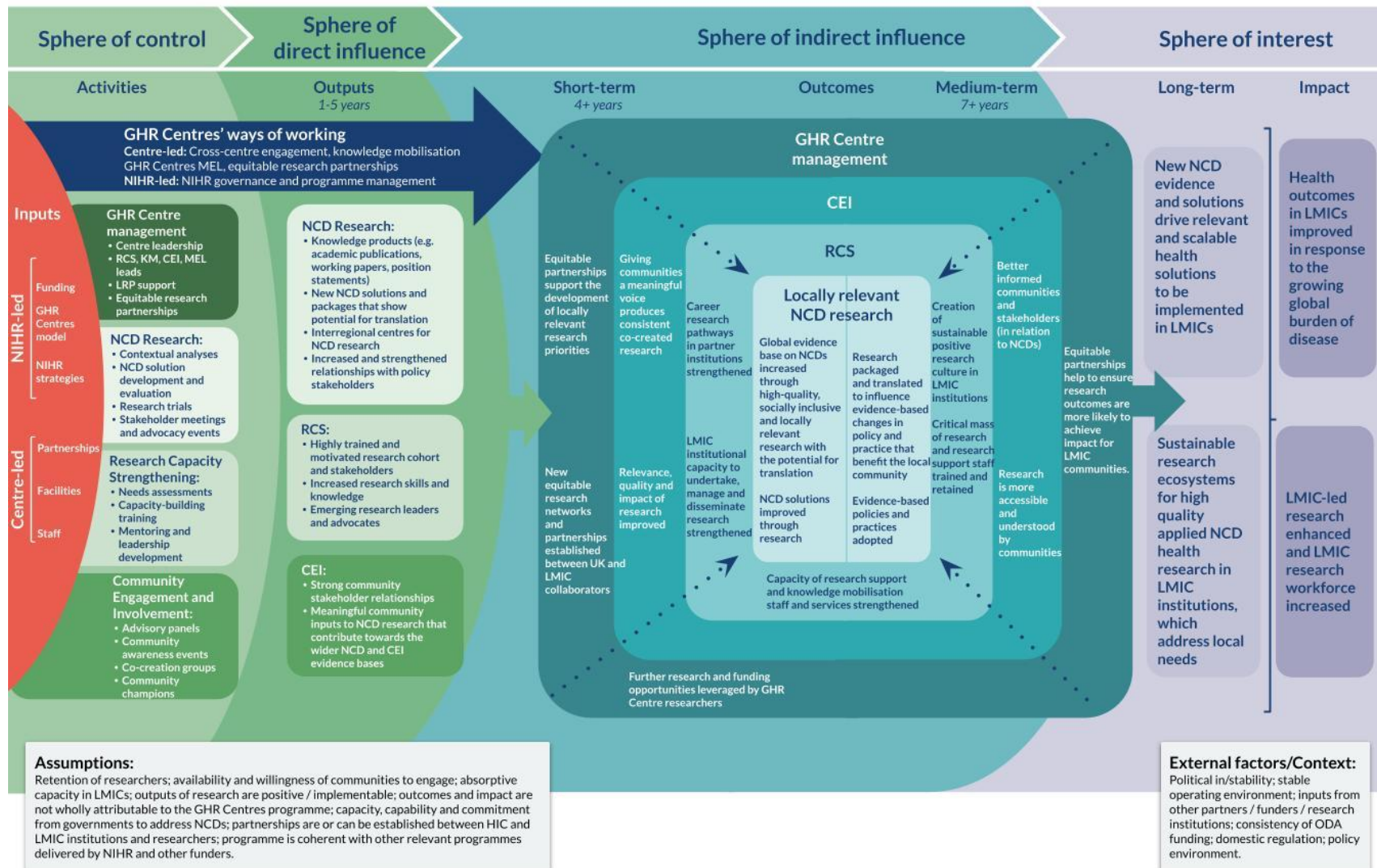




Global Health Research (GHR) Centres Theory of Change

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Established in 2006, the [National Institute for Health and Care Research](#) (NIHR) seeks to improve the health and wealth of the nation through research and is funded by the Department of Health and Social Care (DHSC). Its funding programmes support high quality research in a broad range of topic areas that benefit the NHS, public health and social care.

The Global Health Research Centres (GHR Centres) programme represents a new funding model for NIHR and responds to gaps and priorities in health research capacity strengthening at individual, institution and systems levels. It aims to provide a sustainable platform for high-quality applied health research in low and middle income country (LMIC) institutions in order to address local needs and improve health outcomes in response to the changing global burden of disease.

The programme also supports the ambition of the NIHR Global Health Research portfolio to contribute to the sustainable growth of the wider LMIC research ecosystem and shift its centre of gravity to LMIC-led research. In support of Sustainable Development Goals (SDGs) 3 and 9.5, the investment aims to scale up LMIC research capacity and capability through institutional-level research partnerships. Importantly, equal value is given to both research capacity strengthening and the production of high-quality research. The GHR Centres programme aims to ensure that not only is existing LMIC research capacity strengthened but also smaller or less research-intensive institutions are enabled to expand their research capability and move into new areas of research in support of national or regional health and research strategies.

In addition to these aims and objectives, the NIHR's '[Call Remit and Guidance](#)' for GHR Centres includes a [provisional programme Theory of Change](#) (ToC). This ToC was used to communicate a selection of activities and results that applicants could use to design their award applications. Since then, five GHR Centres have been selected and initial activities

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are underway. As Centres have further developed their plans and conducted various contextual analyses, they have generated their own ToCs, which the NIHR GHR Centres programme team has sought to reflect in an revised version of the GHR Centres programme ToC.

Work to iterate the GHR Centres programme ToC included:

- Review and mapping of each GHR Centre's ToC
- Scoping discussions with the NIHR's Global Health Research stakeholders
- Document review
- ToC workshops with NIHR and other stakeholders

The Theory of Change is described below.

ToC Structure

The revised theory of change seeks to convey not only the expected activities, results and causal chain of the GHR Centres programme, but also how the unique GHR Centres streams of work necessarily interact to create impact. The structure of the ToC follows the traditional inputs-activities-outputs-outcomes-impact linear model, but with an embedded 'theory of action' at the outcome stage. It also includes a graphical representation of the different ToC 'spheres', from 'sphere of control' at the input layer to 'sphere of interest' at the impact layer. These spheres make clear the relationship the GHR Centres programme has with the results statements for each layer of the ToC. For example, the programme has 'control' over the activities it implements but may only 'indirectly influence' its short- and long-term outcomes. These spheres have been included to enable the ToC to be used in a variety of ways, namely in communication, planning, and evaluation.

Inputs

Starting on the left-hand side are the **inputs**, which list the resources that will be invested in the programme to enable delivery. This has been divided between resources led and owned by the NIHR and those led and owned by the Centres themselves. The **GHR Centres' ways of working** also includes features led either by the GHR Centres or by the NIHR. The various GHR Centres' ways of working continuously feed into both the different activity streams of the programme and into the initial outputs, resulting in short- and medium-term outcomes. These ways of working are distinct from the **inputs** as they both facilitate activities and maximise results of the programme.

Activities

Activities for the GHR Centres have been grouped into four streams of work. The first stream represents the GHR Centre management and support functions which are in place to ensure that the activities related to research, monitoring, evaluation and learning (MEL), knowledge mobilisation (KM), community engagement and involvement (CEI), and research capacity strengthening (RCS) are embedded across the GHR Centres. This is followed by the activities related to conducting research on non-communicable diseases (NCDs). The third stream encompasses activities related to RCS. The final stream relates to CEI

activities. The objective of the GHR Centres programme is for the research to be LMIC-led and responsive to local population needs so as to arrive at contextually relevant results. Therefore, the activities listed here are not exhaustive but instead represent a cross-section of activities taking place across GHR Centres.

Outputs

The **outputs** are results that the programme has 'direct influence' over and would hope to achieve after the first year and up to the fifth year of implementation. Output statements have been grouped under three streams corresponding to, and therefore resulting from, the activities layer (NCD research, RCS, CEI). Given the programme's focus on delivering results relevant to people in LMICs, there may be additional output-level results that emerge over the course of implementation including, for example, cross-GHR Centres outputs.

Outcomes

From the **outcomes** layer of the ToC, the delineation between the three streams adapts to show the nested, interactive nature of the streams. The timeline for achieving the programme outcomes ranges from 4+ years for short-term outcomes and 7+ years for medium-term outcomes. Starting from the outermost layer we have the outcomes related to **GHR Centre management**. Despite Centre management functions primarily being a supportive feature which underpin ways of working, it also produces results of its own which transcend enabling programme delivery. Results of Centre management are mainly focused on equitable partnerships and in the short-term include: 'equitable partnerships support the development of locally relevant research priorities', 'further research and funding opportunities leveraged by GHR Centre researchers', and 'new equitable research networks and partnerships established between UK and LMIC collaborators'. The latter statement relates to enhancing North-South, South-South and triangular regional and international cooperation on and access to science, technology, and innovation. The medium-term outcome of GHR Centre management is 'Equitable partnerships help to ensure research outcomes are more likely to achieve impact for LMIC communities'. The NIHR envisions that equitable partnerships which are embedded across the research cycle, from design through to implementation and translation, ensure more locally relevant research is produced which in turn leads to greater impact for LMIC populations.

The next layers at **outcome** level include results statements for both short-term and medium-term outcomes which mirror the streams of work (RCS, CEI) but have been organised in a nested way to show how each workstream is also an 'enabling layer' which ultimately leads to outcomes in locally-relevant NCD research. This thereby demonstrates not only a theory of 'change' but also a theory of 'action'. For **CEI** the short-term outcomes include: 'Giving communities a meaningful voice produces consistent co-created research' and 'relevance, quality and impact of research improved'. These then result in 'better informed communities and stakeholders (in relation to NCDs)' and 'research is more accessible and understood by communities' in the medium-term. For **RCS** the short-term outcomes include: 'career research pathways in partner institutions strengthened', 'LMIC institutional capacity to undertake, manage and disseminate research strengthened', and 'Capacity of research support and knowledge mobilisation staff and services strengthened'.

These feed into the ‘creation of sustainable positive research culture in LMIC institutions’ and a ‘critical mass of research and non-research staff being trained and retained’.

Finally, the centre of the **outcomes** section contains the results statements for ‘locally relevant NCD research’. The short-term outcomes here are: ‘global evidence base on NCDs increased through high-quality socially inclusive and locally relevant research with the potential for translation’ and ‘NCD solutions improved through research’. These then result in ‘research being packaged and translated to influence evidence-based changes in policy and practice that benefit the local community’ and ‘evidence-based policies and practices being adopted’.

Long term outcomes & impact

The **short- and medium-term outcomes**, including those related to GHR Centre management, then generate the **long-term outcomes and impact**. The long-term outcomes are ‘new NCD evidence and solutions drive relevant and scalable health solutions to be implemented in LMICs’ and ‘sustainable research ecosystems for high quality applied NCD health research in LMIC institutions, which address local needs’. These correspond with, but also work together to contribute to the two impact statements: ‘health outcomes in LMICs improved in response to the growing global burden of disease’ and ‘LMIC-led research enhanced and LMIC research workforce increased’, which align with SGD 3 and 9 respectively. The long-term outcomes and impact sit within the ‘sphere of interest’ and are viewed as results which the GHR Centres programme is interested in but is not able to control, directly-influence, or perhaps even indirectly influence.

Assumptions and Context

Underpinning the ToC is a set of **assumptions and external factors** listing what contextual features need to remain the same and which programmatic assumptions must hold true for the causal chain of the ToC to progress as articulated.

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- Anupama Ramaswamy: facilitation, methodology, stakeholder engagement, Theory of Change development, indicator framework design, writing, visualisation
- Joanna Cole-Hamilton: conceptualisation, methodology, investigation, writing (original draft), writing (review and editing), project administration, visualisation

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- Ianina L Conte: conceptualisation, writing (review and editing), investigation, resources, visualisation
- Zeba Siddiqui: facilitation, methodology, stakeholder engagement, Theory of Change development, indicator framework design, writing, visualisation
- Hannah Schwemin: facilitation, methodology, stakeholder engagement, Theory of Change development, indicator framework design, writing, visualisation
- Anne River: conceptualisation, supervision, methodology
- Kara Hanson: supervision

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Competing interests

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Key words

Theory of change; logic model; Global Health Research Centres; global health; programme theory; impact; outcomes; evaluation