National Institute for Health Research

COLLABORATIONS FOR LEADERSHIP IN APPLIED HEALTH AND CARE

SPECIFIC THEME - DETAILS

1.1 Name of proposed Host Organisation (NHS Trust or Provider of NHS services)

Liverpool Clinical Commissioning Group

2.1 Name of Theme

Improving public health and reducing health inequalities

2.2 Percentage of Research and Implementation

Research:	**60%**
Implementation:	**40%**

2.3 The specific short (1-2 years), medium (2-3 years) and long term (4-5 years) aims and objectives:

This programme consists of two sub-programmes.

Sub-programme 1 aims to embed evidence-based local policies/practices to reduce health inequalities by addressing the social determinants of health

Short term objectives

1.2 To establish systems for knowledge exchange and capacity building to support implementation and evaluation of local policies and actions to reduce health inequalities.

1.2 To develop tools and processes to underpin a programme of implementation and research

Medium term objectives.

1.3 To select policies and actions with the potential to reduce health inequalities, adapt them to the local context, prioritise those to be implemented and develop others for evaluation.

Long term objectives

1.4. To expand the evidence base for effective local action on social determinants of inequalities,

1.5. To establish enhanced capacity in Local Authorities (LA) and partners to reduce health inequalities

Sub-programme 2 aims to ensure that all activities undertaken by NWC_CLAHRC contribute to reducing inequalities in access to, and outcomes of, health care.

Short term objectives

2.1 To develop a Health Inequalities Audit and Monitoring System to ensure research, implementation and capacity building activities address health inequalities

Medium-Long term objectives

2.2 To implement this system across the NWC CLAHRC.

2.4 The strategy for the Theme, providing a description of how the aims and objectives be achieved:

Sub programme 1. Support local public health systems to reduce health inequalities

1.1 To support knowledge exchange and capacity building for implementation and research we will establish a multi-professional *Community of Public Health Practice* (CoPHP) and engage members in a knowledge-to-action cycle (see Implementation Section below).

1.1 To underpin our activities we will construct a *Health Inequalities Assessment Toolkit (HIAT)* (applicable to research and policy) and establish *Neighbourhoods for Learning* (NfL) in local public health systems as locations for implementation, research and public engagement.

1.3 We will work with the CoPHP, residents and other stakeholders to identify a small number of LA policies/actions relevant to health inequalities in NfLs, review evidence on the potential and/or actual impacts of these on health and health inequalities and consider how to adapt these to local contexts. In deliberative workshops with the CoPHP and NfL stakeholders we will use review findings to prioritise policies/actions for implementation or for further development and evaluation.

1.4. We will expand the evidence base for effective local action on the social determinants of health inequalities by implementing and evaluating LA policies/actions in the NfLs

1.5. To enhance the capacity by LA's and partners to take effective action on health inequalities we will deliver a *programme of mentoring* for local authorities' staff seconded to the NWC CLAHRC and a *Health*

Inequalities Training and Development Programme.

Sub Programme 2. Embedding a health inequalities focus across NWC CLAHRC

Much health research, implementation and capacity-building fails adequately to address inequalities (e.g. samples that do not allow differential impacts to be identified or analyses that fail to consider differential outcomes). We will therefore establish a system across the NWC CLAHRC to assess whether appropriate attention is paid to inequalities in all our activities and if not to make recommendations as to how this can be achieved. This will involve the development of a *Health Inequalities Audit and Monitoring System* incorporating a *Health Inequalities Assessment Toolkit* (see 1.2 above) with a dual focus on research and policy. We will work with theme leaders to implement this and related CPD activities across NWC CLAHRC.

2.5 A brief description of proposed projects that will be pursued within the first two years:

1. Establishing and maintaining a Community of Public Health Practice During the first year we will establish a new Community of Public Health Practice involving people working in local public health systems across the NW Coast region and academics with expertise in maternal health and the early years, young people, working age people with chronic health conditions and/or disabilities, older people, people with learning disabilities and a range of disciplines. The CoPHR will be a significant platform for knowledge exchange and co-production of research and implementation activities aimed at reducing health inequalities during the life of NWC_CLAHRC.

2. Establishing Neighbourhoods for Learning (NfL) and associated date capture systems. We will identify two *neighbourhoods of learning* in each partner LA, reflecting different dimensions of disadvantage. New post-coded administrative datasets for each will provide baseline "thick descriptions" of the areas and the communities, to be developed as a longitudinal data resource to evaluate the impact on health/health inequalities of selected LA policies/actions.

3. Developing a NWC_CLAHRC Health Inequalities Audit and Monitoring System: A central component of this system with be a Health Inequalities Assessment Toolkit (HIAT) with a dual focus on research/implementation and on policy/action. The development of this system and the HAIT will be based on a review and synthesis of existing approaches to assessing the impact of research/policy on health/health inequalities. The system will be piloted on NWC_CLAHRC activities and the HAIT will also be piloted on policies being reviewed as part of sub-programme 1.

4.Conducting a series of evidence reviews on LA policies/investments in collaboration with the evidence review theme.

2.6 The Theme's relevance to the health of patients and the public:

The Health and Social Care Act (2012) lays new duties on CCGs to have regard to the need to reduce inequalities in access to, and outcomes of, healthcare" and on Local Authorities to improve the health of their population and take the lead in coordinating efforts to ensure that services in their locality work together to promote population health and reduce health inequalities. NHS funds are now allocated to LAs for their new public health responsibilities. However there is a lack of evidence for the effectiveness of public policy, particularly at the local level, as a tool for building equitable population health (Milward et al, 2003, Walt et al 2008). Well-intended policies, which improve average health, may have no effect on the unequal distribution of health if the outcome is greater uptake by the better off (Acheson et al. 1998). This thematic programme aims to support local NHS and LA bodies to fulfil their new statutory responsibilities with regards to health inequalities by: (i) embedding evidence based approaches to the reduction of health inequalities in local policies/actions; and (ii) ensuring that activities across the NWC_ CLAHRC contribute to reducing inequalities in access to, and outcomes of, health care. The programme outputs will benefit patients by improving access to effective health services for all socioeconomic groups and improve the health of the public by boosting evidence-based efforts in LAs to improve the social determinants of health and health inequalities (e.g. action on housing, transport, leisure and environmental services, employment and income support). This is in line with the international strategy spearheaded by the World Health Organisation to promote the development of methods to incorporate "Health in All Policies" at all levels of government.

2.7 The proposed Theme Leader:

JENNIE POPAY is Professor of Sociology and Public Health at Lancaster, where she leads the Centre for Health Equity Research and Knowledge Exchange. She has expertise in qualitative methods and diverse evidence synthesis and her research focuses on: identifying effective ways of involving the public in policy-making and research; evaluating interventions addressing the social determinants of health inequalities; and methods for the systematic review of diverse evidence. She is Deputy Director of the NIHR School for Public Health Research and leads a programme of evaluative research on health inequalities. She is PI on three studies evaluating the impact of area interventions on health inequalities and of PI in research; and CI on an evaluation of the South Australian Government's Health in All Policies initiative. She is on the Bevan Commission advising the Welsh Government on the future of the NHS in Wales and in 2010her work was recognised by the Faculty of Public Health when she was made a Fellow through Distinction.

2.8 Three examples over the last ten-year period from the proposed NIHR CLAHRC of how previous research findings in this area have translated into improved outcomes for patients and the NHS:

Community engagement in health decision making: In 2003 Popay and colleagues published the first empirical findings from research funded by the ESRC on the nature of lay knowledge about health inequalities. This informed two major implementation projects funded by the Health Development Agency (SARP - focusing on evidence based approaches to the development of social capital in low income neighbourhoods in the NW of England) and the DH (SAPHC -producing guidance for the NHS on organization change to support community engagement). Subsequently she conducted a systematic review of evidence on the health impact of community engagement in policy. This body of research informed the work of the Commission for Patient and Public Involvement in Health (which Popay was Vice Chair of) and NICE guidance on community engagement in public health interventions. Popay has also been appointed to the Bevan Commission advising the Welsh Government on public involvement in the NHS and other issues. *Policies to promote the health of young people*: Limmer's doctoral research informed his work with the Department of Health National Support Teams and as a public health specialist with Government Office NW and NHS NW where he worked with senior leadership in LAs and the health sector to implement evidence based approaches to address teenage pregnancy, sexual health and alcohol consumption amongst young people. He is now working with NHS, LA and third sector partner organisations across the NW of England identifying effective alcohol interventions with young people, adapting this evidence to diverse local contexts to increase the likelihood and impact of their implementation. *Maternal and infant health:* Downe and Dyke's research portfolio is cited in two NICE guidelines, professional body standards and the websites of national consumer groups (AIMS, NCT, BirthChoiceUK, SANDS, BfI). Downe's review on place of birth (Hodnett et al 2012) formed part of the case for a freestanding birth centre in East Lancashire Hospital Trust - now the biggest in the country. Her work on interventions in normal birth was a catalyst for the UK's Normal Birth Campaign (http://www.rcmnormalbirth.org.uk/) and international successors, as well as influencing UK National Statistics definition of normal birth (Downe et al 2001). The work of Dyke's and colleagues has shaped the implementation of the WHO/UNICEF Baby Friendly Initiative, particularly education of health professionals in protection and support of breastfeeding and outreach and peer support for breastfeeding mothers.

For Themes containing proposed applied health research

Research Theme Section – for research or mixed model Themes
Please leave blank if implementation-only Theme

3.1 Please describe the proposed applied health research to be undertaken in the Theme

Developing a Health Inequalities Audit and Monitoring System including a Health Inequalities Assessment Toolkit (HIAT) Development of this system and its central component, the HIAT will be informed by a review of existing assessment tools/approaches (e.g. South Australian Government's Health Lens Toolkit, various Health Impact Assessment methods developed in New Zealand, Liverpool and Cardiff, the Public Health Observatory's Handbook of Health Inequalities Measurements and outputs from the Cochrane/Campbell Health Equity Methods Group). The system will support assessments of research/implementation and policy/action and will comprise a framework identifying key stages in a health inequalities audit and monitoring process with linked resources/tools for use at each stage. The framework will be developed on the basis of reviews findings and in dialogue with the programme partners but could include: (a) initial screening to assess whether an activity/policy/research project is suitable for audit; (b) scoping the key issues needing to be considered to integrate a focus on health inequalities; (c) appraisal to identify potential health and health inequality impacts of selected activity/policy/research; (d) assessing the significance of these impacts; and (e) identifying changes required to ensure health inequalities are appropriately addressed.

Reviews of evidence on selected local authority policies/investments and application of Health Inequalities Assessment Toolkit (HIAT): We will identify the actual and/or potential impacts on health and health inequalities of a number of LA policies/actions agreed with CoPHP members and NfL residents and other stakeholders. This will involve three elements: (i) reviews in each policy area to establish the evidence base on the impact of, and barriers and enablers to, implementing the policies/actions prioritized and to identify evidence gaps; (ii) a health economics assessment in terms of potential to integrate cost-effectiveness goals; and (ii) application of the HIAT to identify potential health and health inequality impacts where evidence is lacking. The reviews will adapt equity focused systematic reviews methods developed by the Cochrane and Campbell Equity Methods Group (Ueffing E, et al 2011) and methods for the narrative synthesis of diverse evidence (Popay et. al. 2004; 2005). Policies/actions for review will be selected based on their relevance to health inequalities and to reflect different contexts, policy/practice 'types' and life course stages. This diversity sampling will maximize the use of the findings in other settings. Initial consultation with LA partners has identified some potential policies/investments, which may be

implemented across LAs, within NfLs or with sub-sections of populations. These include: reducing fuel poverty through selective licensing of private landlords and housing improvement; housing adaptations to support older people at home; transport policies and planning regulations to increase physical activities and reduce obesity; local minimum unit price for alcohol; and introducing living wage policy. A series of deliberative events with the CoPHP and NfL residents and other stakeholders will identify which policies/actions can be implemented immediately and which require further development and evaluation.

Establishing data capture systems in Neighbourhoods for Learning (NfL) The implementation and evaluation of LA policies/investments to reduce health inequalities will involve an innovative approach to evidence generation. In discussion with our seven Local Authority partners we will identify two neighbourhoods of learning (NfL) in each LA area, reflecting a variety of dimensions of disadvantage (socio-economic conditions, labour market, social capital/cohesion, rural/urban). They will cover populations of around 10,000 residents to ensure inclusion of one or more key services/institutions e.g. a GP practice, a primary school, church, community centre, shops and businesses. Within each NfL we will construct integrated datasets drawing on data from administrative/routine sources (e.g. primary care data, HES data, census data, data on education, employment rates, welfare benefits, etc). Where possible data sources will be linked at the individual or area level (e.g postcode). We have extensive experience of creating and utilising area datasets of this type in an evaluation of the impact of New Deal for Communities regeneration initiative on health inequalities (Stafford, et. al. 2008). They will provide a baseline and longitudinal data resource, which will be used to evaluate the impact on health and health inequalities of the selected LA policies/investments.

Evaluating LA investments with potential to reduce health inequalities In the last three years of the CLAHRC we will evaluate a sample of LA policies/actions to investigate which aspects of these policies/investments bring about which outcomes for which groups in, what context and through which mechanisms (Pawson and Tilley, 2006). The health economics input to this work will also ensure that not only is effectiveness assessed, but cost-effectiveness information, where appropriate, will be measured, adding key additional information not typically available in this type of evaluation. *Context***.** The policies/actions will be implemented in selected NfLs. Initial baseline NfLs datasets (see 3 above) will be extended with data from key informant interviews to produce 'thicker' descriptions of these areas and the communities that live there. These new data will be tailored to the specific policy/action being evaluated but include data on socio-economic conditions, social networks/capital, informal and formal health and social care, the socio-economic history of these areas and the range of local and national policies operating there. *Mechanisms*: For each policy/action to be evaluated a logic model will be developed informed by evidence reviews and key informant interviews. These models will set out the mechanisms linking inputs, processes, outputs, intermediate outcomes, and intended and unintended longer-term outcomes of the policy. They will provide the structure for a systematic use of the NfL administrative datasets, covering inputs, processes, outputs and intermediate outcomes. Qualitative research, involving repeat in-depth interviews (Hoggett et al, 2008; Sennet et al, 1972) will enable the cumulative development of meaningful narratives about the mechanisms through which the policy/action influences peoples' lives in different contexts and potential barriers to, and facilitators for, achieving the policy outcomes. A purposive sample of people targeted by, and delivering the specific policy/action will be selected. *Outcomes***:** The impact of policies/actions on social determinants of health and on health and health inequalities will be investigated by comparing the change in outcomes over time between different neighbourhoods and population sub groups. Implementation will be designed to maximise opportunities for variation in policy exposure to be used to analyse impact (Craig et al., 2010). This could involve comparing implementation and matched comparison NfLs or rolling out policies/actions incrementally across NfLs and using a stepped wedge design. The impact data in the NfL administrative datasets will be extended with data from repeat cross sectional surveys assessing a range of physical and mental health indicators, and social determinants relevant to the specific policy/action being evaluated and the collection of relevant quantitative 'process' data. *Analysis and Synthesis:* Qualitative data will be analysed thematically using the framework approach aided by QSR NVIVO software and quantitative data will be analysed using STATA, applying appropriate statistical techniques for the analysis of quasi-experimental research designs. All analyses will investigate differential impacts by SES, gender, age and ethnicity. A narrative interpretative synthesis will weave the findings into a rigorous, evidence informed and policy relevant explanation of the success or otherwise of the policy/actions being evaluated.

3.2 Please outline the key researchers associated with the Theme

In addition to the theme lead Popay At Liverpool, Whitehead, Director, WHO Collaborating Centre for Policy Research and PI on the EU funded Demitriq programme and Capewell brings expertise in evaluating the impact of policies on health inequalities; and Barr and Capewell bring expertise in experimental designs and public health practice. At Lancaster, Milligan, a geographer and director of the multi-disciplinary Centre for Ageing and Society brings expertise in evaluating social policies/interventions to improve the lives of older people; Hollingsworth and Zucchelli bring expertise in economist evaluation; Hatton, a psychologist is Deputy Director of the PHE observatory on learning disabilities; Holland is involved in research on the

differential impact of chronic conditions on labour market activity; and Limmer brings experience of policies aimed at promoting the health of young people, working in the NHS and with local government and as a researcher. At UCLAN Downe is an experienced midwife and researcher who brings expertise in a range of research methods focused on improving service access and outcomes for disadvantaged women and their children, while Dyke brings expertise in maternal and infant nutrition.

3.3 Please describe the proposed outputs from the research and the impacts anticipated:

A series of briefing papers aimed at informing commissioning strategies and investment decisions in NHS and LA and/or public health practice. These would be based on the experience of the CoPHP, reviews of evidence of policies/actions and on the findings from the policy/action evaluations. Topics could include: (i) Lessons on how local politicians, LA and NHS commissioners and staff, researchers and local people can combined their knowledge, skills and experience to co-produce effective action to reduce health inequalities; (ii) Ways in health and health equity goals can be integrated into policies and practices; and (iii) Managing the change process involved in implementing health equity policies to optimise effective processes and outcomes.

A Health Inequalities Assessment Resource For LA and NHS Commissions and Health and Wellbeing Boards including practical tools and approaches to help them assessing the actual and potential impact of policies/actions on population health and health inequalities and to establish cost effective area based monitoring and evaluation systems

A programme of CPD opportunities to support people working at all levels of the local public health systems to gain skills in the interpretation and generation of different forms of evidence to inform policy and action aimed at reducing health inequalities while improving population health.

For Themes containing implementation (to be funded by matched funding only)

Implementation Theme Section – for implementation or mixed model Themes
Please leave blank if research-only Theme

4.1 Proposed implementation of applied health research

This theme will support local public health systems co-ordinated by LAs to implement evidence on ways of improving population health and reducing health inequalities by integrating health goals into non-health policies/investments. A second aim is to support those involved in research and implementation activities within the NWC_CLAHRC and more widely to implement evidence based approaches to ensuring that their work will address health inequalities in service access.

4.2 Please describe the proposals for activities to facilitate the implementation of research

1. Our research described in 3.1 will follow a *knowledge-to-action cycle* (Graham et al., 2006), from selecting policies/actions, adapting these to the local context, through implementation and evaluation of outcomes and factors, to the application of learning to other policy/actions and settings. Through the CoPHR and deliberative events researchers, policy and practice actors and local people will be engaged with researchers in each stage of this cycle.

2. A group of 12 or more LA staff, seconded on a sessional basis (average 0.4wte) to the theme for the duration of the funding, will form a *network of NWC_CLAHRC Research and Implementation Associates*. They will have academic mentors and be involved in all aspects of the programme building their capacity for conducting and using evidence and producing a cadre of staff to support knowledge exchange and capacity building in local public health systems.

4. A Health Inequalities Training and Development Programme will be developed initially for NWC_CLAHRC researchers and partners including patients and members of the public. In the second year it will be opened up to people outside the NWC_CLAHRC. The programme will seek to build understanding of the nature and extent of health inequalities in England and globally, of causal pathways particularly the social determinants approach to understanding causality and in the use of the Health Inequalities Assessment Toolkit.

Participative action research cycles will be used to evaluate the work of the CoPHP ad particularly the deliberative events and processes of resident and stakeholder engagement

4.3 Key individuals associated with the implementation,

All the researchers named in 3.2 above will be involved in implementation. Particular expertise will be provided by: Popay in developing and working with Communities of Practice as mechanisms for knowledge exchange and implementation; Popay, Downe, Dyke and Limmer in the use of participative action research cycles to support implementation of evidence based practices; and Popay, Downe, Hatton and Whitehead in running deliberative events.