

The Health Inequalities Assessment Toolkit: supporting integration of equity into applied health research

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ABSTRACT

Background Despite insistent calls for more and better evidence to inform action to reduce health inequities, applied health research sensitive to these inequalities is rare. Recognising this problem, the Collaboration for Leadership in Applied Research and Care in the North West Coast (England) developed the Health Inequalities Assessment Toolkit (HIAT) to support those involved in health research to integrate equity into their work.

Objective This paper reports on an evaluation of the extent to which HIAT enhances the equity focus of the work of users.

Methods The evaluation used semi-structured interviews, focus groups and workshops ($n = 131$ respondents including Public Advisers, university, NHS and local government partners). Routine data included HIAT feedback forms.

Findings HIAT can help to strengthen the equity focus of applied health research by: increasing understanding of how socioeconomic inequities impact on health; building capacity for integrating equity into all aspects of research, implementation and capacity building; stimulating thinking on action to address local structural drivers of health inequalities; and increasing understanding of the positive contribution public involvement can make to research.

Conclusion If we are to advance health equity goals delivering research and training needs to be combined with political commitment to create more equal societies.

Keywords health inequalities, mainstreaming, health research, medical education, social determinants of health inequities

Introduction

Life is not grim up North, but, on average, people here get less time to enjoy it... That health inequalities exist and persist across the north of England is not news, but that does not mean that they are inevitable. Paul Johnstone 2014 in¹

This statement from the preface to *Due North: The report of the Inquiry on Health Equity for the North* reflects a major public health concern found in many countries.^{2–5} There is however reason for optimism: inequalities are amendable to change and, as the Due North report reminds us, whilst ‘much of the responsibility for reducing health inequalities and their socio-economic causes lies with central government... a lot can be done locally’.¹

Funders, researchers and local policy and practice professionals all have an important role in increasing the equity focus of health research. But this potential remains

underdeveloped.⁶ There are many possible challenges to develop research and actions sensitive to health inequalities. These include the dominance of lifestyle explanations for poor health as opposed to explanations that foreground the structural determinants of health-damaging behaviours⁷; the paralysing myth that upstream socioeconomic drivers of health inequalities are ‘too hard to tackle’⁸; and failure to envisage local action on the structural determinants of health inequalities.⁹

Whilst these factors need to be addressed at multiple levels within and across countries, action to equip researchers and health professionals with skills to become more sensitive to the structural drivers of health inequalities has a crucial role to play.¹⁰ To this end, the Collaboration for Leader-

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ship in Applied Research and Care in the North West Coast of England (CLAHRC-NWC), a large research partnership, developed a Health Equity Mainstreaming Strategy (HEMS) and co-produced the Health Inequalities Assessment Toolkit (HIAT) as an integral part of it.

This paper aims to introduce the HIAT to a global readership. First, we outline the context for the development of the toolkit. Second, we report findings from an internal evaluation of CLAHRC-NWC and explain how practitioners think the HIAT toolkit has enhanced their knowledge and skills to change practice. Our goal is not to provide a detailed description of HIAT (which is an open access online resource) nor a definitive evaluation of the tool. Rather we hope to stimulate discussion about the need for a greater equity focus in applied health research and the potential role of a resource such as the HIAT in supporting this agenda. In another paper¹¹ we detail how the tool was part of CLAHRC-NWC's HEMS and explain the challenges of implementing the HIAT in practice including cognitive distance between stakeholders involved in projects and perceptions of urgency over importance.

CLAHRC-NWC

The CLAHRC-NWC was one of 13 such collaborations established across England by the National Institute for Health Research (NIHR). They aimed to accelerate translation of research findings into health policy and practice. Funded from 2014 to 2019, CLAHRC included 36 partners from 3 universities, 5 NHS Clinical Commissioning Groups (CCG), 9 local authorities (LA), 17 NHS provider trusts and the NW Innovation Agency. In addition, 170 members of the public contributed as Public Advisers (PA) and 8 third sector organisations recruited residents of 10 neighbourhoods to a Community Research and Engagement Network supporting placed-based research.

The CLAHRC-NWC operated within an English Region with some of the starkest inequalities in mortality and other health outcomes. Since 1965 there have been 1.5 million excess premature deaths in the North of England compared with the rest of the country.¹ This geographical divide is increasing, driven in part by England's public expenditure reductions and 'the systematic dismantling of social protection policies since 2010'.¹² In this context CLAHRC-NWC acknowledged that the primary drivers of health inequalities are not within the gift of researchers to act on. However, it was committed to increase the equity dimension of all its research portfolio to maximise the relevance of findings for frontline practice and policy to reduce these inequalities. It therefore undertook a rapid review to identify resources/tools that could support this objective. A number of excellent guides and toolkits to support people to assess the impact

Table 1 Key elements informing the design of HIAT

Key elements identified in the rapid review of existing guides, toolkits and theoretical and methodological articles on health inequalities

1. Public involvement
2. Integration of a health inequalities focus in design and analysis
3. Awareness of the socioeconomic drivers of health inequalities
4. Collection of data on the upstream processes that generate inequalities and addressing the socioeconomic determinants of these inequalities in health
5. Addressing the socioeconomic determinants of these inequalities in health

of actions (e.g. policies, practice, etc.) on health inequalities and how to integrate an equity focus into research were found.^{13–26}

The HIAT

The HIAT aimed to fill this gap to support researchers and health professionals to integrate a health equity focus routinely in the range of CLAHRC activities: evidence synthesis, applied health research, implementation, knowledge mobilisation and capacity building. PAs and staff from universities, the NHS and local authorities and experts with international experience of health inequalities work contributed to the development of the tool at three participative workshops and piloted draft versions.

The HIAT is an open access online resource (www.HIAT.org.uk). Its design was informed by existing guides and tools. It is divided into four sections: clarifying the health inequality dimension of the problem to be addressed; designing the work to address the problem; evaluating the work as it is implemented; and monitoring and planning for wider impacts on health inequalities. These sections are each structured around five key elements (Table 1).

CLAHRC-NWC used HIAT as a vehicle to support its strategic aim of mainstreaming a health equity focus across all levels of the organisation. For instance, the collaboration's Steering Board (SB) requested mandatory HIAT assessments for all proposals seeking funding from CLAHRC-NWC. Support to use the toolkit was provided by specialised staff. The HIAT was used during in-house and external training sessions, which included analysis of case studies of research/policy/practice/from the UK and beyond. The tool was also used in the design of a variety of projects (including systematic reviews, service evaluation or participatory inquiries in neighbourhoods) with academics, PAs, health professionals, service users, PhD students, interns and communities.

Methods

Findings are based on data collected during an internal evaluation of CLAHRC-NWC conducted in 2017–2018 by teams of academics and Public Advisers (PAs). A panel of six PAs also contributed to the study design and interpretation of findings. It comprised four interlinked components focused on the Public Health (PH) research programme involving participatory research in 10 neighbourhoods; the Partner Priority Programme's (PPP) involving evaluation of new models of care; the Intern programme (IP) providing research training for NHS and LA staff; and the extent to which strategic objectives in relation to public and stakeholder involvement, health equity and research capacity building had been achieved.

The evaluation used qualitative data collection methods and information from internal documents and routine data such as HIAT and training feedback forms. In total, data were obtained from 131 individuals through face-to-face interviews ($n = 58$) and focus groups/workshops ($n = 73$). These included staff from CLAHRC-NWC's NHS, local government, university and third sector partners; PAs; and professional interns supported by CLAHRC-NWC. Information sheets and consent forms emphasised that participation was voluntary.

As each component of the evaluation had its own objectives, the interview and focus group topic guides varied in the extent to which they prompted about health inequalities, but all collected some qualitative data on aspects of the topic. All interviews and focus group were recorded and transcribed. The initial coding frame was based on the five key dimensions of the HIAT, which were identified during the rapid review of existing guidance/toolkits (Table 1). As the analysis evolved, additional codes were added.²⁷ Researchers first familiarised themselves with the data by reading the transcripts, noting new themes. The final coding frame was then systematically applied to all transcripts. The coding frame was uploaded to Excel, and data was coded into a set of analytical charts. These charts were studied to identify common or divergent perspectives and the main authors discussed potential explanations and interpretations. A PA panel took part in two workshops to discuss data interpretation and preliminary findings. Content analysis of CLAHRC-NWC policies and strategies and SB minutes were also conducted to identify references to health inequalities.

Ethical approval was obtained from the university where lead researchers were based: Lancaster University for the Public Health programme and CLAHRC-NWC strategic objectives; Liverpool University for the Partners Priority Programme; and the University of Central Lancashire for the Intern programme. Where quotations are used to illustrate

findings, the reference includes (i) the data collection method with a unique number (int14 = interview n.14; grp2 = focus group n.2; HIAT1. feedback form), (ii) respondent's organisation (Local Authority = LA; NHS; Public Adviser; Academic; Intern), (iii) and the evaluation component (PH = Public Health programme; PPP = Partners Priority Programme; Intern Programme = IP; CC = CLAHRC strategic objectives). On occasions, verbatim words or short expressions are inserted within the text and italicised to differentiate them from the authors' interpretation.

Discussion

Main findings

Increased understanding of the socioeconomic drivers of health inequalities

There was a widespread view that HIAT-related activities such as mandatory HIAT assessments and one-to-one support and training increased understanding of the socioeconomic drivers of health inequalities. The impact was described by two NHS Partners as 'triggering a lightbulb moment' and 'transformational for some people's thinking'. Others used metaphors describing HIAT activities as a pair of corrective 'glasses' helping them to develop new understandings of how inequalities in health are caused by structural 'factors that individuals do not have control over' such as 'infrastructure and the environment we live in' leading to 'lack of control and choice', impacting on people's risk of getting ill or ability to access services. This new awareness was reported to have changed how people 'looked at the data now'. For instance:

I think it really raised the awareness of the people in the project ... on health inequalities because I think they'd always been a bit paternalistic about the service and very much focused on like the physical and hadn't really necessarily thought about the wider implications of having a long term illness ... so that awareness around equality would be pulled into that project. (grp10-NHS-PPP)

Many respondents noted that HIAT contributed to shifting thinking about health equity from 'someone else's' to 'everybody's business' and a CLAHRC-wide responsibility. Following HIAT training, a professional from another CLAHRC stated that health equity should be a 'golden thread' running through everything. Similarly, a PA explained the development of their understanding:

The analogy of the people drowning downstream, yes it's such a powerful analogy isn't it. There's people drowning downstream so people go searching upstream to find out why that is and then they see people jumping in; that analogy unless that dam is built,

which is everyone's responsibility . . . not just the directors of CLAHRC or NIHR. (grp3-Public Adviser-CC)

Developing confidence to integrate health inequalities into the design and analysis of activities

As this quote illustrates, the HIAT had helped people learn more about how to design more equity-sensitive interventions, evaluations and implementation frameworks:

The HIAT tool brought greater clarity and value to our evaluation planning process. It also encouraged us to think more about barriers to access in terms of our activities, and how we might measure this as well as address it. (HIAT1 feedback-NHS)

Integrating an equity focus into projects was argued to be necessary to spend public money 'wisely'. Using the HIAT had also helped people understand the need for collecting disaggregated data linked to factors that influence health such as ethnicity, age, socioeconomic status, sex, gender, etc. or on whether services or policies benefited all socioeconomic groups equally and, if not, how to address this. Two NHS partners reported that they had changed their organisations' data recording systems to provide disaggregated data: one changing patient records and the other adding a short questionnaire at the beginning of their online service to track differential access.

Developing skills to collect better data on the upstream processes generating inequalities

HIAT had helped professionals to understand the implications of tracking the root causes of inequalities. This NHS respondent explains how their team realised how much they do not know about the impact of their work on health inequalities and what they needed to do to change this:

With one of our projects (...) when it started 6-5 years ago you know there was a throwaway line in it: "this will help to reduce health inequalities". That was that and then it's never been looked at in any depth. So the team now recognise this is one of the sensitivities . . . and they have started to look at the data, analyse it differently to really try and understand what's happening'. (grp16-NHS-PPP)

Other respondents stated that the process of applying HIAT to reviews was instructive. It showed that most studies did not consider health inequalities or provide data on the differential impacts of interventions. Also, most studies selected for review did not provide data on the upstream causes of health inequalities, so it was difficult to evaluate whether the designed actions could address these. The respondents below suggest a way forward to change current practice:

So I think the trouble with reviewing evidence is that doesn't look at health inequalities. The key thing is you can say that in the future research needs to consider health inequalities. When the review is published (it) will create an awareness of that lack of consideration and put forward that message that they need to and hopefully change. (int8-Academic-CC)

Enhanced capacity to address the socioeconomic determinants of health inequalities

The evaluation found a few modest examples of how CLAHRC research had impacted on local action aimed at reducing health inequalities of increased awareness and intention to make changes.

Advocating for a focus on health equity within organisations. HIAT helped some respondents to appreciate the importance of drawing their colleagues' and organisation's attention to health inequalities. As this NHS Partner emphasised, to facilitate change, it is necessary to collect evidence highlighting how health inequalities is a pressing issue for their organisations and to present this evidence in the right settings and to the right people with power to influence change:

(...) if the report goes to the Health and Wellbeing Board, which it will do, it's about everybody within that Board thinking about what does that mean for [the borough] and how does it get into the plans? How does it get into different people and the strategic needs assessment? How do we embed what we've done within plans, systems, processes within our locality? (int11-NHS-CC)

Advocating for a focus on health equity outside organisations. A few respondents mentioned that they had roles in organisations other than the CLAHRC and were intending to use these to advance awareness and consideration of health equity.

Developing new partnerships. Some NHS and LA Partner's staff expressed their appreciation for the way that 'the joint work between Universities and the service side' supported by the HIAT had opened opportunities to increase the equity focus of their work. These included access to new resources like databases and tools. Several academic and NHS respondents valued the opportunity to work with LA departments and organisations outside their traditional remit, such as transport, third sector organisations or local businesses to 'look at how we tackle some of the entrenched issues'.

The contribution of public involvement to equity sensitive research

There were also modest examples of increased understanding of the contributions that public involvement offers to design and implement more effective interventions. As one respondent put it:

... public engagement and the HIAT actually mesh together in that you can't really do a HIAT without engaging with people, members of the public or patients or carers, because you're turning the research topic round to what they think would be helpful to them rather than we've got this really interesting, exciting new way of delivering stuff. (int7-NHS-CC)

For many, this realisation occurred when they 'witnessed' firsthand the insights provided by the 'lived experience' of service users, citizens or carers.

What is already known on the topic

A focus on reducing health inequalities is essential in advancing population health and reducing inequalities. Yet, relatively little applied research has an explicit focus on health equity, and some policies/practice/interventions may increase health inequalities by differentially benefiting more socioeconomically advantaged groups.⁶

What this study adds

The CLAHRC-NWC HIAT was designed to equip researchers and health professionals with the knowledge and skills to integrate an equity focus in their work. The findings reported here suggest that HIAT can be a useful resource to help in the development of these essential competencies by (1) increasing understanding of how socioeconomic inequalities lead to health inequalities, (2) building capacity for integrating a health equity focus into the design and evaluation of research and action including the requirement for data to assess differential impacts, (3) stimulating innovative thinking on how researchers and local professionals can address the socioeconomic drivers of health inequalities, and (4) illuminating the contribution public involvement can make to enhancing equity sensitivity.

Limitations of the study

As the evaluations were conducted by internal teams within CLAHRC-NWC, several steps were taken to reduce potential bias²⁸ including where possible avoiding team members interviewing people previously known to them, using pre-existing theory to structure the coding frame and inform the analysis and data extraction from a subset of transcripts by two researchers. In addition, only one of the core teams was directly involved in developing and implementing the HIAT. The team provided an internal check to challenge potential bias during the processes of data analysis and interpretation.

Conclusion

Strengthening the equity dimensions of applied health research will create an evidence base to support policy makers

and practitioners to act on drivers of health inequalities that are amenable to local action and to avoid actions that may increase inequalities. However, we recognise that delivering research and training with a greater equity dimension will not be sufficient to advance health equity goals. The HIAT was co-developed as a part of a wider strategy for mainstreaming a health equity focus to enable change of organisational cultures and structures. Only in this context, combined with political commitment to create more equal societies, will an equity focus be successfully mainstreamed in health research, policy and practice. The challenges of implementing such mainstreaming strategies are discussed in a further paper from the CLAHRC-NWC evaluation.

Declaration of conflicting interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

Availability of data and materials

Due to confidentiality, and the nature of the consent obtained, the qualitative interview transcripts cannot be shared. For further information related to this data set, please contact the corresponding author.

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