health" OR "rapid participatory assessment" OR "regeneration" OR "relations" OR "support"