INTRODUCTION

The rapid outbreak of COVID-19 in 2020 brought the world to a standstill, while health professionals sought to control the spread of the disease. As a result, the international development and global health sectors lost their traditional means of in-person programme management and project delivery. Where programme implementation had required travel between high-income and low- or middle-income countries, organisations were forced to adapt in order to continue delivering global health interventions.

The pandemic highlighted significant weaknesses in health systems, with many struggling to cope with an influx of patients while continuing to deliver everyday care. This resulted in urgent reprioritisation, with health programmes often shifting focus to directly support COVID-19 care or provide prevention and control assistance. Concurrently, within Myanmar a military coup on the 1st of February 2021 led to the collapse of the healthcare system, and the ability for civilians to access medical care became severely limited.

As part of the response to COVID-19 and the Myanmar coup, a series of small grants were established to fund partnerships carrying out entirely virtual programmes. These grants schemes, funded through the UK Partnerships for Health Systems (UKPHS) programme and managed by the Tropical Health and Education Trust (THET), consisted of the COVID-19 Response Fund (CRF) and the Myanmar Emergency Fund (MEF). They provided funding for projects in low- and lower middle-income countries (LMICs) within sub-Saharan Africa and Southeast Asia, with the intention of taking a virtual approach to addressing specific clinical and health system challenges. Funded by the UK Foreign, Commonwealth and Development Office (FCDO), the UKPHS engages the UK health sector by harnessing the expertise of UK health institutions and professionals, in partnership with LMIC counterparts.

While the switch to virtual delivery methods is largely derived from the COVID-19 pandemic and involvement in fragile states, the impact on the environment from international travel within the aid sector should not be understated. As organisations seek to urgently reduce their carbon footprint, virtual delivery methods will be of even greater importance.

This report outlines the most common modes of virtual programme delivery, the common challenges faced by health partnerships, examples of good practice, and recommendations for future virtual working.
In total, seven CRF and three MEF grants were awarded. This report is based on analysis of all six CRF Grant Completion Reports, alongside exploration of three Expressions of Interest for the MEF. The latter included details of planned projects which are useful to include, though the Grant Completion Reports were not received in time to include in the analysis.

After initial analysis of reports, UK and LMIC leads (n=18) for each grant were sent a survey, and all were contacted for further interview. Inclusion of MEF grant holders in surveys and interviews allowed them to contribute up to date information on project progress, achievements and challenges, even though project completion reports were not available for analysis.

To meet the reporting deadline, this analysis has taken place over a short time period, reducing the time available for survey responses and interviews. This, along with grant leads’ other commitments, led to limited interview uptake, and fewer survey responses than would be ideal. While this inevitably limits our ability to draw widely applicable conclusions, we have noted that many of the responses tell a similar story of shared experiences. We are therefore confident that many barriers and recommendations presented here are both common and relevant. Furthermore, these also reflect wider feedback received from the health partnership community into their approach to virtual working and their digital capabilities. Despite this, it is possible that had interviews or surveys not been carried out by the fund manager, to whom grant holders are accountable, that responses may have been more candid and objective.

Due to strict limitations on international travel during the pandemic, these programmes were ‘fully virtual’ for UK partners. However, partners and participants were often able to travel internally within the programme delivery countries, so the programmes were not necessarily ‘fully virtual’ for LMIC partners. For the purposes of this report, references to programmes being ‘fully virtual’ refer to the functioning of the partnership from the UK viewpoint.

Considering the need for these programmes to be ‘fully virtual’, both CRF and MEF grant applications were only open to established partnerships – those that have worked together for over six months - reducing the number of potential applicants. Subsequently, all grant holders referenced within this report are from established partnerships who have previously met in person.

The nine projects within the CRF and MEF grant streams aimed to, respectively, respond to the COVID-19 pandemic and provide essential services and training for the Myanmar health system. Within this scope, the projects supported a wide array of themes, ranging from midwifery and infection, prevention and control, to telemedicine and wellbeing support. Interventions were carried out through virtual training, knowledge sharing and protocol development. In total, our survey received nine responses from seven different partnerships. We conducted two interviews: one each from the CRF and MEF grant streams.

Here, we outline our key findings associated with carrying out a virtual programme.

As health worker training migrated virtually, partnerships were forced to adopt new software and methods of communications to achieve the goals of their grants. All grant holders adopted videoconferencing solutions, allowing coordinators to carry out their teaching from across the globe. Zoom remained the most popular solution for health partnerships due to user familiarity.
Despite initial worries about these adaptations, 66% of project leads believed that the level of communication and interaction between LMIC and UK partner institutions increased, whilst 44% suggested this stayed the same. No partnerships recorded a reduction in communication or interaction because of working virtually.

‘Working remotely and managing projects virtually is an increasingly inevitable situation. Given that situation, projects in partnership programmes should prepare for the rapidly changing environment. Projects should use collaborative software that should be applicable for both UK and developing countries.’

To coincide with online training, over half of the partnerships established online communities of practice between health partnership leads, facilitators and participants to enable collaboration within the project. These typically took place on platforms familiar to all participants such as Whatsapp, Telegram, Facebook Messenger and Facebook private groups.

‘We were already using Facebook extensively, but new groups were formed on Facebook Messenger for the young midwife leaders and the service-user group. These groups were very successful as people were already familiar with the technology. We plan to continue using these technologies to scale up the training to more midwives in the network’.

Across various projects within both grant streams, all partnerships detailed the need to establish and build clear communication processes to ensure a smooth delivery of the project. 60% of respondents noted more regular meetings to ensure sustained communication between both partners.

For projects under the Myanmar Emergency Fund, respondents’ feedback focused mainly on the need to continue digital communications in all health partnership projects due to the current local context.

**E-LEARNING**

All respondents attributed various forms of e-learning within their projects. The two main forms of online learning were live virtual training, and modularised learning and development through Learning Management Systems (LMS).

Despite virtual delivery, 88% respondents confirmed that some element of training was carried out in person by the LMIC side of the partnership. This included several health partnerships using non-digital learning resources, such as hard copies of the virtual training carried out. In most cases, this was considered essential to combat any issues with internet connectivity, time zones and user access.

**E-HEALTH SERVICES**

In addition to virtual capacity development, one project also sought to expand a virtual health service to ensure greater health care access for patients. The health partnership carried out a survey to analyse the impact of virtual healthcare technology compared to face-to-face health services. Over 90% of respondents, both patients and health workers, reported that the digital service was satisfactory. As a result, the partnership plans to continue the growth of telemedicine and virtual healthcare support for patients.

**PARTICIPATION**

Within our survey, respondents indicated a number of positive impacts of new delivery methods on participation, including that sessions were more accessible for those with limited time (n=6), for those who would not have been able to travel (7), could reach wider audiences (5), were more flexible for trainees (5), and encouraged multi-disciplinary participation (4). Widening of participation was seen both in the UK and LMICs.
Without the need to travel, there were fewer barriers to engagement and an increase in gender equality and social inclusion (GESI) in global health activities than with traditional programme implementation. Due to the increased pressure on the NHS during the COVID-19 pandemic, clinicians, often working on the frontlines, would have been unable to travel overseas or take annual leave. One interviewee described the impact of this as facilitating engagement of volunteers from a broader range of demographics, bringing different skills and knowledge and thereby improving the training offered. This would previously not have been possible, as typically these health workers were people (and more often than not, women) in their 30’s and 40’s, who would not have been able to travel due to family commitments. Another organisation was able to engage a student healthcare worker to lead on an aspect of their project. This would not have been possible in previous projects which required travel, due to insurance and safeguarding requirements. Cultural contexts within certain delivery countries are often challenging for women, and the grant holder noted that had the project been in-person, the student health worker would have been unable to lead part of the project, given her social status as a young woman, demonstrating the ability of virtual projects to address traditional disadvantages.

There is also evidence to suggest that virtual partnerships allowed for a wider range of HIC implementers. Projects in Myanmar brought together diaspora health workers from the United States, United Kingdom, Australia and Singapore to deliver patient care through virtual means. This also led to a strengthening of the global Burmese diaspora to support their fellow health workers in Myanmar during a time of crisis.

This was also evident for health workers receiving training, as the use of online communities of practice led to an improvement in sustained engagement post-project:

"COVID 19 has really shown that collaboration in patient care is the key way for success. This project has really empowered the front-liners to embrace the use of online platforms in knowledge dissemination and sharing among facilities across all the corners of the country."

LMIC participation falls within two categories – those delivering the projects, and those receiving the training. In terms of those delivering projects, 78% of respondents suggested that the participation of LMIC partners increased, as they took on responsibilities previously held by UK partners:

‘Remote working has resulted in greater responsibility for the LMIC based volunteers...Our volunteer has worked with us on several grants and many projects. His confidence and skill has grown significantly. This has meant he is able to take on increasing amount of responsibility with our support.’

This is replicated across many other grants, where LMIC partners began taking greater leadership roles, to resolve issues and drive project delivery. One grant holder emphasised the impact of increased local leadership as furthering GESI indicators, where women health workers were thrust into leadership positions, despite local cultural contexts which meant that male and white voices traditionally held more command and young women were unlikely to gain leadership experience. Another grant holder specified that online sessions promoted inclusion, where many women health workers do not have their own transport to attend in-person.

Beyond leadership, LMIC partners were more involved in virtual projects than those face-to-face. 67% of survey respondents said that their level of communication with partners had increased during this project, with one interviewee commenting that their communication style became more instant, meaning issues which previously would have been raised at the next in-person meeting could instead be addressed quickly, and the project progressed. Despite this, all respondents said that in future they would prefer a blended approach to partnerships in future. While generally grant holders felt that the virtual nature of their programmes did not impact upon their quality or efficacy, the desire for a blended approach appears grounded in issues relating to
relationship building, morale and solidarity, with 62% of survey respondents pointing to the need for in-person contact to avoid the diminishment of relationships.

For trainees, flexibility is a key feature of virtual project delivery, and grant holders indicated that they were able to reach wider audiences through the online sessions themselves, the sharing of recordings and training resources through Whatsapp, social media and e-learning platforms. 60% of survey respondents stated that a virtual project improved participation of those usually unable to travel, and 40% stated that there was better multi-disciplinary participation. Online training also avoids the opportunity costs associated with traditional projects, such as travel, accommodation and childcare. One grant holder stated that, because typical location constraints did not apply, their training was able to reach many more rural health clinics than they had ever previously managed.

**COMMON CHALLENGES**

Whilst many partnerships detailed examples of increased participation and benefits of virtual delivery, several common challenges existed which impacted the success of the project deliverables.

**DIGITAL ACCESS**

The most common issue was the limited access to efficient internet connection within LMICs. Online training in rural regions was particularly affected, and often interrupted or delayed due to unreliable internet connection or electricity supply. Many partnerships felt that it was difficult to solve this larger, ongoing problem within the scope of this project. As a result, for participants in LMICs, partial access highlighted the need for improved digital infrastructure for underserved communities.

This also had a particular impact on the involvement of UK-based partners, who thereby had limited interaction with the face-to-face training conducted in the host country:

‘All of our activity was led by clinical teams, face to face in the LMIC. We had no way of knowing the actual quality of training delivered. Most of our training is in remote health centres where there is no internet. We have attempted to link into training sessions, but it has never been effective.’

Partnerships also reported concerns about the digital capabilities of participants. 55% of respondents reported a lack of access to the required hardware and software to carry out the project efficiently, whilst 44% reported a lack of technical training for participants:

‘Not all participants had access to devices sufficient for digital working – for example the project manager had no laptop for the first three months and managed the project solely from her mobile phone.’

This was especially evident within the project management phase, with a need to transform and expand the current advice for those undertaking virtual delivery, to include the need for suitable equipment and technology. Digital access also presents issues where resources tend to be written, creating a barrier for those with limited literacy in that language. By ensuring that content is spoken in a local language, or learners are able to use text-to-speech software on resources, digital access can be secured for a broad range of groups.

**PROJECT MANAGEMENT**

All partnerships confirmed the need to transform or recreate many of their traditional volunteering and implementation guides. For example, one partnership’s existing volunteering resources were tailored to face-to-face engagement with partners, and travel to and around the LMIC. These required significant revision to reflect the realities of working remotely. Many described the need to quickly adapt their current delivery guideline for virtual platforms to include standard digital requirements such as internet usage and device and
storage space compatibility. One health partnership also included the need to change its procurement and courier process to deliver clinical supplies, rather than taking them in person when delivering training in person.

All respondents successfully adapted processes to suit virtual work. These typically included having more regular team meetings and the development of guidance or training materials for new technologies used within the project:

‘We had some challenges at the beginning of the project and tried to adapt processes. These included introducing and familiarising new software: [LMIC] Project team members chose software and applications which were feasible for limited internet connections and addressed security concerns of project team members in the [LMIC]. Telemedicine is a relatively new concept in [the LMIC] and patients don’t know how to access these platforms. As a result, we created and developed a series of demonstration videos in local languages.’

Furthermore, 44% of respondents detailed the need to adapt fund management budgets to reflect virtual partnerships:

“Managing a project completely remotely can be challenging and when the project management percentages covered by the grant budget are tight, it can prove difficult to do so effectively without spending more time than originally allocated.”

STAKEHOLDER ENGAGEMENT

Although virtual delivery allowed partnerships to continue their interventions, multiple respondents noted that both trainers and learners, who were used to traditional forms of face-to-face training, struggled with the transition to online learning.

One partnership noted that they struggled with convincing key stakeholders that virtual meetings could provide the same level of knowledge sharing and learning as face-to-face meetings. Furthermore, with the delivery of training, asking trainers in the LMIC to prepare virtual talks created anxiety due to lack of familiarity.

Training sessions were often delivered to a group, within on-site hospital facilities. While this was seen as being more convenient for healthcare workers than travelling to an external setting, three grant holders noted that this potentially impacted upon concentration and engagement, as workers attending the sessions were not on dedicated study leave and remained on call, often leaving the room multiple times. While grant holders felt that this had not necessarily affected learning on the whole, this issue could be overcome by carrying out virtual training either off-site, or ensuring participants do not have concurrent clinical commitments.

In reference to the general engagement of stakeholders and partners within a virtual programme, while there was an increase in communication noted by a majority of respondents, one partnership suggested that this sustained communication was more difficult due to staff capacity:

‘More time was required to coordinate remote engagement, which included repeating meetings and chasing incredibly busy clinicians for required outputs like feedback or review of materials over a course of weeks, as opposed to volunteers having a week-long trip where all the work is conducted in a short amount of time.’
DISCUSSION

Health Partnerships are typically mutually beneficial, long-term links between health institutions in high-income countries (HICs) and counterparts in LMICs. While Health Partnerships are on a more equal footing than traditional Global North to South aid delivery structures, power imbalances often remain and can present as differences in roles and responsibilities throughout the planning, implementation and evaluation phases. As an example, the primary grant holders of the projects described here are all UK-based, and would normally have travelled to the LMIC to deliver training, or to lead evaluations and wind-down activities.

Virtual activities therefore offer an opportunity for a more equal relationship. Our analysis finds evidence of this, with a reported increase in LMIC leadership and responsibility for many of the project activities. However, some power imbalances remain, with UK partners controlling finances and feeling the need for “oversight” of delivery. While issues such as a lack of local capacity or skills have been cited as justification for intervention or leadership from the HIC, the cultural landscape of the delivery country is crucial. One interviewee carrying out a programme in a South Asian country described the impact a “white person” has, in that they will automatically be given authority over others, and that they had experienced similar issues in other countries in the African continent. Societal gender status is crucial to understand, particularly when delivery is being led locally by women. An initial start-up visit has been suggested as a means of clearly establishing roles and responsibilities. Although an in-person visit can help to facilitate or progress local leadership and gender equality, there is potential for these activities to exacerbate neo-colonial power tropes.

Participation has been a key benefit of implementing programmes virtually, both for those delivering the project and those receiving the intervention. There are strong positive GESI implications, where ability to take part in project delivery has not necessitated costly travel and time away from other commitments, such as childcare. This has resulted in a wider skills demographic involved in project delivery, strengthening the training received and improving leadership skills for those who would have traditionally missed out on such opportunities. Where travelling is no longer a prerequisite for involvement, student health workers are able to engage in activities, where previously insurance and associated safeguarding factors would have been prohibitive.

For those receiving virtual training, participation is improved through reduced opportunity costs in relation to travel, accommodation and time away from other commitments. Despite many sessions being delivered to in-person groups, by virtue of them being virtual, participants beyond typically city-based hospitals were able to join sessions, increasing the reach of training nation-wide.

Throughout this report, we refer to the “flexibility” offered by virtual training. We describe these training sessions as flexible as they do not require significant travel and costs, or often participants can catch up with recordings at a later date. Many of these training sessions within the projects took place within workplace settings, and while this is seen as being more convenient for healthcare workers not having to travel elsewhere or take time off, this perhaps meant that sessions were less convenient and conflicted with clinical duties. Participation will always be hampered by access barriers, and technology has been chief among these.

Connectivity issues have been commonplace for grant holders, while distrust or a lack of familiarity with specific modes of delivery also have the ability to affect active engagement. The latter here can be overcome through time and training, but ultimately, significant advocacy and funding is needed to improve digital infrastructure going forward. Although connectivity has been a universal issue for these projects, an example of good practice in one CRF programme is to ensure that all sessions are recorded, subtitled, and uploaded on a video sharing site – reducing the need for live engagement and a larger bandwidth. Such lasting availability of videos greatly increases the reach and sustainability of projects.
All survey respondents noted that in future they would prefer projects to have a blended approach – a mix of in-person and online activities. While much of this appears to be related to the ease and speed of communications, lower costs and improved participation offered by virtual means, the desire for in-person activities appears to be not solely related to the physical delivery of training activities. Where so often partnerships are based on personal relationships, this has become even more pronounced in a virtual setting. These relationships can benefit from meeting in person, and impacts of meetings on morale should not be underestimated. Initial distrust in the virtual nature of sessions appears to stem from a disbelief in online training being as effective as in-person – particularly in relation to the transferral of physical skills. However, no respondents to our survey noted a decline in training quality, and many expressed that more could be done virtually – and done well – than anticipated.

CONCLUSION AND RECOMMENDATIONS

THE NEED FOR LOCALLY LED ENGAGEMENT

While two thirds of our surveyed partnerships reported a lack of digital capabilities among participants and facilitators as a barrier, this could be easily overcome within an initial training session. Many of the CRF grant holders recognised this and carried out trouble shooting sessions to ensure the future success of their projects. By building such sessions or relevant training materials into the initial design of the project, this barrier can be removed, and time spent delivering virtual sessions made more effective. The success of a virtual programme is dependent on knowledge of the cultural context

➢ Within initial planning, thought must be given to who will lead the programme in the LMIC, what support mechanisms will facilitate this, and what barriers will need to be addressed. Wider group meetings at the beginning of a project which establish responsibilities and leadership will help.

IN-PERSON VISITS CAN BE SUCCESSFULLY REDUCED

Even online teaching of practical skills can be successful given the correct environment, and environmental impact and cost reductions alongside this paves the way for greatly increasing the virtual nature of programmes. However, some face-to-face visits are useful, particularly if establishing new partnerships, to establish relationships and conduct viability assessments, or if capacity is limited within the LMIC.

➢ In established partnerships, in-person visits can and should be reduced, though they retain value in staff morale and conducting wind-down activities where local capacity is limited.

VIRTUAL PROGRAMMES CAN WIDEN PARTICIPATION

Participation in both partner countries can be meaningfully increased in a virtual versus in-person programmes. Within the HIC, a wider demographic of healthcare workers are able to take, where time, travel and cost would previously have been a barrier. Within the LMIC, participation is increased through opportunities for local leadership, reduced opportunity costs for those attending sessions, ability of online training to reach rural areas, and recordings of online sessions reaching a wider audience.

➢ Future projects should consider virtual delivery methods even once the ability to travel is restored. These should be planned with widening participation as a goal.
DIGITAL PRINCIPLES ARE FUNDAMENTAL TO VIRTUAL PROGRAMMES

Whilst many health partnerships have managed to react to virtual programming, many participants lacked the digital funding, infrastructure, and training to further strengthen their programme. Both THET and our partners advocate for better infrastructure and internet access in LMIC settings in accordance with FCDO.

Health partnership leads and volunteers should also familiarise themselves with the Principles for Digital Development and the Incorporating Technology section of the THET Virtual Volunteer toolkit. These guidelines allow health partnerships carrying out a digital intervention to do so in an inclusive manner to help bridge the digital divide.