Case Study:

COVID-19 Research Implementation and Knowledge Hub

The emergence of COVID-19 required robust, collaborative research to immediately understand how to combat this novel disease and also to learn for future outbreaks. Anticipating the need to support rapid research implementation in low-resource settings, The Global Health Network immediately reacted and launched the COVID-19 Research Implementation and Knowledge Hub in January 2020.

The overall aim is to support global equity in taking part in and benefiting from health research. The Hub enables health professionals and researchers to discover the most relevant information, guidance, and resources to their research, role and setting. It is being used by researchers to access resources in one place and is connecting major international initiatives working on COVID-19 to further disseminate by cross-linking all for maximum accessibility, information delivery and further driving equitable access to COVID-19 research.

As of FEB 2021:
- Over 400,000 visits from 195+ countries to coronavirus.tghn.org
- More than 20,000 COVID-19 outbreak resources downloaded including Case Report Forms, Clinical Characterisation Protocols and ethics approval request templates
- An ongoing programme of workshops, with 40+ workshops, and over 5000+ attendees from 140+ countries
- Leading to the development of seven open working groups with 500+ researchers from at least 82 countries; each finding solutions for specific research areas.

Ten years of running The Global Health Network has taught us the value in creating communities of practice to solve problems. The science of sharing is deeply rooted in this Hub and is central to strengthening local capacity and supporting critical implementation of COVID-19 research locally, across low-resource settings. This Hub seeks to illustrate the potential for transformative change through a simultaneous process of taking action, doing research, dynamic sharing, and critical reflection. The nature of the content hosted on the Hub is steered by the feasibility and utility for researchers in LMICs, as led by the named partners. Considering the wider communities of researchers who could benefit, the outreach is amplified by the Hub and the purpose-built cross-cutting nature of The Global Health Network platform. This effectively draws on the associated international collaborators and programmes operating across The Global Health Network to disseminate the project more widely, as well as fostering opportunities for new partnerships and expanded research opportunities.
The ability to undertake research should be equitable across the globe and we need to engage in all types of studies across all settings and care contexts.

• **Resource Area:**

The Hub supports research implementation in 7 key thematic areas and ensures that research teams can find the support, tools, resources and guidance that they need to aid their studies during this rapidly evolving situation. Using shared and open protocols and tools can raise research standards and enable easier and better data sharing.

This area reflects the greatest demand for training resources and continues to expand with **interactive step-wise toolkits** as well as showcases the **ISARIC Clinical Characterisation Protocol**, with short tutorial videos developed to support operationalising this observational study globally.

The area also has a **crowdsourcing initiative** whereby we work with regional research teams to share their study documentation - including *SOP’s, informed consent forms and any other study and training materials*. Working alongside these research teams, TGHN collates study resources in the form of a ‘study implementation map’.

At the moment these include studies related to COVID-19 disease characterisation, such as the COVID-19 Solidarity Trial, as well as studies evaluating the impact of COVID-19 control measures on the delivery of health services, such as Malaria (see image).

This active sharing by teams and sites in the form of study ‘walk-throughs’ hosted on the platform enables other site teams to download, modify and adapt them for use in their own setting. This supports high-quality, rapid implementation of these critical COVID-19 studies and brings the added benefit of standardisation and approaches to measuring outcomes that are pragmatic and proven to work.
Regional Response area:
Led by project consortia, aims to drive and seek wider engagement across the regions to implement locally-led research and build thriving communities of practice as part of this global effort to respond.

With a strong digital platform built in consideration of low-bandwidth settings, The Global Health Network has connected communities researching COVID-19 from numerous disciplines and locations. The regional teams for Latin America, Africa and Asia continue to collaborate closely, contributing to local initiatives in support of research efforts as part of the COVID-19 response.

➢ Latin America
   a. A mixed methods study, now published in a regional journal in Spanish, was conducted to identify COVID-19 research gaps that require urgent attention and establish support for wider study implementation to address this.
   b. TGHN is also supporting research institutions across Central America and the Caribbean to develop a grant proposal (awarded by WHO) and currently implement a project to “Strengthen research ethics governance and regulatory oversight in Central America and the Dominican Republic in response to the COVID-19 pandemic”. Members of the COVID-19 hub will be openly invited to participate in workshops and discussions regarding ethical frameworks in the region.

➢ Africa we are bringing teams together through a new regional leadership agreement with Africa CDC.
   a. In partnership with Fiocruz, and international networks including ALERRT, webinars in English, French, Portuguese have been conducted to promote the exchange of challenges and solutions, and ultimately support the implementation of research across Africa.
   b. In partnership with ALERRT, PANDORA and the EDCTP Networks of Excellence, two complementary workshops were hosted to draw on Research in Global Health Emergencies and Research Ethics during Epidemics.
   c. In response to the paucity of material available in Portuguese, an African-Brazilian Lusophone Working Group forum was formed, for actively addressing the research
priorities pertinent to these settings. The group continues to collaborate and actively engage in different activities including: collating and translating vital English resources, and writing key papers. Two manuscripts are currently in draft, one is intended as an opinion piece to bring to international attention how uncoordinated testing strategies might undermine the success of a global response to the pandemic. The second paper focuses on the COVID research efforts in Brazil.

- **Asia** we have strong partnerships in place in Bangladesh, Pakistan, Nepal and Malaysia.
  a. Currently, we are supporting a five-month project to assess the *capacity of the ethics review process for health-related research in Pakistan during the COVID-19 global public health emergency*.

• **WORKSHOPS**
  This COVID-19 Hub is also leading a programme of open workshops with research organisations tackling different aspects of the pandemic. What began with an 'open virtual workshop' to explore the immediate regional research questions led rapidly to an evolving series identifying emerging research needs. These allow participants to directly voice their own questions, identify relevant resources and gather consensus with the panel and other attendees. This has also brought about an active mechanism for linking networks and consortia, heightening the impact each would achieve working separately.

  To date we have run more than 40 workshops in multiple languages, attended by more than 5,000 participants from 140+ countries. We have worked in collaboration with UK-PHRST, CEPI, PHEPHREN’s Epidemics Ethics, COVID Neuro Network (BIG) amongst others.

• **WORKING GROUPS**
  Also, in May 2020, we were asked by UKCDR to determine the current research priorities for LMICs in light of the WHO research priority roadmap lacking considerations for such settings. This research highlighted key areas where questions remain. As a direct outcome of the workshops and to actively address identified research priorities, 7 Working Groups (WGs) were established bringing excellent representation: almost 500 researchers across 82 countries from a range of organisations and with varying levels of experience. They now lead themselves, with the Oxford team providing coordination and support as requested by these LMIC researchers. It is this combination of local leadership and the application of TGHN’s platform that stand to make this work exceptional. The new 7 Working Groups have a steering group and a strong set of tasks that they are already advancing, including:
  ➢ Developing protocols and the corresponding study documentation evaluating the impact of COVID-19 on health systems protocols. These directly came from a strong, wide ranging and highly robust and ongoing process. Here we have enabled new voices to be heard. Proposals foster contributions from a range of research experience levels and LMIC settings, strengthening the remit, objectives and efficacy of the team to deliver these studies. Such protocols were developed in association with the Working Group members, acknowledging the context-specific nature and diverse considerations across LMIC
countries. These are now being reviewed and polished and will then be shared widely with other researchers and stakeholder groups across the field of global health. This will promote democratic engagement as the support and materials will be open and free, providing a neutral platform for researchers globally to use the materials for uptake of these studies in other settings. This will serve as a catalyst inviting broader regional comparative studies, utilizing the same successful protocol and study materials in other settings and offering a forum to foster new collaborations and initiatives.

- Conducting exploratory workshops to understand the capacity of ethical review carried out by ethical review boards or institutional review boards in global emergencies and,

- 3 publications are already in draft, co-authored by the members directly. These papers concern:
  - vaccine development and deployment across LMICs,
  - COVID-19 and vulnerable populations, and
  - Ethical Governance framework.