



Case studies for the report

Funding and undertaking research during the first year of the COVID-19 pandemic: COVID CIRCLE lessons for funders

A collection of research projects and programmes demonstrating innovative best practice in research in epidemics



UK Collaborative on
Development Research





As part of the report *'Funding and undertaking research during the first year of the COVID-19 pandemic: COVID CIRCLE lessons for funders'*, we have developed seven case studies involving research projects and programmes which have demonstrated innovative best practice in research in epidemics. Each case study highlights factors of success in applying one or more of the Seven Funder Principles for supporting high quality research for the most pressing global needs in epidemics and pandemics, to inform future funding and research practice.

INTRODUCTION

The 2014-2016 West Africa Ebola outbreak highlighted the inadequacies of global health research systems to respond to acute crises and galvanized global health actors around initiatives to boost preparedness and capacity for effective future epidemic response. Key among these is the WHO Research & Development Blueprint mechanism which focusses on priority pathogens of epidemic potential and outlines a framework for prompt response to disease outbreaks.

This mechanism was rapidly triggered at the onset of the current COVID-19 pandemic in early 2020 resulting in a WHO Coordinated Global Research Roadmap to which several funders aligned their research responses.

Further, funders drew on their experiences from funding research during the West Africa Ebola outbreaks (2014-2016), Zika epidemic (2015-2016), North Kivu Ebola epidemic (2018) and other acute health emergencies to refine their approach to funding COVID-19 related research.

The Global Effort on COVID-19 Health Research (GECO), European and Developing Countries Clinical Trial partnership (EDCTP) and Research for Health in Humanitarian Crises (R2HC) funding programmes in particular have demonstrated innovative funder practices which are highlighted here.

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Research for Health in Humanitarian Crises (R2HC) COVID-19 Response



Africa CDC Response to COVID-19

The Africa CDC Response to COVID-19 programme aimed to develop a unified regional approach by Africa Centres for Disease Control and Prevention (Africa CDC) and the African Union to tackle the rapid spread of COVID-19. In collaboration with multi-sectoral partners, Africa CDC developed an overarching framework for Africa's COVID-19 preparedness and response. Through implementing the framework, this programme has contributed to building research capacity, cross-sectoral and multi-disciplinary partnerships and supported coordination and collaboration for pandemic preparedness and emergency response.

Funders: Wellcome and UK Foreign, Commonwealth & Development Office (FCDO)
Fund/Funding programme: Wellcome/FCDO Joint Initiative on Epidemics Preparedness (JIREP)

Total investment: £2m

Project dates: 10 April 2020 - 10 April 2021

Lead Institutions: African CDC & the Institute Pasteur Dakar

Partner Institutions: Wellcome, UK Foreign, Commonwealth and Development Office (FCDO), Africa CDC, WHO, African Union, and member states.

Countries of focus: Multiple African countries [Pan-African focus – 5 sites/hubs across Africa through the Africa CDC coordinating centres – Ethiopia (the Africa CDC headquarters), Kenya (East Africa regionals collaborating centre), Nigeria (Western centre), Gabon, Zambia (Southern centre)] with 20% funding provided to each centre.

BACKGROUND

As COVID-19 cases emerged in Africa, African leaders united to develop a joint African continental strategy to deal with the rapid spread of the COVID-19 pandemic. On February 22nd 2020 in collaboration with WHO, The African Union and Africa CDC, developed the [‘common pandemic preparedness strategy’](#) to provide an effective, united response against the pandemic. Africa’s comprehensive continent-wide response strategy against the crisis was boosted by the Wellcome/FCDO JIREP funding. The strategy highlighted the importance of greater coordination, collaboration, cooperation and communication and intends to provide direct technical assistance to Member States in the six strategic technical areas: laboratory and sub-typing, surveillance and enhanced port of entry screening, infection prevention and control, clinical case management, risk communication and [supply chain management](#).¹ The Institute Pasteur Dakar, Senegal managed the funds for the project activities on behalf of [African CDC](#).² Keeping research capacity strengthening at the core of the project, the African CDC project highlighted the value of multi-sectoral partnership, collaboration and coordination for pandemic preparedness and emergency response.

PRINCIPLES IN PRACTICE

Research capacity for rapid research

Within two months of the first African COVID-19 cases, Africa CDC received funding from Wellcome/FCDO for emergency response in resource limited contexts. To ensure rapid disbursement of funds, Institute Pasteur Dakar (IPD) managed the funding on behalf of Africa CDC. As previous Wellcome grantees, IPD had existing mechanisms to rapidly receive and manage research funding which enabled Wellcome/FCDO to circumvent the potential complexities of funding an institution which they had not previously funded. IPD also provides an existing research platform and reputation to facilitate research in response to COVID-19. The Wellcome/FCDO funding facilitated specialised training in different aspects of the response including exchange of data, knowledge, and information; stockpiling and distribution of essential commodities needed by the member states, which enhanced research capabilities of local institutions. The institutional capacity built through this funding in the early stages of the pandemic (e.g. through laboratory strengthening, surveillance, clinical case management, infection prevention and control etc), enabled a stronger emergency

response system, which will benefit future research response to epidemics and pandemics – particularly laboratory and sequencing components.

Equitable, inclusive, cross-sectoral, and interdisciplinary partnerships

For this project, which was by LMIC researchers, cross-sectoral and multi-disciplinary partnerships were formed across different sectors including partnerships between the African Union, WHO, Regional Economic Communities, member states, private sector actors, donors, foundations, and other stakeholders. These partnerships helped to harmonise the political, social, economic, and public health [responses to the pandemic](#).³ By providing support to develop relevant policies and implement essential public health operations across the continent, the cross sectoral and multilateral partnerships developed by Africa CDC facilitated greater regional response to the COVID-19 pandemic. In addition, Africa CDC gained trust through public and community engagement, ensuring consideration of marginalised and vulnerable people through inclusive partnership.

Protection from harm

The grant conditions for this project highlighted risk mitigation for COVID-19 projects. During the early stages of the pandemic, there was widespread recognition of the difficulties and expense of sourcing personal protective equipment (PPE). To address this and ensure researchers were protected from harm, Wellcome and FCDO implemented a change in grants policy, allocating specific funding to ensure PPE was provided for all researchers and participants, which they aim to sustain for future funding of epidemics research projects.



Collaboration and learning enhanced through coordination

This project exemplifies the importance of regional coordination and collaboration in response to an epidemic. As a result of the collaboration between partners, the resultant diverse expertise, additional regional resources, and in-country collaborators, strengthened the regional response to the COVID-19 pandemic. In addition, the multisectoral collaboration and coordination catalysed research to policy pathways supporting the uptake of research.

The existing funding partnership between Wellcome & FCDO through the Joint Initiative on Epidemics Preparedness (JIREP), which was established in response to the 2014 Ebola pandemic, also enabled coordination in research funding response, and built on the funders complementary expertise and systems (FCDO's in-country experience and Wellcome's previous funding of Institute Pasteur). This facilitated rapid disbursement of funds at a pivotal time in the pandemic, which enabled rapid response.

KEY TAKEAWAYS

Key learning and recommendations are as follows:

1. The Africa joint continental strategy for COVID-19 outbreak led by Africa CDC demonstrates the value of multisectoral partnerships for political and regional collaboration, particularly in low resource settings where capacity may be limited, and therefore efficient resourcing is a greater priority.
2. The existence of the Wellcome funding relationship with Institute Pasteur enabled rapid disbursement of funds. However, there is a need for improved processes and mechanisms to enable rapid funding to LMIC institutions and partnerships.
3. Cross-funder coordination and pre-established funding partnerships support rapid response during emergencies. Partnership between research funders also ensure efficient and coordinated funding which builds on each funders systems and expertise.
4. The joint strategy highlighted the importance of funders prioritising locally led research and local capacity building in resource limited settings which enhance the capabilities of local institutions to handle future epidemics or pandemics.
5. The programme highlighted the importance of adaptability from funders through the funding allocation for personal protective equipment (PPE) to protect researchers and participants from harm during global health emergencies, particularly in low resource settings.
6. Rapid funding is essential to respond to global health emergencies of new infectious diseases. However, this is most effective where it builds on pre-existing research capacity for epidemics and pandemic response. Furthermore, funding preparedness activities in between epidemics is important to ensure effective and pre-emptive response for future epidemics and pandemics.

REFERENCES

1. <https://africacdc.org/news-item/wellcome-and-dfid-support-africa-covid-19-continental-response-with-e-2-26-million/>
2. <https://africacdc.org/download/covid-19-pandemic-response-initiatives/>
3. <https://africacdc.org/download/adapted-africa-joint-continental-strategy-for-covid-19-pandemic/>

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afrimapr building blocks for the operational COVID-19 health response

The afrimapr team contributed to the COVID-19 response efforts by documenting gaps and identifying challenges in using open data on health facility locations in Africa, building on their ongoing Open Research Fund project building R components and providing training for mapping health data in Africa. Their work enables researchers and program planners to understand the available data and how it could be used and improved to inform responses. In doing so, afrimapr contributed important input to conversations about capacity building and tools for analysis in resource-limited settings.

KEY INFORMATION

Funders

Wellcome Trust Fund/Funding programme: Open Research Fund, discretionary funding awarded through the ORF and the Wellcome Data for Science and Health group (split 50%)



Total investments: £118,565 (£68,658 + £49,907)

Project dates: January 2020 – June 2021

Lead Institutions: Liverpool School of Tropical Medicine

Partner Institutions:

University of Leeds, University of Bath, Talarify (South Africa), Higher Education Strategy Centre (Ethiopia)

Countries of focus: UK, South Africa, Malawi, Ethiopia, Kenya

BACKGROUND

afriMAPr aimed to create software components – building blocks – for mapping health data in R, a free and open-source data language and software that is increasingly used in research and operational settings. These blocks would build the capacity of data scientists and analysts across the African continent to create data-driven maps that would support operational planning and responses to crises. Originally funded under the [Wellcome's Open Research Fund \(ORF\)](#)¹, supplementary funding was given to the afriMAPr team in response to the COVID-19 pandemic to extend their approach to examine health facility location data in Africa. They identified and assessed available data sets, highlighting the incompatibilities between these, as well as implications for planning and operations. In constructing software components to strengthen the ability of local researchers to create their own tools, the project emphasizes collaboration and capacity building around open data.

PRINCIPLES IN PRACTICE

Alignment to global research agendas and locally identified priorities

afriMAPr, as a set of open software components, can be tailored to fit the needs of researchers and operational planners. As such, it is well-placed to facilitate the pivoting and re-alignment of the activities of researchers and organisations to emerging priorities. When the COVID-19 pandemic emerged, the afriMAPr team shifted focus to develop and strengthen the components considered useful in the operational response.

Equitable, inclusive, cross-sectoral and interdisciplinary partnerships

The original project was built with a multi-institution and multidisciplinary team, which relied on existing partnerships with organizations with strong ties to data communities in several countries in Africa. Training materials are available on the [afriMAPr website](#)², with initial trials of online sessions with participants from Africa and a planned half-day tutorial at a conference for R users in July. These sessions will be led in English and French, with 60 participants. The afriMAPr blocks, as components rather than an end output, enable partnerships to be built around their application. The free software employing the blocks allows all to collaborate and use it freely.

Open science and data sharing

Using free and open-source data language enables researchers and partners to share and collaborate, without barriers of technical access. Using publicly available data, the components have increased access and usability of the data that is available. They also highlighted the gaps that remain in making data open and accessible, including closed data within organisations that is used in operational planning. It is unknown how applicable the afriMAPr tools are for this data, as it is not available to test and use. afriMAPr shows the possibilities for open science when data sets are available and tools can be made to harness these.



Collaboration and learning enhanced through coordination

The afriMAPr project has created several components (or packages) in R now [available on Github](#)³ – afrihealthsites, africovid and afriadmin, improving usability of health facility locations, subnational COVID data, and administrative boundaries respectively. afriMAPr recently [showcased their activities](#)⁴ in an online presentation as part of [Open Education Week](#)⁵, attracting more than 70 registrants from African countries. Their work and [associated paper](#)⁶ have been discussed by WHO, GAVI, and MSF working groups for the COVID-19 response, and they have been accepted as a technical partner in a WHO & UNICEF COVAX [GIS working group](#)⁷. Through this, their work is offered to countries to assist in COVAX planning, with most recent funding through MapAction to document the availability of open health facility location data for

South Sudan in a pilot project to inform the COVID-19 response. Remaining true to their original goals, local uptake of tools and use of the building blocks to conduct local mapping and analysis remains a priority, as are the relationships and collaboration required to gather and incorporate local feedback. While they sought to support operational planning during the COVID-19 pandemic by assisting with the use of open health facility location data, they were impeded by a lack of high-quality open data and support to improve this. Furthermore, a lack of familiarity with the open-source approach was apparent in peer reviews of their paper, which focused on the database element over the open-source code that enabled it. Though its content was immediately operationally relevant, the manuscript was in review for 6 months, which hindered afrimapr's ability to disseminate their findings and approach among different groups.

KEY TAKEAWAYS

1. Funding schemes like ORF can identify innovative projects in non-crisis times, that can then be expanded and supplemented when required to fill emerging needs.
2. afrimapr's open-source approach enabled quick collaboration and knowledge-sharing during the pandemic. Leaning on existing connections, it was able to quickly shift activities to adapt to emerging needs.

3. Closed data sets within organizations and groups that do not make their software components and analysis tools open-source make collaboration between developers difficult. Much code and data remaining unshared, with many opportunities to improve the efficiency of data use to inform health related research and operations.
4. A barrier to publications and dissemination of knowledge is the limited familiarity of peer reviewers with open-source approaches to data sharing and open science.

RECOMMENDATIONS

1. Consistent sharing of data and collaboration could lead to increased standardisation of data and ability to use data across multiple settings.
2. Increased awareness among funders of the strengths and long-term benefit of open-source approaches will increase their reach and can inspire open science from the start of data collection and preparation to the analyses, dissemination and operational use.

REFERENCES

1. <https://wellcome.org/grant-funding/schemes/open-research-fund>
2. <https://afrimapr.github.io/afrimapr.website/training/>
3. <https://github.com/afrimapr>
4. <https://www.openeducationweek.org/>
5. <https://afrimapr.github.io/afrimapr.website/blog/2021/afrimapr-showcase/>
6. South A, Dicko A, Heringer M et al. A reproducible picture of open access health facility data in Africa and R tools to support improvement [version 2; peer review: 3 approved, 1 approved with reservations]. Wellcome Open Res 2021, 5:157
<https://doi.org/10.12688/wellcomeopenres.16075.2>
7. https://docs.google.com/presentation/d/13BgTRc2EPqwKidE7PIEU_djxWRxh3YSuHXO8ue1hxJU/

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COVID-19 Child Abuse Prevention Emergency Response

In response to the COVID-19 pandemic, the 'COVID-19 Child Abuse Prevention Emergency Response' project developed a set of evidence-based open-source resources that reached over 193.6 million families to reduce parent stress and prevent child abuse at a pivotal point during the pandemic. The resources were also used by 33 governments, the WHO, UNICEF, USAID, and other implementing partners. The project built on the existing research capacity and systems established by the broader '[Parenting for Lifelong Health](#)' programme. The success of the projects activities and subsequent outcomes highlight the importance of long-term research capacity building, multi-sectoral partnerships, and open-access resources in response to public health emergencies.

Funders: UK Research and Innovation (UKRI), University of Oxford, Oak Foundation, The Human Safety Net, & LEGO Foundation. UKRI GCRF Accelerate Hub

Fund/Funding schemes: UKRI GCRF/Newton Fund Agile Response call to address COVID-19; University of Oxford COVID-19 Research Response Fund; TIDES/Oak Foundation grant, The Human Safety Net donation, LEGO Foundation grant. UKRI GCRF Accelerate Hub.

Total investment: £1662,537 (UKRI GCRF/Newton Fund: £472,297, LEGO: £716,875, Oak: £145,503, THSN: £124,155.09, University of Oxford: £203,707.18)

Project dates: 14 Aug 2020- 13 Feb 2021

Lead Institutions: University of Oxford

Partner Institutions: UNICEF, WHO, USAID, Centers for Disease Control and Prevention, Child Helpline International, UNODC, World Without Orphans, World Childhood Foundation, the Global Partnership to End Violence Against Children, the Civil Society Forum to End Violence Against Children, Parenting for Lifelong Health, Early Childhood Development Action Network, Clowns Without Borders South Africa, Together for Girls, LEGO Foundation & multiple universities: University of Oxford, University College London, University of Cape Town, Ateneo de Manila University, University Putra Malaysia, Bangor University, University of KwaZulu-Natal.

Countries of focus: Global including all DAC countries (except Western Sahara, Guinea, and North Korea)

BACKGROUND

Challenges faced by families and children were significantly exacerbated by COVID-19 due to the social and economic ramifications of the pandemic, and [mobility and social networking disruptions](#)¹. Globally, more than 1.37 billion children were out of school or childcare which increased the risk of an [upsurge in child abuse](#)². In response to the crisis, the University of Oxford built on their alliance with multiple global and local grass roots partners to prevent child violence and mitigate parenting stress during the peak of the crisis. Through this project, they aimed to deliver evidence-based resources against child violence to [57 million families in DAC countries](#)³.

In the early stages of the pandemic, grants from the LEGO Foundation, Oak Foundation, and the University of Oxford COVID-19 Research Response Fund, as well as the UKRI GCRF Accelerate Hub supported the initial groundwork, by establishing relationships with key partners and developing the evidence-based child abuse prevention programme content. Subsequent UKRI GCRF/Newton funding built on this and facilitated the global delivery of COVID-19 parenting resources, enabling rapid scale-up in low resource settings, multi-sectoral engagement, easy access for resource limited populations, and adaptive evaluation. In the immediate and urgent pandemic response period, the project demonstrated the value of capacity building, multi-sectoral collaborative partnerships, and data sharing, with demonstrated effectiveness against child violence.

The materials have been distributed across 193.6 million families, and taken up by 33 governments, and incorporated onto websites by UNICEF, WHO, and the World Childhood Foundation and more – exceeding the target milestones and expectations. The project has also delivered initial impact. A survey of 1371 families receiving COVID-19 Parenting resources in Nepal, Malawi, Cambodia, South Africa, Sri Lanka, Zambia, Pakistan, North Macedonia, India and Cameroon also reported 78% reduction in physical abuse and 76% less emotional abuse for children, as well as a 84% increase in parent engagement in play, 91% increased confidence in positive relationship building, 84% increase in confidence to protect children from online and offline sexual abuse, and [74% increase capacity to cope with parenting stress](#)⁴.



PRINCIPLES IN PRACTICE

Alignment to global research agendas and locally identified priorities

Due to existing partnerships with WHO, UNICEF and grassroots organizations and networks, this project had an in-depth understanding of local needs and priorities. As a result, the resources developed were easily adaptable to different contexts. For instance, the Malaysian University of Putra Malaysia is working with the Department of Islamic Development (JAKIM) to produce a faith-based package integrating COVID-19 Parenting resources with messages from the Quran, Hadith or sirah for use by religious leaders to [support families during the pandemic](#)⁵. Additionally, and importantly, this project proactively contributed to WHO and UNICEF's COVID-19 priorities on protecting children against elevated violence during the pandemic.

Research capacity for rapid research

The COVID-19 Parenting project ensured rapid response to the pandemic by utilising the pre-existing research capacity and systems, which were established in part due to previous UKRI funding.

From 2012-2019 UKRI/ESRC supported evidence-based in-person parenting programmes, which built institutional and individual capacity through various schemes including UKRI GCRF Accelerating Achievement for Africa's Adolescents Hub, UKRI/ESRC studentships and UKRI/ESRC Future Leaders Awards. The additional funding provided in 2020 through the UKRI GCRF/Newton Fund COVID-19 rapid response call, enabled the project to build on the existing capacity and partnerships, which facilitated a rapid and

timely response to the COVID-19 crisis. As a result, within 6 months, the resources were translated into 100 languages, and [reached over 193.6 million people in 198 countries and territories](#) ⁶.

Open science and data sharing

Open access of the COVID-19 parenting project resources led to wide uptake and impact. Additionally, the use of open-source platforms and accessible versions of the resources enabled collaboration with over 600 implementing partners in 198 countries and territories and supported 33 governments. Lessons learned from the project were also actively shared with the global community of practitioners, policymakers and academics preventing violence against children through different channels: social media, meetings, webinars, and reports.

Equitable, inclusive, cross-sectoral, and interdisciplinary partnerships

The COVID-19 parenting program was developed and implemented through extraordinary stakeholder engagement and trusted partnerships, demonstrating the value of multilateral and cross-sectional partnerships for efficient response during a global health emergency. Multi-sectoral partners from grassroots to global level were involved in this project, which enabled rapid delivery of locally relevant content through equitable partnerships between these institutions and organisations. The project placed significant emphasis on co-creation and shared

ownership of resources, which also supported the wide dissemination and uptake of the resources. Public and community engagement was also an integral part of this project, which enhanced the acceptance of the parenting resources in local communities. The focus on inclusivity through these partnerships further ensured easy access for families with disabilities and limited contexts such as humanitarian settings (e.g., refugees, internally displaced persons).

KEY TAKEAWAYS

1. A combination of long-term and rapid response funding is important to ensure effective research response in epidemics and pandemics. Long term funding enables capacity building for research, which can then be built on by rapid response funding to facilitate fast and effective research response during epidemics and pandemics for greater impact.
2. Multi-sectoral and interdisciplinary partnerships across global, national, and local levels are important in ensuring rapid and effective research response. Furthermore, relationships and trust established through long term partnerships facilitate greater collaboration and coordination for greater impact.
3. Innovative and open resource dissemination methods, which are based on understanding of cultural context and local priorities ensure acceptance and large-scale impact of research.

REFERENCES

1. Cluver, L., et al., Parenting in a time of COVID-19. The Lancet, 2020. 395(10231): p. e64.
<chrome-extension://dagcmkpagjlhakfdhnbomgmjdpkdklff/enhanced-reader.html?openApp&pdf=https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpmc%2Farticles%2FPMC7146667%2Fpdf%2Fmain.pdf>
2. COVID-19 PLAYFUL PARENTING EMERGENCY RESPONSE
https://www.end-violence.org/sites/default/files/paragraphs/download/COVID-19_Playful_Parenting_Emergency_Response%20%28002%29.pdf
3. <https://gtr.ukri.org/projects?ref=EP%2FV028456%2F1>
- 4,5,6. <https://covid19parenting.com/home>

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European and Developing Countries Clinical Trials Partnership (EDCTP) COVID-19 Response

EDCTP is the major channel of European support to global health research in Africa aimed at developing tools for the prevention and control of poverty-related infectious diseases. The EDCTP initiated a rapid emergency funding mechanism under its [Research and Innovation Actions](#) in response to the COVID-19 pandemic. This response is remarkable in that it harnessed existing rapid funding mechanisms and built on previous investments in pandemic preparedness and capacity strengthening activities that were initiated after the Ebola 2014-2016 outbreak.



KEY INFORMATION

Funders

European Commission, European and African Participating States

Total investments: Over €4.75m was initially invested in COVID-19 emergency call. Additional support from Participating States raised this amount to €12.75m (as of May 2021)

Duration of COVID-19 Emergency call: Opened on 3 April 2020 and closed on 17 April 2020

Number of projects funded: 28 projects funded (as of May 2021)

Countries of focus: Funded projects are being implemented in 25 sub-Saharan African Countries. Each project is conducted by a consortium of at least 2 European and 1 African institution

BACKGROUND

The European and Developing Countries Clinical Trials Partnership (EDCTP) is a public-public partnership, launched in 2003. Supported by the European Commission's Horizon 2020 Research and Innovation programme, which has provided a €683m investment for the period between 2014 and 2024, the EDCTP2 programme is implemented by an association of 14 European and 16 African countries. The €683m EU investment is complemented by contributions from European and African Participating States, and further support is received from third party partners.

Research is normally funded through annually launched funding calls with research themes outlined in annual workplans which are approved by the European Commission. Workplans for a particular year are submitted in the preceding year or approval. Hence the 2020 workplan, which was drafted in the course of 2019, included funds earmarked for emergency response in the event of to an infectious disease outbreak in 2020.

European countries

Austria, Denmark, Finland, France, Germany, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden and the UK.

African countries

Burkina Faso, Cameroon, Congo, Ethiopia, Gabon, The Gambia, Ghana, Mali, Mozambique, Niger, Nigeria, Senegal, South Africa, Tanzania, Uganda and Zambia

PRINCIPLES IN PRACTICE

EDCTP's [Emergency COVID-19 response call](#) inspired the development of the [COVID CIRCLE funder principles for supporting high-quality research for the most pressing global needs in epidemics & pandemic](#). Some examples of innovative practice of the Principles are highlighted below.

Alignment to global research agendas and locally identified priorities

The call was aligned to the [WHO Research Roadmap](#) with a focus on the following four thematic gaps: therapeutics, diagnostics, serological testing and understanding the natural history of infection.

Research capacity for rapid research

Investment in pandemic preparedness

Following the 2014 West Africa Ebola outbreak, an EDCTP Call for Proposal aiming to develop a new workstream for epidemic preparedness was approved by the European Commission as part of the 2016 EDCTP Work Plan. The €10m from the H2020 program was matched by the Participating States supported the initiation of the African coalition for Epidemic Research, Response and Training (ALERRT) and the Pan-African Network for Rapid Research, Response, Relief and Preparedness for Infectious Diseases Epidemics (PANDORA-ID-NET). The continued support for these international multidisciplinary consortia built research capacity and promoted a rapid response at the onset of the COVID-19 pandemic. For instance, ALERRT was involved in the development of crucial guidance and protocols (adapted to the African context) for the clinical management of COVID-19¹ and PANDORA-ID-NET carried out early studies that informed countries about the necessary strategies for the detection of COVID-19 cases at points of entry in various African countries².

Rapid research mechanism

Since 2018 the EDCTP Strategic Research Agenda has included an emergency response mechanism to support research response in the event of an infectious disease outbreak. This was incorporated into annual work plans with a commitment of €2.25m by the European Commission. The first projects funded under this mechanism were in response to the 2018 Ebola outbreak in the Democratic Republic of Congo and lessons learnt from the this call have informed the process used to activate the mechanism in response to the COVID-19 pandemic. The 20 COVID-19 projects initially funded under this mechanism (as of June, 2020) increased to 28 projects (as of May, 2021) after additional funds were secured from Participating States including France, Sweden, South Africa, Austria, Norway and the United Kingdom.

Specific modifications to normal funding processes to facilitate rapid research include:

1. Call readiness ahead of the approval of the 2020 work plan (which was still under review at the onset of the pandemic) leading to rapid launch of the emergency call.

2. Shortening call duration to 2 weeks
3. Expedited proposal review process
 - a. Shortening duration of expert review process
 - b. Organising a series of small consensus meetings
4. Support for the initiation of research in advance of proposal review and contracting
 - a. Applicants with fundable proposals could ask for an immediate start date for projects, the earliest being the date of call closure. Any accrued costs were potentially eligible for reimbursement. Although this favoured the initiation of rapid research, less-resourced institutions could have been put at a disadvantage
5. Expedited contracting processes



Open science and data sharing

Costs related to data management and data sharing are eligible for reimbursement during the project duration.

Appropriate ethical consideration

Consistent long-standing investments in ethics and regulatory capacities of countries in Sub-Saharan Africa have strengthened capacity for ethical oversight and governance over the years. Over 45 grants (valued at €15.59m) to support ethics capacity were awarded by EDCTP between 2014-2020. EDCTP has supported the African Vaccine Regulatory Forum (AVAREF) bringing together multi-country experts who play a key role in ethics guidance during the COVID-19 pandemic.

Collaboration and learning enhanced through coordination

Strategic partnerships

EDCTP provides a coordinated approach to the European Union's support for collaborative clinical research addressing poverty-related infectious disease in Sub-Saharan Africa. These efforts are supported by strategic partnerships with policy and governance agencies including WHO Afro, AUDA-NEPAD and Africa CDC to promote collaboration.

In addition to the emergency response mechanism for COVID-19, EDCTP collaborated with the Africa CDC to launch a call for "Capacity development for disease outbreak and epidemic response in sub-Saharan Africa" in 2020. The objective of the call is to establish a cohort of epidemiologists and biostatisticians to boost capacity for surveillance of infectious diseases outbreaks.

Another collaboration with the Botnar Research Centre for Child Health (BRCCCH) resulted in jointly funded multi-country research projects aiming to mitigate the impact of COVID-19 through improved surveillance and management of infections.

Trigger Criteria for emergency response

An official declaration of a situation as:

1. a Public Health Emergency of International Concern (PHEIC) according to the World Health Organization
2. a public health emergency under Decision 1082/2013/EU
3. an emergency under applicable national frameworks and regulations.

COVID-19 research through existing grants (funded prior to COVID-19)

Conditions stipulated in the Horizon 2020 framework do not allow supplementation of existing awards (in addition to agreed project budgets). Acknowledgement of the potential to generate evidence on COVID-19 led to EDCTP accepting amendment requests from projects seeking to add on COVID-19 research questions to their previous objectives.

Equitable, inclusive, cross-sectoral and interdisciplinary partnerships

EDCTP's funding model promotes inclusivity and interdisciplinarity with research partnerships required to include at least two European and one African partner in their research. 15 of the 28 COVID-19 projects are led by institutions from Sub-Saharan Africa.

Researcher support

The EDCTP knowledge hub is an online platform which fosters researcher collaboration and supports researchers from low- and middle-income countries with data management and research protocol development resources.

Engagement with funder coordination activities

EDCTP engaged with the UKCDR & GloPID-R COVID-19 Research Projects Tracker and associated Living Mapping Review of COVID-19 funded research projects to guide the prioritisation of funded projects. These resources serve as “important tools used by funders including EDCTP to gather information on knowledge gaps in terms of research topics and geographical coverage”.

SUMMARY OF LEARNING

Key learnings include:

1. Capacity to undertake rapid research is facilitated by:
 - a. Prior investment in pandemic preparedness initiatives
 - b. Existence of a ‘tested’ emergency response mechanism which could rapidly be activated

2. Researcher support promotes application of the COVID CIRCLE Seven Principles.
3. Strategic partnerships and collaborations with diverse global health actors strengthens the research response to the COVID-19 pandemic.
4. Flexibility of EDCTP to review and adapt call process to facilitate rapid research response funding.

RECOMMENDATIONS

Key recommendations include:

1. Continued investment in preparedness initiatives and resourcing of existing programmes e.g. AVAREF
2. Flexibility and adaptability to emerging research needs in a rapidly evolving pandemic considering:
 - a. Changing research priorities
 - b. Impact of the pandemic and public health interventions on research processes including field work, transport of biospecimen between countries etc.

REFERENCES

1. ALERRT. ALERRT AFRICA-READY COVID-19 CCP PROTOCOL Clinical Characterization Protocol for COVID-19 disease [Internet]. 2020 [cited 2021 Jun 3].

Available from:

https://media.tghn.org/medialibrary/2020/10/Step_1-CCP_Protocol_.pdf

2. PANDORA ID NET. pandora-id - News [Internet]. 2020. [cited 2021 Jul 15].

Available from:

<https://www.pandora-id.net/news>

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Global Effort On Covid-19 Health Research (GECO)

GECO is a cross-UK funder initiative specifically targeted at the COVID-19 research response, to address knowledge gaps in applied research in low-and-middle-income countries (LMICs), as defined by OECD-DAC classification. The call was underpinned by: the need to employ a truly global approach to health research in LMICs, taking cognisance of the unique contextual research needs; alignment to best research practice guidance (by GECO and other UK funders); and the need to address gaps in research evidence based on WHO Research Roadmap (and other research priorities).

KEY INFORMATION

Funders

UK Research and Innovation (Medical Research Council - MRC) and the UK Department of Health and Social Care (DHSC) through the National Institutes of Health Research (NIHR)
Funds form part of UK Official Development Assistance (ODA) commitments

Duration of funding call

The call was open between 18th May and 28th September, 2020 and decisions were made on a rolling basis in 3 consecutive rounds

Total investments: £11.6m

Number of projects:

Round 1 & 2 - 19 projects

Round 3 - Impacted by the recent review of UK ODA funding allocation. Further updates on these awards are pending

Countries of focus:

Projects involve 21 countries across Africa, Southeast Asia, Latin America and South America



Medical
Research
Council



Department
of Health &
Social Care

NIHR | National Institute
for Health Research

BACKGROUND

The COVID-19 pandemic poses a particular challenge for resource-constrained settings considering the wide-reaching health, economic and social impacts. Given the global nature of the pandemic funders of the GECO call were quick to recognise that research portfolios could be skewed to high-income settings, potentially leaving pertinent research questions relevant to or specific to LMICs unaddressed. Further to take a truly global approach to tackling the pandemic it was recognised that “a global pandemic requires a world effort to end it – none of us will be safe until everyone is safe”¹. The GECO call was therefore launched to address specific gaps in funded research addressing specific areas of the [WHO Coordinated Global Research Roadmap](#) with a focus on low-and-middle-income countries.

Developing the Seven Funder Principles for High Quality research in Epidemics and pandemics

The Seven Funder Principles were created as part of the development of the GECO call and were inspired by the EDCTP [emergency COVID-19 response call](#) specifications published in April, 2020. The UK DHSC initiated this work and further refinement and linkage to best practice guidance was undertaken by the UK Collaborative on Development Research (UKCDR) and the Global Research Collaboration for Infectious Disease Preparedness (GloPID-R) between May and June 2020. In the interim, the EDCTP call specifications were incorporated into the GECO call requirements of grantees with the subsequent linkage made to the Seven Funder Principles in the [GECO Call Specification](#) once they were formally adopted. Given the scope of the GECO call, the Principles are of particular relevance to LMICs although they are globally applicable to research funding practice, aimed at improving an effective research response to this and future epidemics and pandemics. The major UK funders of development research and GloPID-R funders have agreed to align to the Principles which were published in the [Lancet](#) in July, 2020. Continuing engagement and further endorsement is being sought from other research funding organisations, researchers and other actors in the international development research sector.

PRINCIPLES IN PRACTICE

The GECO call was aligned to all Seven Principles as outlined in the [GECO call specifications](#).



Activities of the call to meet three of the Principles are outlined here in detail.

Alignment to global research agendas and locally identified priorities

The GECO call was aligned to the research priorities outlined in the [WHO Coordinated Global Research Roadmap](#) with a focus on addressing the research gaps relevant to low and middle income settings, in particular: ‘epidemiological studies’; ‘infection prevention and control’; ‘clinical management’ and ‘social sciences in the outbreak response’. The call also aligned to the [research priorities of relevance to LMICs](#) identified in the collaborative study undertaken by the Africa Academy of Sciences (AAS), the Global Health Network (TGHN) and UKCDR².

The remaining research priorities which were of global relevance were covered by early investments of UK funders (including MRC and DHSC) in large clinical trials for vaccines, diagnostics and drug treatments. Noteworthy among these is the [RECOVERY trial](#) which demonstrated that dexamethasone (a cheap and readily available drug) improves the prognosis of severe COVID-19 infections and this has significantly influenced treatment practice globally including in LMICs³.

Equitable, inclusive, cross-sectoral and interdisciplinary partnerships

The call particularly encouraged applications from LMIC-based researchers and at least 6 of the funded research projects are led by research organisations in LMICs. Several of the remaining projects involved research partnerships between LMIC and UK-based institutions.

Collaboration and learning enhanced through coordination

Funder co-ordination and collaboration

The DHSC through NIHR and UKRI/MRC collaborated to fund the GECO call building on a previous model of co-funding other domestic and international research projects.

This model improved efficiency and scale by:

- bringing in expertise from both organisations to co-develop the call specification
- coordinating staff from both funding agencies to deliver specific elements of the call; and
- increasing the budget available for the call as each funder contributed an equal budget.

Ultimately, one funder administers and manages the on-grants on behalf of the co-funders. This approach ensured the successful and rapid delivery of the first and second rounds of the GECO call. Further updates on the round 3 call are pending following UK ODA budget reductions which were introduced following the [December 2020 funding committee](#). By working flexibly together the two funders have ensured that all on-going research funded under rounds 1 & 2 have been maintained.

Researcher support and coordination

These two funders also worked together to ensure researchers funded by the GECO call are supported throughout their awards to undertake high quality research which results in useful outputs. DHSC provided £50,000 with MRC and Wellcome contributing additional funds to support UKCDR to develop a researcher and coordination platform. This became part of the activities of the COVID-19 Research Coordination and learning (COVID CIRCLE) initiative. The support is planned to run for the duration of the GECO funded projects.

The [COVID CIRCLE Researcher Platform](#) has two parts:

- a public facing website which collates relevant resources and events and links to epidemic research networks to enable coordination and collaboration

- a closed networking platform for the GECO funded grantees for enhancing interaction between researchers, engaging with funders, providing access to guidance and resources and promoting exchange of ideas. This platform has also been opened to grantees of some of the main UK-funded rapid response calls including FCDO/Wellcome Joint Initiative on Research in [Epidemic Preparedness and Response \(JIREP\)](#), UKRI/GCRF [Newton Agile Response call to address COVID and R2HC](#).

SUMMARY OF LEARNING

1. A new rapid research funding response mechanism has been established between UK funders working together to address WHO research gaps for COVID-19 relevant to low and middle-income settings.
2. Funder collaboration through established funding models maximised speed and efficiency to deliver a new rapid research funding process.
3. Researcher support promotes the networking and sharing of ideas for undertaking high-quality research and application of the Seven funder Principles.

RECOMMENDATIONS

1. Development of a well-established rapid response mechanism based on learnings from domestic research funding and the development of the GECO call.
2. Utilization of funder coordination initiatives including COVID CIRCLE, a partnership between UKCDR and GLoPID-R funders with the aim of coordinating funding efforts.
3. The development of a mechanism for rapid prioritization of funded research to yield definitive answers to pertinent questions in the pandemic with consideration of context specific research.

REFERENCES

1. Tedros Adhanom Ghebreyesus, Ursula von der Leyen. A global pandemic requires a world effort to end it – none of us will be safe until everyone is safe [Internet]. The Telegraph.2020 [cited 2021 Jun 8].

Available from:

<https://www.who.int/news-room/commentaries/detail/a-global-pandemic-requires-a-world-effort-to-end-it-none-of-us-will-be-safe-until-everyone-is-safe>

2. Norton A, De La Horra Gozalo A, Feune de Colombi N, Alobo M, Mutheu Asego J, Al-Rawni Z, et al. The remaining unknowns: a mixed methods study of the current and global health research priorities for COVID-19. *BMJ Glob Heal* [Internet]. 2020 Jul 29 [cited 2020 Aug 3];5(7):e003306.

Available from:

<http://gh.bmj.com/lookup/doi/10.1136/bmjgh-2020-003306>

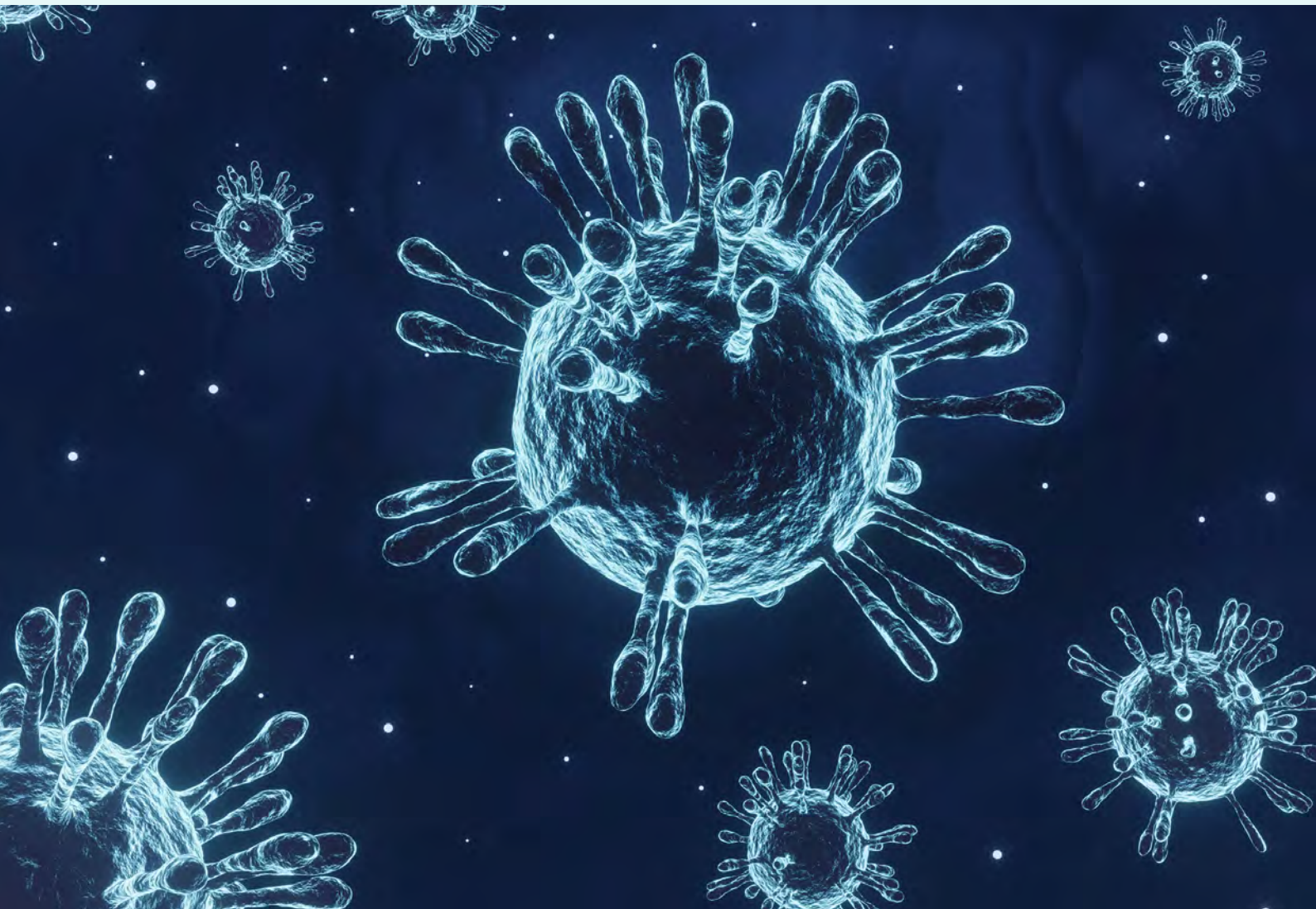
3. Horby P, Lim WS, Emberson JR, Mafham M, Bell JL, Linsell L, et al. Dexamethasone in Hospitalized Patients with Covid-19 – Preliminary Report. *N Engl J Med* [Internet]. 2020 Jul 17 [cited 2020 Jul 23];NEJMoa2021436.

Available from:

<http://www.nejm.org/doi/10.1056/NEJMoa2021436>

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International COVID-19 Data Alliance (ICODA)

ICODA aims to promote open science and data sharing in research by developing a different way of securely sharing data for analysis. ICODA has created a secure platform - [‘The Workbench’](#)¹- through which data partners and researchers can securely access and analyse data, and collaborate throughout the process. The Workbench is not a data repository but a bridge between data partners and researchers, where both can generate insights that will be left behind on the platform for others to build on.

KEY INFORMATION

Funders: COVID-19 Therapeutics Accelerator

Investment: \$5m USD initial

Total investments: Project underway and seeking additional funding

Project Dates: July 2020 – present

Convening partner: Health Data Research UK

Partner Institutions: African Academy of Sciences, Aridhia, BREATHE, CAIAC, Certara, Cytel, DNASTack, Generation Scotland, Genomics England, Global Alliance for Genomic Health, HDR Network Canada, Infectious Diseases Data Laboratory, ISARIC, NICE, Novartis, Preva Group, RDA Research Data Alliance, SAIL Databank, UK Secure e-Research Platform, Shivrom

Countries of focus: Global, Low and Middle Income Countries

BACKGROUND

The impetus for ICODA came from the COVID-19 pandemic, but the issues it addresses in data access and use are long-standing. Researchers, especially in lower resource settings, face barriers to accessing data due to handling and storage requirements of biomedical data. ICODA has created a platform, the Workbench, which can support the administrative and logistical aspects of access to datasets by acting as a bridge between researchers and data partners. It allows researchers to securely access and analyze data held by a data partner (or via a third party), without having to store the data themselves. ICODA also aims to build trust in and strengthen governance of this process, to enable better collaboration and confidence for funders to disburse funding to projects that would use the platform. This will be achieved through a governance board that will oversee activities across multiple groups and committees focused on specific aspects of the initiatives, including public and patient involvement and feedback.



PRINCIPLES IN PRACTICE

Alignment to global research agendas and locally identified priorities

Acting as a bridge between researchers and data partners, the platform can be easily leveraged to facilitate research shifting to emerging priorities. By facilitating the creation of relationships between partners and researchers, ICODA and its workbench are creating trust in their process that will make future investments in the program, for example through targeted projects, that can address emerging and local needs.

Research capacity for rapid research

With an emphasis on collaborative research across projects, the ICODA platform is a space where researchers can document the analyses they have done and the data they have accessed. Though ICODA arose from the rapid response surrounding the COVID-19 pandemic, its intention is to serve as a foundation for preparedness for future pandemics and global health issues by collecting this documentation and strengthening governance in a non-crisis period. In future demands for research during crises, this repository of documentation will speed future research with replicable steps that researchers can learn from.

Equitable, inclusive, cross-sectoral and interdisciplinary partnerships

By working to remove the barrier of data storage, ICODA could leverage more equitable partnerships between researchers and organizations. To increase awareness and uptake, and to support researchers, a Grand Challenges call was launched for projects to use the Workbench. To date, 10 projects have been selected for a Challenges Award, 7 of which have a majority of team members from low- and middle-income countries (LMICs).

Open science and data sharing

ICODA was built to facilitate data sharing in a secure manner, and to provide a repository of methodologies that others can use in further work. The Workbench was created with needs of data partners and researchers in mind, with flexibility for partners in sharing their data, and researchers in how to access and analyze. ICODA seeks to build trust in its platform and process, which will hopefully encourage more partners to join the platform.

The Workbench's capabilities are a key component around which collaborative data science projects are organized, as demonstrated by the two existing Driver Projects. A meta-analysis of clinical trials for COVID-19 treatments and an assessment of the impact of the pandemic on global preterm birth rates and infant and maternal mortality, these projects both demonstrate these capabilities and offer a chance to further develop and test new tools. The new Grand Challenge projects will also be Driver projects, creating a broad range of questions being addressed by researchers using the platform.

Protection from harm

A governance board has been installed to oversee ICODA's actions, along with several steering groups and committees for specific foci of the platform. Guided by the board, the platform adheres to the GDPR's concepts of the 'five safes' - safe people, projects, data, settings, and outputs.

Appropriate ethical consideration

By aligning to the five safes, ICODA acts as a partner in ensuring good governance of the ethical acquisition and use of the data. The Ethics Advisory Council, comprised of external experts, assisted ICODA in creating an [Ethics and Governance framework](#)² for ICODA, and will monitor ICODA's adherence to its principles.

Collaboration and learning enhanced through coordination

ICODA fosters collaboration through a shared platform that emphasizes sharing of queries, data outputs, and results. Through the Workbench, it is possible to work with several data sets from different sources,

encouraging possibilities for collaboration between multiple countries, researchers, and organisations.

SUMMARY OF LEARNING

Platforms such as ICODA are not easily set up, and require extensive funding, effort, and continued vision to succeed. As a new initiative, large impacts were not anticipated within the first year of funding. However, there are promising results emerging from the initiative, particularly through the researchers in LMICs participating in the Grand Challenge projects. ICODA's vision to be a bridge between data partners and researchers could catalyse long-term changes in the ways researchers collaborate with data partners.

1. Continued feedback loops ensure that the platform can respond to changing needs and reflect requirements of data partners and users.
2. Strong partnerships between funders have been a key strength so far in the establishment of the platform. This was a key lesson learned from the experiences of its convening partner, HDR UK, from whose [Innovation Gateway](#)³ initiative ICODA drew inspiration.
3. Long-term funding is needed to ensure stability for the program, which will enable it to strengthen its governance and build trust in the platform among partners. In the next time of need, it could then be a key player in the fast scaling up of research to address emerging priorities and access to data to accomplish this.

REFERENCES

1. <https://portal.covid-19.aridhia.io/>
2. <https://icoda-research.org/wp-content/uploads/2021/06/Ethics-and-Governance-framework-May-2021-v1.1.pdf>
3. <https://www.healthdatagateway.org/about/our-mission-and-purpose>

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Research for Health in Humanitarian Crises (R2HC) COVID-19 Response

In response to the COVID-19 pandemic, Elrha's Research for Health in Humanitarian Crises (R2HC) programme triggered its "responsive funding mechanism" to generate rapid evidence for the control of infections in humanitarian settings. The emphasis on strong partnerships and extensive experience in funding research in often very challenging contexts were key factors of success of the response. Lessons learnt from funding research in the West Africa Ebola outbreak (2014-2016) and food security crisis in the horn of Africa (2017) were also key in facilitating an effective response.

KEY INFORMATION

Funders: Elrha's R2HC programme is co-funded by the UK Foreign, Commonwealth and Development Office (FCDO), Wellcome, and the Department of Health and Social Care (DHSC) through the National Institute for Health Research (NIHR)

Total investment: Up to £2.44m invested

Number of projects funded: 15 projects

Countries of focus: Columbia, Turkey, Burkina Faso, Mali, Zimbabwe, DRC, Kenya, Uganda, Somalia, Lebanon, Ethiopia, Ukraine, Afghanistan, Gaza, Jordan and Bangladesh



Research for health
in humanitarian crises

elrha



NIHR | National Institute
for Health Research



BACKGROUND

Research for Health in Humanitarian Crises (R2HC) was launched in 2013 by Elrha, an global charity that finds solutions to complex humanitarian problems through research and innovation. It seeks to improve health outcomes for people affected by humanitarian crises, including refugees and internally displaced persons (IDPs) in camps or urban humanitarian settings, by strengthening the evidence base for public health interventions.

Targeting people affected by humanitarian crises, ensures the inclusion of often marginalised vulnerable groups in research and promotes the identification of unique context-relevant solutions to health challenges. Research projects are funded through annual “open” funding calls to yield evidence around specific health issues or themes to improve health outcomes of populations involved. Up to £4.5m was invested in the 2020 open funding call and an additional responsive funding call was triggered at the onset of the COVID-19 pandemic.

PRINCIPLES IN PRACTICE

Grantee requirements for best practice are outlined in the rapid responsive call specifications and some innovative applications are highlighted below.

Alignment to global research agendas and locally identified priorities

The call was geared at generating rapid evidence to respond to on-the-ground needs and address research gaps. Hence, there was engagement of reviewers and experts with operational background with deep contextual knowledge of research priorities in funding processes. The call was also aligned to the WHO Coordinated Global Research Roadmap priorities.

Research capacity for rapid research

The majority of projects were funded through the rapid responsive call and only a few existing projects pivoted to COVID-19. The R2HC Strategic Advisory Group - comprising representatives from key UN and humanitarian agencies and public health research institutions - and subsequently the funders, approved the launch of the responsive mechanism following an assessment of the COVID-19 crisis against the trigger criteria (Table 1) which assess the need for research, feasibility of research and research scope for alignment with R2HC funding.



The rapid call built on review processes for the regular (annual) funding calls with the following modifications, as shown in Figure 1:

1. Shortening of proposal submission and review processes (from a two-staged process to a single stage)
2. Expedited review processes. This was facilitated by:
 - a. Directing existing capacity to the COVID-19 funding call
 - b. Reviewing proposals at multiple designated timepoints as they were received (3 rounds of proposal review were employed)
 - c. Drawing on an existing network of technical reviewers and a [Funding Committee](#) with expertise across multiple thematic areas and humanitarian settings
3. Expedited contracting and due diligence. This was facilitated by:
 - a. Releasing grant agreement template and due diligence requirements as part of the application process and requiring them to be accepted in full (non-negotiable)
 - b. Having different tiers of due diligence requirements relative to the perceived risk of grantees
 - c. Enabling existing Elrha grantees to carry forward their previous due diligence
4. Initiation of research in advance of contracting
 - a. This was facilitated by ensuring award letters indicating the funding agreement were available in advance of the contract

These processes enabled rapid funding of research without compromising on quality of funded projects. Further, rapid research was facilitated by pre-existing research relationships and building on the annual funding call networks. This enabled attraction of large numbers of diverse proposals (over 450) and positioned humanitarian researchers to rapidly produce and submit research proposals. Another factor of success was the commitment of R2HC to fund applicants located in any country based on quality of their proposals.

Table 1: Some elements of the trigger criteria for the responsive funding mechanism

<p>1. A significant emergency event e.g. PHEIC</p>
<p>2. Context of emergency response</p> <ul style="list-style-type: none"> a. Humanitarian LMICs or fragile States b. Protracted or sudden onset crisis c. Conflict d. Refugee situation e. Natural disaster
<p>3. The need for research</p> <ul style="list-style-type: none"> a. Significant gaps in research identified b. The potential for research outputs to have real impact/ contribute to existing evidence
<p>4. Feasibility of research</p> <ul style="list-style-type: none"> a. Considering the security situation b. Timely research c. Ethical considerations in an emergency context d. Accessibility of research sites

Equitable, inclusive, cross-sectoral and interdisciplinary partnerships

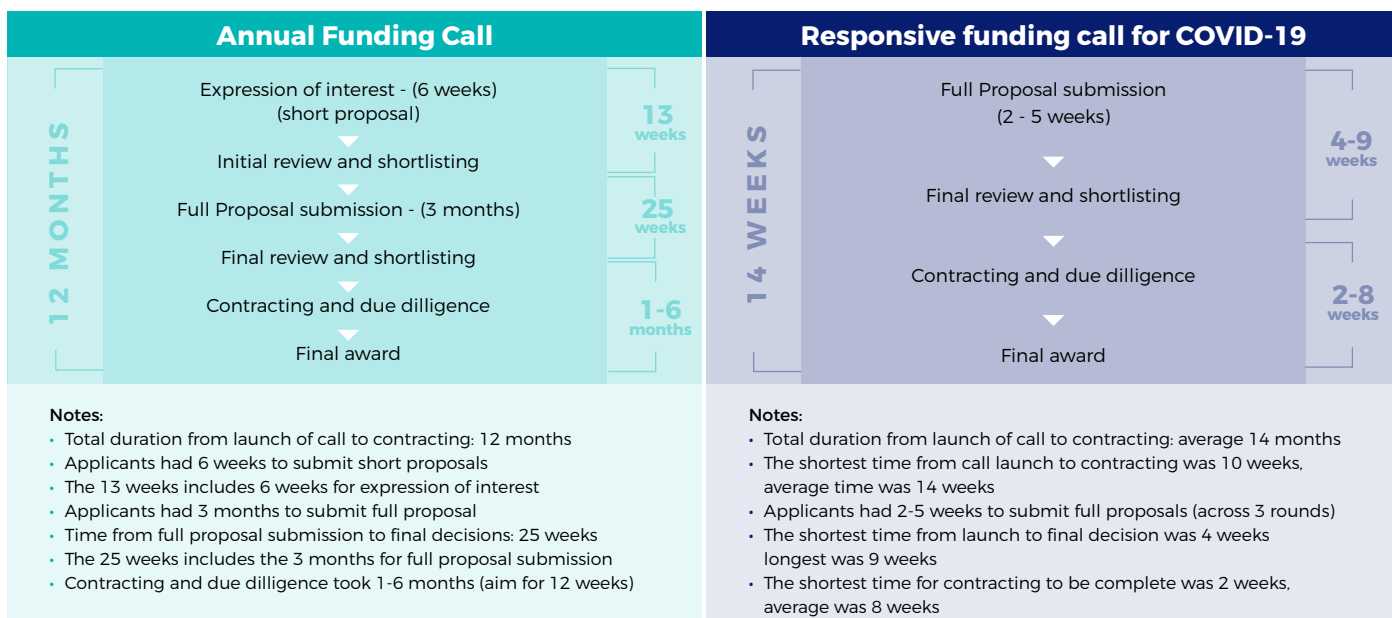
Partnerships between academic institutions and humanitarian organisations are a requirement for applying for R2HC funding as these promote research relevance, rigor and uptake into policy and practice. Partnerships were even more relevant during the COVID-19 pandemic where travel restrictions required strong local involvement to undertake research successfully. In most cases, research teams included academic institutions from the country or region where the study was conducted, as well as the local operational partners – including host governments - who were key audiences for research findings.

R2HC’s innovative activities for promoting equitable partnerships in normal times (open funding call) include:

1. Provision of seed money (up to £10k) to support development of partnerships for selected proposals in the review process
2. Provision of bespoke partnership support
3. Provision of written guidance materials and tools on effective partnerships

On account of the speed with which the research processes were initiated, activities to support gradual building of partnerships could not be undertaken. Rather, existing relationships between researchers working together prior to the pandemic were harnessed leading to rapid mobilization for response. Of the 15 projects funded in the responsive mechanism 14 were led by organisations R2HC had not previously funded.

Figure 1: Schematic showing modification of annual funding call process for the responsive funding call for COVID-19



SUMMARY OF LEARNING

1. Support provided by funders to research teams promotes adherence to the seven funder principles.
2. Harnessing existing rapid research funding mechanisms promotes the initiation of rapid research.
3. Running an open funding call, rather than working only through pre-existing partnerships, enables a diversity of research teams to apply for funding (including from LMIC settings), and encourages a diverse range of research topics that address locally identified research needs, and where there is greatest potential for real-time uptake of findings.
4. Research funding processes can be adapted/modified in acute crises to address research needs without compromising research quality.

RECOMMENDATIONS

1. Evaluation and learning from the response to COVID-19 to:
 - a. Identify characteristics of studies that succeeded in influencing emergency response in real-time to guide prioritisation of research during future epidemics and pandemics.
 - b. To inform funders' approach to funding research in future epidemics and pandemics.
2. Further review of rapid funding mechanisms to develop innovative ways of further expediting funding processes.

For this cohort of grantees, partnerships were supported by rapidly bringing grantees (including in-country partners) together as a cohort to regularly discuss challenges faced in conducting rapid research. Learning and best practice was shared across the cohort on topics including operational challenges, research uptake and working with communities affected by crises. Further, regular formal and informal follow-ups to assess adherence to the principles and address any difficulties faced in ensuring equity in partnerships were also done.

Open Science and data sharing

R2HC requires research outputs to be open access and allows for flexibility around funding to support this. For instance, providing support for publications resulting from grants even after grant closure.

Protection from harm and appropriate ethical consideration

R2HC has developed an [ethics tool](#) to offer practical ethical guidance to researchers to address ethical challenges related to the design, implementation of research and dissemination of research outputs.

Collaboration and learning enhanced through coordination

Researcher support

Grantees were brought together into a learning cohort which promotes exchanging ideas, collaboration and addressing potential challenges with adherence to the principles.

Evaluation and learning

A process evaluation of the COVID-19 rapid response has been undertaken to gain insights into ways of improving funding processes for rapid research. Lessons learnt from this will improve preparedness for future pandemics.

REFERENCES

1. <https://www.elrha.org/wp-content/uploads/2016/11/ELRHA-Ebola-Research-Report-F2-web.pdf>
2. <https://www.elrha.org/wp-content/uploads/2019/06/ELRHA-Annual-Report-2018-Final-Signed.pdf>

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