End-point Report

Public Health England, International Health Regulations Strengthening Project

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Submitted by Itad



Acknowledgements

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Quality assurance was conducted by Paul Balogun.

Thanks are also due to the Public Health England International Health Regulations Strengthening Project Team for their support throughout the evaluation.

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List of acronyms

AFCOR	Africa Task Force for Novel Coronavirus
Africa CDC	Africa Centres for Disease Control and Prevention
AMR	Antimicrobial resistance
AVoHC	African Volunteer Health Corps
CSR	Comprehensive Spending Review
DAC	Development Assistance Committee
DFAT	Department of Foreign Affairs and Trade (Australia)
DFID	Department for International Development
DHSC	Department of Health and Social Care
EMPHNET	Eastern Mediterranean Public Health Network
EOC	Emergency Operation Centre
EPHI	Ethiopian Public Health Institute
EPRR	Emergency Preparedness, Resilience and Response
EQ	Evaluation Question
e-SPAR	Electronic State Party Self-Assessment Annual Report
FCDO	Foreign, Commonwealth & Development Office
FCO	Foreign and Commonwealth Office
GDPR	General Data Protection Regulation
GHD	Global Health Development
GHS	Global Health Security
GIS	Geographic Information System
GIZ	Gesellschaft für Internationale Zusammenarbeit
GPH	Global Public Health
HD	Human Development
HMG	Her Majesty's Government
HQ	Headquarters
IANPHI	International Association of National Public Health Institutes
IDSR	Integrated Disease Surveillance and Response
IHR	International Health Regulations
JEE	Joint External Evaluation
JICA	Japan International Cooperation Agency
KI	Key Informant
KII	Key Informant Interview
KP	Khyber Pakhtunkhwa

LIC	Low-Income Country
LMIC	Low and Middle-Income Country
M&E	Monitoring and Evaluation
МоН	Ministry of Health
MoNHSR&C	Ministry of National Health Services Regulation and Coordination
MOU	Memorandum of Understanding
MTE	Midterm Evaluation
NAPHS	National Action Plans for Health Security
NCD	Non-communicable Disease
NCDC	Nigeria Centre for Disease Control
NGO	Non-Governmental Organisation
NIH	National Institute of Health
NIS	National Infection Service
NPHA	National Public Health Agency
NPHI	National Public Health Institute
NRL	National Reference Laboratory
NVAP	New Variant Assessment Platform
ODA	Official Development Assistance
OECD	Organisation for Economic Co-operation and Development
PANDORA	Pan-African Network for Rapid Research, Response, Relief and Preparedness for Infectious Diseases Epidemics
PHE	Public Health England
PHEOC	Public Health Emergency Operations Centre
PHI	Public Health Institute
PID	Project Initiation Document
PM	Project Management
	rioject Management
PSI	Population Services International
PSI QA	
	Population Services International
QA	Population Services International Quality Assurance
QA SLT	Population Services International Quality Assurance Senior Leadership Team
QA SLT SNAP-GHS	Population Services International Quality Assurance Senior Leadership Team Strengthening National Action and Preparedness for Global Health Security
QA SLT SNAP-GHS SOP	Population Services International Quality Assurance Senior Leadership Team Strengthening National Action and Preparedness for Global Health Security Standard Operating Procedure
QA SLT SNAP-GHS SOP SPAR	Population Services International Quality Assurance Senior Leadership Team Strengthening National Action and Preparedness for Global Health Security Standard Operating Procedure State Party Self-Assessment Annual Report
QA SLT SNAP-GHS SOP SPAR TA	Population Services International Quality Assurance Senior Leadership Team Strengthening National Action and Preparedness for Global Health Security Standard Operating Procedure State Party Self-Assessment Annual Report Technical Assistance
QA SLT SNAP-GHS SOP SPAR TA TDDAP	Population Services International Quality Assurance Senior Leadership Team Strengthening National Action and Preparedness for Global Health Security Standard Operating Procedure State Party Self-Assessment Annual Report Technical Assistance Tackling Deadly Disease in Africa Programme

TPE	Third-Party Evaluation
TWG	Technical Working Group
UK	United Kingdom
UKHSA	UK Health Security Agency
UK-PHRST	UK Public Health Rapid Support Team
UN	United Nations
UNICEF	United Nations Children's Fund
USCDC	United States Centre for Disease Control
VfM	Value for Money
WFD	Workforce Development
WHO	World Health Organization
WHO AFRO	World Health Organization Regional Office for Africa
WHO EMRO	WHO Eastern Mediterranean Region
ZNPHI	Zambian National Public Health Institute





End-point Report

Public Health England, International Health Regulations Strengthening Project

Executive Summary

Introduction

The United Kingdom (UK) Department of Health and Social Care (DHSC) has funded Public Health England (PHE) to the value of £17 million over five years (2016–21) to implement the International Health Regulations (IHR)ⁱ Strengthening Project.

The Project aims to improve global health security (GHS) by supporting and strengthening national and regional health protection systems, enabling public health threats to be detected, prevented and responded to before they become potential cross-border emergencies. The IHR Project works primarily with national institutes of public health, or their equivalents, to respond to national priorities and needs and strengthen systems in areas of disease surveillance strengthening, including strengthening of laboratories and enhancing epidemic outbreak response capacities, as well as on strengthening public health management systems and the public health workforce overall.

The Project has provided support in six selected countries:



Nigeria





Ethiopia

Sierra Leone



As well as to Africa Centres for Disease Control and Prevention (Africa CDC) and the Eastern Mediterranean Public Health Network (EMPHNET)

Pakistan

Evaluation purpose and evidence base for this report



The IHR Project commissioned Itad to serve three main functions: as independent monitor, as evaluator and as learning partner. Since 2018, Itad has helped PHE identify ways in which the Project can be strengthened – as set out in the midterm review. This end-point report presents findings on 10 evaluation questions (EQs)ⁱⁱ using three core workstreams corresponding to the following questions:



Did the **Project** do the **right things?**

Was the Project implemented in the right ways?

Did the Project achieve the right results?

We report on implementation up to April 2021, and recognise that Project activities are ongoing following its extension to March 2022.

End-point findings are based on reviews of 809 IHR Project documents, interviews with 111 key informants (KIs) – representing stakeholders at country, regional and global levels – and analysis presented in seven case studies.ⁱⁱⁱ Findings and conclusions were presented to the IHR Project and used as the basis to jointly identify actionable recommendations, including for any future phases of the Project.

Headline messages

1

The IHR Project has positively contributed towards progress in strengthening IHR capacity in all countries and most technical areas in which the Project has been active, and should be deemed a success.



3

Public Health England systems were not initially well suited to global work, but they were adapted and evolved to address concerns highlighted in our Mid-Term Evaluation (MTE) report. However, work remains to be done to ensure internal structures fully support global work.





The Project has been highly relevant in supporting country and UK needs, and PHE is a valued source of technical knowledge, skills and experience.

2



4

COVID-19 has constrained what has been possible to achieve, e.g. through unpredictable funding for the Project, but has also provided a platform for PHE to further demonstrate its value-add to domestic and country partners.



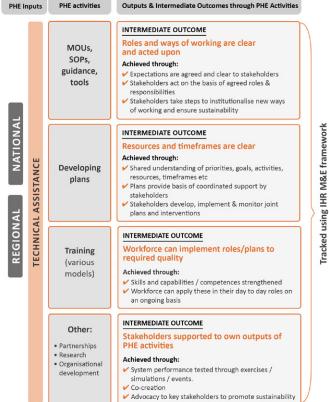
Did the Project do the right things?

The midterm evaluation (MTE) found that the IHR Project had initiated the right approaches to aligning to and supporting country priorities and to coordinating and harmonising its work with other Her Majesty's Government (HMG) programmes and development partners.

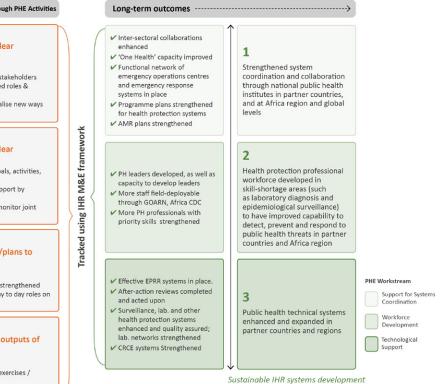
The end-point evaluation finds that this has continued and that COVID-19 has provided an opportunity for the IHR Project to demonstrate its added value and respond flexibly to evolving country needs. The Project goals remain relevant to and aligned with country and regional goals – especially in supporting responses to COVID-19 – and actions being implemented are aligned with World Health Organization (WHO) guidance; however, there is scope to further strengthen the articulation of the Project's Theory of Change (ToC) and underpinning assumptions.

The IHR Project has continued to coordinate well with development partners to contribute to more coherent health security support, including providing evidence for informing COVID-19 responses. In addition, it has continued to align with UK official development assistance (ODA) and GHS agendas, strengthened during the COVID-19 outbreak, although there is scope to strengthen collaboration with HMG-funded health security implementers. The Project has contributed to PHE's credibility within the GHS community, building on already strong collaborations with key external partners.

Theory of Change









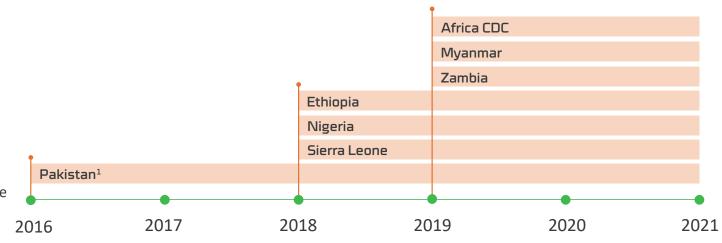
Was the Project implemented in the **right ways?**

The MTE found that the Project's annual work planning processes were overly ambitious, with significant levels of planned activities not implemented, and limited transparency on allocation of financial resources; it also concluded that efficiency and effectiveness could be further enhanced by giving more responsibility and authority to Country Leads; finally it highlighted limitations in the Project's systems to generate evidence on progress, quality and lessons in order to apply adaptive management.

Evidence collected through the end-point evaluation shows that progress has been made on all of these issues. Substantial efforts and improvements have been made to Project monitoring and evaluation (M&E) systems, and these are better suited to generate evidence that the Project can use to track and manage for better results; however, there remains scope for further improvements. Changes to Project governance, management structures, communications and financial management/ procurement have generally been well made, although (as is to be expected) more can be done to streamline these to ensure efficiency, albeit within the constraints of overarching PHE and DHSC systems and structures.

Together this has contributed to implementation of activities that have generally contributed to achievement of intended outputs, particularly in addressing shortage skills in public health staff, and enhancing laboratory systems. A qualitative overview of the achievement of outputs is provided in Table 1 on the next page. It is important to note that progress may be linked to the duration of Project implementation in each country, given that start dates in were staggered, as shown in Figure 1 below.





¹DFID funded Pakistan Provincial Health and Nutrition Project (PHNP), which included the PHE-led IDSR component. DFID funding ended in March 2019, when the IDSR component of the project was integrated into the PHE IHR Strengthening Project, with only small changes in the team and focus.

Previous logframe outputs	Africa CDC	Ethiopia	Myanmar	Nigeria	Pakistan	Sierra Leone	Zambia
TOC Outcome Area: System coordination and collaboration							
Output 1.1 Enhanced inter-sectoral collaborations for all-hazards health protection partner countries							
Dutput 1.2 'One Health' capacity improved through inter-sectoral coordination and collaboration							
utput 1.3 Functional network of EOCs and emergency response systems apable of addressing potential public health threats established							
Putput 1.4 PHE technical input complementary to DFID Tackling Deadly iseases in Africa Programme supported priorities ²							
utput 1.5 Defined package of technical assistance for antimicrobial esistance shaping national strategy							
OC Outcome Area: Health protection workforce		-					1
itput 2.1 Workforce needs assessments undertaken and toolkits ailable for workforce gap analysis							
Dutput 2.2 Workforce strategic plans developed & implemented and polkits available for workforce strategy development							
utput 2.3 Public health leaders developed and mentored and capacity creased for leadership development							
utput 2.4 Increased number of professionals field-deployable through DARN, Africa CDC or other bilateral and national systems							
utput 2.5 Increased number of public health professionals with shortage ills, with training capabilities increased in partner organisations							
C Outcome Area: Public health technical systems							·
utput 3.1 Operationalisation of effective emergency preparedness, esilience and response systems							
Dutput 3.2 Strategy developed and operationalised for surveillance, aboratories and other health protection systems							
Dutput 3.3 System performance tested through exercises /simulations nd/or events, with after-action reviews done and acted upon							
Dutput 3.4 Laboratory systems enhanced and quality assured, with capacity increased for QA, and laboratory networks strengthened							
Output 3.5 Strengthened systems for detection and response to chemical- toxicological public health incidents							

² TDDAP and the IHR Project developed a close working relationship in the early days of both Projects' activities, though there is no overlap of countries where they work.



Did the Project achieve the right results?

The MTE reported indications that the Project was on the right track to achieve its agreed results.

The end-point evaluation finds that, across all countries and most of the technical areas in which the IHR Project has been active, capacity to prevent, detect and respond to public health events has strengthened since Project inception. This includes progress against all three Project outcome areas (i.e. NPHI leadership, coordination and collaboration functions; technical capabilities and health workforce capacity; and public health technical systems) as shown in Table 2 below.

Some limited progress has been made towards the Project's global and regional objectives, for instance by contributing to demonstrable improvements in Africa CDC's capacity over time. Evidence also suggests that the capacity built as a result of the IHR Project has supported the COVID-19 response in many countries, which is a demonstration of the IHR Project's contribution to improved IHR capacity.

The high-quality technical assistance provided by the Project has been effective in making a

meaningful contribution to the achievement of these results in many countries. Significant steps have been taken to embed sustainability considerations within the design and operationalisation of the IHR Project, and there is some evidence to suggest that many Project outputs are likely to be sustained, subject to the enabling/operating environment being conducive to this.



TABLE 2. Assessment of progress made towards IHR capacity strengthening by country and technical area where the IHR Project has been active^{iv}

	Cordination, comms & advocacy	One Health	Workforce dev.	Laboratory systems	Surveillance	EPRR	Chemicals & poisons	
Ethiopia								
Myanmar								
Nigeria								
Pakistan								
Sierra Leone								
Zambia								
Significant	Significant gains Some gains Minimal/no gains N/A – not a focus for the Project							

Source: Triangulation of data from successive JEE and e-SPAR assessments, alongside qualitative and any other quantitative data collected through and reported in each of the country case studies

Conclusions

We have drawn the following set of conclusions across the **three 'rights'** workstreams. These have been rationalised to ensure coherence.



- The Project remains highly relevant both in terms of partner country and UK health security priorities and concerns. Stakeholders value its technical knowledge, skills and experience.
- The IHR Project staff efforts to coordinate with other stakeholders were effective on the whole, as it pivoted to filling in gaps in national IHR implementation.
- 3. Concerns remain that the Project is limited to technical assistance and capacity development, although we note that the Project is constrained in terms of capital expenditure as a condition of the funding (not by design). However, in some countries, collaboration with other partners has ensured material support is provided.



Right ways?

- 4. Project activities have contributed to the intended outputs, even though the Project's revised results framework and Project reporting systems are ongoing and do not yet support complete and uniform monitoring and reporting against Project outputs and outcomes.
- 5. The Project has successfully evolved in response to changes in context and to evaluation findings, adapting its systems and ways of working within the constraints of wider HMG structures in order to deliver the intended outputs.
- **6**. While the Project has successfully adapted to support consistent delivery, its ongoing evolution and rapid growth has contributed to some inefficiencies in internal governance structures and communication.



7. The IHR Project has contributed positively towards strengthening IHR capacity in all counties and most technical areas where the Project has been active, despite significant challenges posed by COVID-19 and other contextual factors. While less progress has been made against global and regional goals, the Project should overall be deemed as a success.

¹ Although we note that the Project is constrained in terms of capital expenditure as a condition of the funding (not by design).

Recommendations

Based on our conclusions, we make a number of recommendations to strengthen the Project in its next phase. These draw on initial suggestions made during a co-creation workshop with PHE staff in June 2021 and subsequently refined by the evaluation team.

</>

Continue and embed

 The Project team should continue with plans to strengthen country-level capacity and maintain mechanisms that allow flexible support to changing country and regional contexts.



Adapt

- The IHR Project team should review the Project's systems to identify further adaptations that will maximise efficiency and effectiveness.
- 3. The Project team should review the model and make revisions to improve its effectiveness, including specifically in relation to availability and use of Project funds, capacity building at sub-national level, influence in national policy dialogue, and modifications to training provision (focus and evaluation).



Act now

- The IHR Project team should review and strengthen strategic focus of communication with HMG stakeholders.
- **5**. The Project team should review the intervention logic and revise the ToC, underpinning assumptions and results framework.
- 6. The Project team should set out and implement a clear strategy and goals for regional-level engagement to support IHR capacity building.
- 7. DHSC should provide multi-year commitment to continue the IHR Strengthening Project.

1. Introduction

1.1. Description of the IHR Strengthening Project

Public Health England (PHE) were provided 17£ million of United Kingdom Official Development Assistance (ODA), via the Department of Health and Social Care (DHSC), over a five-year period (March 2016–March 2021), to contribute to strengthening GHS by supporting and strengthening national and regional health protection systems, thus enabling public health threats to be detected, prevented and responded to before they become potential cross-border emergencies reportable under the International Health Regulations (IHR).^v

To determine the focus areas for the Project, PHE used the analysis and priorities set out in IHR Joint External Evaluations (JEEs)^{vi}, National Action Plans for Health Security (NAPHS) and discussion with country stakeholders in its focus countries: Nigeria, Ethiopia, Sierra Leone, Myanmar, Pakistan and Zambia, as well as to Africa Centres for Disease Control and Prevention (Africa CDC). This led to a focus on disease surveillance strengthening, including strengthening of laboratories, tabletop exercising of Emergency Operations Centres and plans, and enhancing epidemic outbreak response capacities, as well as on strengthening public health management systems and the public health workforce overall. A description of the Project outputs and outcomes is included in the logframe at Annex 11, summarised below in Box 1.

Box 1. IHR Strengthening Project goals (from the Project logframe)

Impact: Improved GHS with strengthened capacity at national, regional and global levels **Purpose:** Strengthened all-hazards health protection systems, capacity and procedures to implement the International Health Regulations (2005)

- Outcome 1: Strengthened system coordination and collaboration through national public health institutes in partner countries and at Africa regional and global levels
- Outcome 2: Health protection professional workforce developed in skill-shortage areas (such as laboratory diagnosis and epidemiological surveillance) to have improved capability to detect, prevent and respond to public health threats in partner countries and Africa region
- Outcome 3: Public health technical systems enhanced and expanded in partner countries and regions
- Outcome 4: Effective cross-government (UK) delivery of international public health system strengthening

The IHR Project works primarily with national institutes of public health, or their equivalents, in the six countries where PHE provides support and with Africa CDC. The Project is at various stages of implementation, with the Nigeria, Ethiopia and Pakistan Projects having been implemented for longer than other focus countries.

Context within which IHR Project was implemented

While broader contextual factors are described in Annex 1 and Annex 19, we note here the importance of UK domestic and in-country contextual factors that have created the imperative for tailored responses and adaptive management. The Project has been implemented during a time of significant domestic political uncertainty. Since 2016 there have been two general elections, three Prime Ministers, two Health Ministers, changes in the scope and mandate of the DHSC and the Foreign, Commonwealth & Development Office (FCO)/ Department for International Development (DFID), and ongoing uncertainty around government spending as determined through the comprehensive spending review process. This has been exacerbated by the COVID-19 pandemic, which has deepened financial uncertainty for the Project, diverted PHE staff resources and time – including in relation to a complete reorganisation of PHE

through the creation of the UK Health Security Agency (UKHSA) – and required substantial reprogramming and adaptation to programme activities to respond to evolving country needs. At the same time the pandemic created opportunities for the Project and PHE, both in terms of strengthening the case for investment in GHS – not least in terms of the UK's national interest, but also in terms of political commitment in the Project's focus countries – and in terms of raising the profile and awareness of the role that PHE can play.

The context in each of the Project's focus countries varies depending on the status of the health system and existing IHR capacities, as assessed using JEE and State Party Self-Assessment Annual Report (SPAR) tools. The six countries are substantially different in terms of administrative and governance arrangements, size and level of development – with two classified as low-income countries and four as lower-middle-income countries^{vii} with populations ranging from around eight million to over 200 million, life expectancies ranging from 54.7 years to 67.3 years,^{viii} and each with different histories of engagement on IHR-related issues.^{ix} With Africa CDC the context was for the IHR Project to provide support to a relatively young organisation during a time of increasing attention on GHS. The key implication of reflecting on contextual differences is on the importance of having a tailored approach in each country. Each country context changed during Project implementation, for example through the impact of elections,^x civil unrest,^{xii} changes in key staff and disease outbreaks; however, events of this nature can be expected in any country, and they underline the importance of adaptive management processes within the Project.

1.2. Purpose, expected results and activities of the IHR evaluation

The Terms of Reference (ToR) for the Third-Party Evaluation (TPE) of the IHR Project state that the purpose of the TPE is 'to ensure that the IHR Strengthening Project is having the intended impact by focusing on quality assurance and accountability and the facilitation of learning and adaptive management in order to improve Project decisions and performance. Thus, informing future health protection system-strengthening activities by PHE and other international actors' (see Annex 1 for full ToR). The evaluation scope covered all aspects of the IHR Strengthening Project (as described above).

To deliver against this purpose the evaluation has three objectives: 1) independent monitor; 2) evaluator; 3) learning partner. Objective 3 was the focus of the evaluation team during 2019 and 2020, and in 2021 (during the end-point process) we have focused on objectives 1 and 2, as described in this report.

Changes from Itad inception plan

We have mainly implemented the approach set out in the inception plan, with the following adjustments:

- In November 2020, following the submission of the midterm evaluation (MTE) and discussion with IHR about implications for the focus of the end-point evaluation, minor modifications were agreed to the evaluation questions (EQs). The revised evaluation framework is set out in Annex 2. Changes were mostly at the level of sub-questions, including to incorporate issues identified in the MTE and ensure the end-point evaluation built on the MTE, and to drop Value for Money (VfM) as a main EQ.²
- In view of international travel restrictions due to the COVID-19 pandemic, it was not possible to undertake country visits to any of the case study countries. All case studies were therefore conducted remotely. To strengthen our ability to gather required data and interact with key informants, for each case study we brought in a national consultant to work with the Country Lead and support data collection and analysis. The evaluation team structure is set out in Annex 2.

² Although some comparable analysis is included in Section 3.2 under EQ6.1.

 IHR decided that publication of end-point evaluation findings as a peer-reviewed journal article should be deprioritised in favour of an additional workshop to promote awareness and uptake of the evaluation findings within the Project.

End-point review activities

End-point evaluation activities took place during the period November 2020 to September 2021, summarised in Table **3**, with most activity happening between February and July 2021. Our official cut-off for documentary evidence was March 2021, and key informant interviews (KIIs) were concluded in April 2021. Stakeholders participated in the end-point evaluation throughout, in particular during primary data collection – both in supporting identification of key informants (KIs) and as KIs, in consultation on draft findings (during the co-creation workshop and in commenting on draft case study reports) and in reviewing a draft and final end-point report.³ It is important to acknowledge that Project implementation continued beyond this point, and so progress and results presented here may have been improved upon.

Activity	Timeline					
Agreement with IHR on changes to the EQs	November 2020					
Secondary data collection	 Ongoing until 31 March 2021 All data to be uploaded by the IHR team by 30 April 2021 					
Primary data collection	 Ongoing until 31 March 2021 Observations have started and are ongoing Country-level data collection to take place February– March 2021 					
Coding of primary and secondary data	Ongoing until 7 May 2021					
Analysis and finalisation of case studies	May 2021					
Co-creation workshop to discuss preliminary findings with IHR team	June 2021					
Sharing of draft case studies with IHR Country Leads for comment	June–July 2021					
Drafting and submission of draft end- point evaluation report	23 July 2021					
IHR comment on first draft	w/c 9 August 20201					
Itad submission of final draft for IHR review	Early September 2021					
IHR comment on final draft	September-October 2021					
Itad revision and submission of finalised end-point evaluation report	October 2021					

Table 3: End-point evaluation period activities

³ Note that we also proposed to the IHR Team an option to run dissemination workshops in each country to enable discussion of findings with key stakeholders. After careful consideration, this approach was deemed not necessary.

2. Methodology

A full description of our evaluation methodology can be found in Annex 2. We present below some key points to inform interpretation of this report.

2.1. Evaluation purpose and objectives

We have described the overarching purpose and objectives for the evaluation in Section 1.2 above. This report focuses on two of the three objectives as appropriate and relevant for an end-point evaluation report: 1) independent monitor; 2) evaluator. The purpose of the end-point report is to provide a summative judgement against the EQs set out in Section 2.5. It is intended that this will help inform DHSC decisions on whether the Project should continue and in what form, and to help shape subsequent interventions by PHE in any future phase of funding. The IHR team is also keen that the report is accessible to a broader range of GHS stakeholders in order to share learning from implementation of the Project.

2.2. Utilisation focus and timing

Our approach is driven by a utility focus;^{xii} we have sought to foster the actual use of the data and evidence we generate, not only internally through adaptive management and course correction but also externally by generating learning in the wider sector.^{xiii} Our deliverable schedule was designed to ensure that we provided information that DHSC, PHE, IHR and in-country stakeholders needed when they needed it. A key means to support use of the end-point evaluation findings by the IHR Project has been through facilitated workshops, including a co-creation workshop (where IHR staff identified actionable recommendations based on the evaluation team's findings and conclusions), and a further workshop to discuss strategic implications for future action⁴. We also shared a draft of the end-point report with IHR for review and comment on two separate occasions before it was finalised. Timing of the end-point report fitted with the UK government's spending review process, and gave IHR an opportunity to reflect on implications and use evidence from the evaluation in its business case as part of the spending review. There is evidence that these efforts, and ongoing close work between the IHR and Itad teams throughout the evaluation period, have led to important adaptations or examples of co-development.

2.3. Target audience and stakeholders

The primary audience for this report is the IHR team and UK Aid GHS partners, mostly those that sit in DHSC. A secondary audience group includes country-level partners and broader GHS stakeholders. The needs of these different groups has informed the design and communication of evaluation products and findings:

- The IHR Project team are interested in detailed findings and supporting evidence, and we have produced a comprehensive report in two volumes to meet their needs.
- Senior PHE staff and the DHSC GHS team do not need the same level as detail as the Project team, and we have produced a short Executive Summary designed to promote accessibility to meet their needs.
- For country-level stakeholders we have discussed with IHR whether country-specific briefings would be of use.

2.4. Evaluation team

The evaluation team comprises eight core team members, plus four research analysts, a team of six incountry consultants and one Project officer.

⁴ We note that two similar workshops were held with the whole IHR Project team to discuss findings and implications for the team from the MTE.

- Core team members include: Jon Cooper (Project Director), Tim Shorten (Team Leader since January 2021; prior to that, WS1 lead on 'Right Things' and Country Lead for Sierra Leone), Cindy Carlson (WS1 lead on 'Right Things' since January 2021; prior to that, Team Leader and Country Lead for Pakistan), Ruth Sherratt (WS2 lead on 'Right Ways' and previously Project Manager and Country Lead for Ethiopia and African CDC), Matthew Cooper (WS3 lead on 'Right Results' and Country Lead for Nigeria and Myanmar), Asma Khalid (lead on quality assessment and Country Lead for Zambia), Giovanna Voltolina (Project Manager since January 2021) and Becka Kindler (cross-evaluation consultant). Paul Balogun has also provided quality assurance (QA) support on evaluation deliverables.
- Research Analyst tasks were carried out by Betsie Lewis, Shreyashi Dasgupta, Steven Beckett and Valeria Raggi.
- Six consultants provided in-country perspectives on case studies: Aminah Rajput (Pakistan), Kyi Minn (Myanmar), Muluneh Yigzaw (Ethiopia and Africa CDC), Ozioma Nwagwu-Unyi (Nigeria), Pascalina Zapata (Zambia) and Robert Sam Kpakra (Sierra Leone).
- Sarah Lamb, Itad Project Officer, assisted the Project Manager in all areas of Project management, including coordination of Project administration and logistics.

Governance of the evaluation operated as set out in the ToR, which are set out in Annex 1, and in the team organogram at Annex 2.

2.5. Overall evaluation approach/design

The evaluation ToRs set out a number of evaluation requirements that the team translated into EQs grouped using three broad questions – is the IHR Project 1) doing the right things 2) in the right ways and 3) getting the right results? The focus of the end-point evaluation has been on how the Project has been implemented, and whether it has achieved its output targets and outcomes. We have also considered what contextual factors are facilitating or creating bottlenecks in the IHR Project, and whether these are related to country-contextual factors or to how PHE is managed and operating in each country, or both.

We have used a theory-based, mixed-methods design, including quantitative and qualitative methods, to gather and analyse data from a range of sources to explore the EQs. The central feature of the design is seven case studies – one for each of the Project's six focus countries, plus one for its support to Africa CDC. An overview of the workstreams and methods used is provided in Annex 2, which includes the evaluation framework with questions, sub-questions, evaluation criteria – using the Organisation for Economic Co-operation and Development (OECD) Development Assistance Committee (DAC) criteria – sources of evidence and analytical methods used, by workstream.

2.6. Data sources and collection



Figure 2. Data sources for end-point review

As illustrated in Figure 2, data was primarily obtained through three sources: 1) documents provided by IHR; 2) documents obtained by the evaluation team; 3) KIIs. In total, 809 documents were received from IHR and other sources, of which 396 were coded by our research analysts using an agreed coding tree. 112 KIIs were completed, using standardised, semi-structured KI guides that were adapted based on experience in initial KIIs. KIs were identified through a mix of IHR inputs, reference to KI lists from the MTE, and snowballing. Table 4 in Annex 2 summarises the number of stakeholders per category for each case study. All people being interviewed did so on a voluntary basis, without compensation or reward. They were assured that their inputs would be treated with confidence and that any quotes used in the report would be anonymised (see Section 2.9 and Annex 2 for details on confidentiality and ethical considerations). Workstream leads analysed this range of documentation to ensure that findings were triangulated where possible, and a strength of evidence framework was applied to make transparent the extent to which triangulation was possible.

2.7. Data analysis

The analysis of the data collected has been framed by the three 'rights', as described in Annex 2. This has guided the evaluation team to pull out key messages for the IHR Project in relation to the EQs. We used the Theory of Change (ToC) as an analysis framework to understand and assess whether the intervention logic has held in the implementation of activities, and whether there are explanatory contextual factors at play. The primary analytical method used to facilitate this assessment is contribution analysis, described in more detail in Annex 7. Other analytical methods used included benchmarking – looking at published literature across all three of the IHR Project workstreams and comparing with the approach, outputs and outcomes of the IHR Project. Cross-country case analysis was carried out after the country case studies were completed. This allowed us to formulate judgements on what has worked best, for which groups and in what contexts.

2.8. Evaluation methods and limitations

We applied the evaluation methods as anticipated in the majority of cases. As described above, the major departure from the ToR and inception report related to conducting country case studies remotely, instead of face to face as planned, due to COVID-19 travel restrictions. COVID-19 also meant that we faced some challenges in arranging KIIs with some government staff – in particular those in national public health institutes (NPHIs) who were directly engaged in the COVID-19 response. We mitigated this as far as possible through engaging national consultants in each country who could more easily speak with key government stakeholders, identify alternatives if appropriate, etc., and through applying flexibility in our data collection timelines. In most cases we were able to secure some views of government staff as a key counterpoint to IHR and development partner views, although this was not possible at all in Myanmar due to Her Majesty's Government (HMG) policy in the aftermath of the military coup in January 2021.

2.9. Inclusion and ethics

The review team have at all times respected the confidentiality of people being interviewed or who are observed when receiving services. Any written or verbal recording of individual responses to questions has not been attributed to a specific individual unless the team has received their explicit consent to have what they have said attributed to them by name. A fuller description of our approach to ethics and safeguarding is included in Annex 2.

Other aspects of our methodology, including on our approach to 'Do no harm', data protection, reward/compensation structure, quality assurance/data integrity and conflicts of interest, are included in Annex 2.

3. Findings

In this section we present our findings from applying the methodology described above, against each of the EQs. In Section 3.1 we present findings for the 'Right Things' workstream; in Section 3.2 we present findings for the 'Right Way' workstream; and in Section 3.3 we present findings for the Right Results workstream. A summary of key findings with strength of evidence ratings is included in Annex 9.

3.1. Is the Project doing the 'right things'?

An examination of whether the IHR Project is doing the 'right things' is based on an assessment of how relevant and aligned Project interventions are with partner country priorities and plans. We also cover alignment with UK government priorities as well as how well the Project coordinates and harmonises with other organisations working in the global health space.

Headline messages for 'right things'

The MTE found that the IHR Project had initiated the right approaches to aligning to and supporting country priorities and to coordinating and harmonising its work with other HMG programmes and development partners. The end-point evaluation finds that this has continued and that COVID-19 has provided an opportunity for PHE to demonstrate its added value and flexibly respond to evolving country needs. The Project goals remain relevant to and aligned with country and regional goals – especially in supporting responses to COVID-19 – and actions being implemented are aligned with World Health Organization (WHO) guidance; however, there is scope to further strengthen the articulation of the Project's ToC and underpinning assumptions. IHR has continued to coordinate well with development partners to contribute to more coherent health security support, including providing evidence for informing COVID-19 responses. In addition, IHR has continued to align with UK ODA and GHS agendas, strengthened during the COVID-19 outbreak, although there is scope to strengthen collaboration with HMG-funded health security implementers. The Project has contributed to PHE's credibility within the GHS community, building on already strong collaborations with key external partners.

EQ1: Are the Project's regional and country-specific goals relevant and appropriate in relation to national strategies and action plans?

EQ1 was subdivided into two specific questions that the team wished to explore further.

- 1. Have IHR activities aligned well with government and regional body priorities?
- 2. How well have IHR activities been coordinated with inputs of government and other stakeholders, especially with regards to the pandemic response?

As with the MTE, we analysed relevance and alignment by reviewing the degree to which ongoing work planning was aligned with national needs, policies and priorities, as they are expressed in the JEEs, follow-up electronic State Party Self-Assessment Annual Report (e-SPAR) and National Action Plans for Health Security (NAPHS) and expressed during KIIs.

Finding 1: Overall the Project remains highly relevant to, and aligned with, country and regional priorities, including, and especially in supporting, responses to the COVID-19 pandemic.

In December 2019 the different teams working to support the six countries and Africa CDC drew up proposed work plans for the 2020/21 year, based on NAPHS and consultations with their partner public health institutions. The work plans were also developed to build on the efforts made in the preceding years, with a view to consolidating capacity and system development gains.^{xiv}

Much of this planning had to be adjusted as attention had to pivot towards support for addressing the COVID-19 pandemic. Our country contribution stories (presented in full in Annex 8) and synthesised findings provided under the 'Right Way' workstream (Section 3.2) provide a full picture of how much plans had to change over the course of 2020. Revised work plans^{xv} were made in mid-2020 to cater for the new

context within which all teams found themselves working. KIIs indicate that these adjusted plans were very much aligned to filling priority gaps in COVID-19 responses identified by the partner institutions and IHR teams.^{xvi} Annex 10 provides an overview of the COVID-19 related requests that the IHR Project responded to.

Finding 2: IHR coordination with other health security partners regionally and nationally continued to be strong, contributing to more coherent health security support.

The IHR Project teams continued to develop good relationships with different global health related partners both in countries and regionally, as well as at global level. Where regional bodies or country governments had set up health security-related technical working groups (TWGs) or task forces, IHR team members participated in meetings.^{xvii} There is some evidence from KIIs that this led to a reasonable division of labour and some synergies in emergency responses, thereby fostering more coherence across partner support (see Table 12 in Annex 10 on Covid-19 coordination).

Other countries reported active coordination by IHR with other organisations, and in some cases proactive division of responsibilities to maximise the added value across different organisations. Examples of this included the IHR Project's work with WHO and with Population Services International (PSI) in Myanmar – see Box 2 below. The degree to which the IHR Project could foster greater coordination was dependent on the situation and political interest in better coordination in each country, but even where this political will was weaker, IHR teams made efforts to ensure their activities were coordinated well with other partners.

Box 2. Working in Myanmar through a complementary partnership with PSI

In Myanmar, IHR established a strong working relationship to provide complementary support to a Project implemented by PSI to rehabilitate Emergency Operation Centres (EOCs). This involved the Project providing technical expertise and guidance to PSI, who brought the capacity and knowledge of how to enact change at the community level. PSI also facilitated the delivery of some training where IHR staff could not be present in-country. As such, IHR was credited with creating the enabling environment for PSI's detailed work at sub-national level.

In Pakistan, the IHR Project has worked collaboratively with WHO to coordinate laboratory strengthening activities, which has included undertaking a landscaping of all lab-related assistance to reduce duplication and ensure more areas of laboratory support could be covered.^{xviii} In Nigeria, the IHR Project worked with GIZ and Japan International Cooperation Agency (JICA) on surveillance and laboratory strengthening activities, while the Resolve Foundation, a new initiative focusing on GHS and non-communicable diseases (NCDs), sees IHR as a primary partner in Nigeria where training and system-strengthening activities have been jointly developed and delivered.^{xix} In Ethiopia, the IHR Project supported the NAPHS development together with WHO, the United Nations Children's Fund (UNICEF) and the United States Centre for Disease Control (US CDC), though was seen as playing a minor role compared to the other agencies due to the limits in the type of support it can provide.^{xx} In Sierra Leone, IHR was credited as working closely and effectively with USCDC and WHO.^{xxi}

An exception to this appears to be in the case of the Pakistan high-level task force, which was set up by the Ministry of National Health Services Regulation and Coordination (MoNHSR&C). In absence of a TWG, the IHR team focused its efforts on small technical groups bringing together partners that work with the National Institutes of Health (NIHs), which were highly valued by key informants.^{xxii} However, the limited engagement with MoNHSR&C was considered by some KIs as limiting PHE's profile and influence in Pakistan more generally.^{xxiii}

At regional level, the IHR Project has worked with the Eastern Mediterranean Public Health Network (EMPHNET) to strengthen multi-sector coordination, while the IHR Project is seen as having helped Africa CDC to strengthen partnership coordination through the collaborative approach the IHR team has taken there.^{xxiv} (See more under EQ3 and EQ8 below)

Finding 3: The IHR Project was seen as having especially contributed to coordinated development partner support for the COVID-19 responses in different countries and at regional level.

When the threats posed by the COVID-19 pandemic became apparent, all of IHR's public health institute partners began to reach out to their development partners to seek support. In all of the IHR Project countries and with Africa CDC, the IHR Project was seen as an active player, working flexibly to fill gaps where other partners might have had more constraints to shift their work programme. Examples of how the Project worked in concert with public health national/regional partners and other development partners include: IHR serving as an active member of the Africa CDC Coronavirus Task Force, which was set up by Ministries of Health and Heads of Member States;^{xxv} in Nigeria the IHR Project lead has worked with the World Bank and Nigeria CDC to finalise a framework for implementing state-level COVID-19 plans; ^{xxvi} and in Zambia the Project supported the Zambia Ministry of Health (MoH) and NPHI to form a COVID-19 Technical Scientific advisory committee.^{xwi} More details are provided in Annex 10.

EQ2: Are activities aligned, complementary to and coherent with other relevant UK ODA and the GHS agenda?

EQ2 was subdivided into two specific questions that the team wished to explore further.

- 1. How well have IHR activities aligned with HMG priorities on GHS, regionally and in countries, especially the Tackling Deadly Disease in Africa Programme (TDDAP), UK Public Health Rapid Support Team (UK-PHRST) and Fleming Fund, as well as COVID-19 support?
- 2. How well have IHR activities been coordinated with inputs of HMG (funded) stakeholders, especially WHO?

Finding 4: There is strong evidence of alignment and coherence with UK ODA agendas across the different countries and institutions that the Project works with. This was strengthened further with the onset of COVID-19.

The documentation and KIIs for the end-point found that the IHR Project has continued to build on and strengthen the alignment of its activities with other UK programmes seen during the MTE. However, as reported in the MTE, the Project TOC assumption that IHR capacity development would be complemented by other HMG and donor Project inputs, such as financing for relevant materials and equipment, did not hold, though efforts were made by some Country Leads to leverage complementary funding from other HMG projects⁵. This assumption was subsequently dropped from the new TOC. With the onset of the COVID-19 pandemic, there was an inevitable shift from leveraging additional resources in support of general IHR Project efforts to the IHR Project being called on to contribute more to HMG's wider COVID-19 agenda. KIIs with FCDO and other government officials indicated that IHR teams became invaluable partners in helping to shape the UK COVID-19 response in different countries in at least five out of the six IHR Project countries. Examples of how the IHR Project lead was called on to be the public health expert to the British Embassy crisis team,^{xxviii} while in Pakistan the Project team provided input to the British High Commission's testing and surveillance group to help manage surveillance in the high number of travellers between the UK and Pakistan.^{xxii} More details are provided in Annex 10.

⁵ Although PHE noted that there aren't always clear mechanisms in place for this kind of leveraging to be taken forward, and that the Project wasn't set up to coordinate complementary investments by other partners.

The IHR Project's own reports of their contributions to HMG health security-related work was also reflected in KIIs with HMG officials.

IHR Project teams also found that they were having a stronger voice in HMG discussions in countries as their expertise became more valued.

While the relationship appears to be mostly positive, some KIs also voiced caution about becoming too entwined with HMG interests. There were concerns that IHR Project staff were increasingly called on to work on wider HMG interests in countries, and so losing focus on delivering IHR Project outputs (which could potentially have been mitigated with a stronger focus on the Project ToC, as discussed under Finding #7). *** Another challenge for the IHR Project teams was juggling the priorities of the UK government and those of their partner institution, for example where there were particular concerns about the high numbers of travellers between the two countries, as is the case with Pakistan. This occasionally led to some tensions in terms of negotiating the types of activities the IHR Project team would engage in. ***

Finding 5: The IHR Project teams coordinated their inputs reasonably well with other HMG-funded health security implementers and were complementary to each other, though in some countries these relationships were hindered by a sense of competition for funds.

The MTE concluded that IHR efforts were leading to better alignment and coordination, but noted that further work would be needed to ensure that the Project enhances HMG IHR-related efforts, especially in antimicrobial resistance (AMR) and One Health. Efforts were being made in late 2019 to boost the IHR Project's One Health efforts but these have not realised their full potential, due to all focus shifting to the COVID-19 response. Support to AMR has subsequently been dropped from the new IHR Project logframe.

The end-point evaluation has focused primarily on three HMG-funded health security implementers – TDDAP, WHO and Fleming Fund. The relationships between the IHR Project and these three entities appeared to vary in strength, depending on whether engagement was primarily from the central Project level or in countries, and on the presence of the entities themselves.

Fleming Fund: The relationships between Fleming Fund and the IHR Project are focused more on what happens at country level. ^{xxxii} The IHR Project has not prioritised AMR activities as such, given the larger AMR related UK investments through Fleming Fund. Instead the IHR Project has been working with its partner NPHIs to 'optimise Fleming Fund engagement in countries'. ^{xxxiii} For example, the Nigeria Centre for Disease Control (NCDC) has asked the IHR Project team to help position the NCDC to more fully benefit from what Fleming Fund has to offer. ^{xxxiv} The IHR Project teams in Nigeria and Pakistan were seen as having helped the Fleming Fund teams to 'navigate the complex landscape' of both countries by offering an initial platform through which they could build their own relationships.^{xxxv}

WHO: The UK government funds WHO in various countries to support a variety of health activities, including supporting national health security efforts. At global level the IHR Project leadership convened a workshop with WHO, other United Nations (UN) agencies, the International Association of National Public Health Institutes (IANPHI) and a range of UK, European and African schools of public health and NPHIs to raise understanding of different models and approaches to public health capacity development, and to identify potential areas for future collaboration.^{xxxvi}

At the outset of IHR's activities in countries, some WHO offices had the impression that IHR was intruding on 'their' territory and that the Project was a competitor for health security financing that might otherwise go to WHO. Other external stakeholders indicated that some of the Project's problems arose from not fully understanding the landscape they were entering into. ^{xxxvii}

Fortunately, in many countries the IHR Project teams have been able to establish a positive working relationship with their WHO counterparts. For example, in Ethiopia IHR delivered a workshop on

Vulnerability, Risk Analysis and Mapping together with WHO Ethiopia and Geneva, while in Myanmar IHR delivered a clinical toxicology training course together with WHO country and regional offices, as well as the UK National Poisons Information Service and the Myanmar Department of Public Health. ^{xxxviii} Working with Africa CDC, the IHR Project worked with WHO and the Pan-African Network for Rapid Research, Response, Relief and Preparedness for Infectious Diseases Epidemics (PANDORA) to hold a workshop on points of entry, risk assessments, infection prevention and control and case management related to COVID-19. ^{xxxix}

TDDAP^{xI}: TDDAP and the IHR Project developed a fairly close working relationship in the early days of both Projects' activities, though there is no overlap of countries where they work. Both Projects developed their business cases around the same time and so provided a fair degree of cross-fertilisation. The Projects have taken similar approaches, focusing on building in-country relationships with partners as well as offering technical support. The IHR Project team continues to share intelligence with the TDDAP programme manager. ^{xli} At country level the relationship has been more mixed, primarily because the Project teams in the countries are generally very occupied with delivering on their own Projects, which each have a different focus.

EQ3: To what extent has the Project been an effective conduit for PHE wider engagement with relevant actors?

EQ3 focused on one specific question that the team wished to explore further.⁶

1. To what extent has PHE been able to use the IHR Project to raise its profile and credibility with other GHS actors on the regional and national stage?

Finding 6: While the IHR Project has contributed to increasing PHE's credibility within the GHS community there is limited evidence that this has led to wider range of partnerships.

There is evidence that the IHR Project has maintained the high reputation of PHE technical capacities and skills within the institutions and countries where it is working, and with the wider GHS actors such as WHO and USCDC, as noted above. There is fairly universal recognition that *what* the IHR Project does is needed and that the right calibre of technical specialist is employed to support the work.

There is limited evidence of how the IHR Project has contributed to PHE being able to cultivate a much wider set of partners to work with or support beyond its NPHI partners and the usual GHS groups. There is also limited evidence for the extent to which the Project has been able to leverage additional resources from new or existing partners (in terms of finance or expertise), either to support the Project's work or for the wider PHE Global Health Programme.

However, there are some good examples of where new partnerships have been fostered, in particular with PSI in Myanmar (see Box 1 above) and EMPHNET. PHE's engagement with EMPHNET arose primarily from the IHR-related work in Pakistan, which is a member state of WHO's Eastern Mediterranean Region (EMRO). There was strong interest in disseminating the model of multisectoral health security planning that IHR has supported in Pakistan to the wider region. Since then, IHR has signed a Memorandum of Understanding (MOU) with EMPHNET. With COVID-19 the EMPHNET members have also expressed a strong interest in developing skills in genomic sequencing and the expertise IHR can bring for this.

EQ4: Are Project activities relevant and appropriate in relation to IHR Project goals and public health evidence more generally?

EQ4 was subdivided into three specific questions that the team wished to explore further.

⁶ In view of the overlap between EQ3.1 and EQ6.5 ('How effective has the IHR Project been in enhancing and leveraging partnership working with other technical partners working at country and regional levels?') we present evidence and findings related to both questions in this section.

- 1. To what extent have the adjustments to the Project ToC and monitoring and evaluation (M&E) framework supported better alignment between inputs, outputs and outcomes?
- 2. Have the assumptions in the intervention logic been upheld?
- 3. To what extent are Project activities consistent with best practice and evidence-based approaches?

Finding 7: The considerable work done on revising the ToC and M&E framework is yielding better alignment across the results chain for the Project, and a better reflection of how relevant interventions are expected to contribute to outcomes, though some further work is still needed to consolidate alignment, and the ToC could be used more in Project design and planning.

The IHR team have spent significant time over the last year developing iterations of an amended IHR Project ToC. The Itad team suggested an amended ToC in mid-2020 in response to the MTE, and included a revised set of assumptions. The IHR Project team then worked on ToC revisions through late 2020 and into early 2021 to inform the proposal for the IHR Project extension. Whereas the original IHR Project ToC provided almost no conceptual framing for how the Project intended its many inputs to yield impact, work on revisions has helped to fill this conceptual gap.

Our analysis suggests that the revised ToC and M&E framework have taken on board the feedback provided in the MTE and additional discussions post-evaluation, as well as the IHR Project team's own reflections on what they realistically can contribute to within the countries and organisations that they support. The revised ToC for mid-2020 and the new ToC developed for the business case are shown respectively in Annex 11, figures 3 and 4.

This revised version of the ToC does more clearly map out the ways that Project inputs, in principle, map across to the intended long-term outcomes and impact with better focus on defined outputs and intermediate outcomes that the Project can achieve. The revised M&E plan results chain does not yet fully align with the intermediate outcomes and long-term outcomes defined in the new ToC. However, both are more accurate representations of the what the IHR Project is trying to achieve. This is discussed further in the 'Right Way' section below (Section 3.2).

Finding 8: Analysis of the assumptions that underpin the intervention logic suggests that IHR Project countries are highly varied in how well they meet assumption conditions, and that some assumptions are more valid than others.

The mid-2020 revised ToC and the new ToC developed for the business case both come with a revised set of assumptions. In order to assess whether the Project assumptions hold, we have chosen to use the mid-2020 revised ToC assumptions. This is in line with Project management good practice that suggests Project ToCs and underlying assumptions should be regularly reviewed and revised based on learning from implementation experience. ^{xlii} An analysis of the new ToC assumptions has been done to provide a baseline as well as comment on appropriateness to support the IHR Project team to reflect on what may be needed going forward.

In general, assumptions usually refer to external factors that are outside the control of the implementing organisation. In the case of PHE, with the organisational structural changes that are ongoing as of mid-2021, it is perhaps natural for the Project team to include organisational factors as well. On the other hand, the Project team should have control over the ways of working, such as 'collaborative processes', appropriate ways of working and ensuring the training is evidence-based and tailored to contextual needs.

An examination of the new set of assumptions indicates that there is a mix of assumptions about internal IHR capacities and processes (5/15), as well as wider contextual assumptions. The assumptions that are deemed more about internal IHR capacities and processes include:

- Appropriate strategies are employed to influence key stakeholders;
- Training is evidence-based and tailored to the contextual needs and the appropriate target audience;
- Standard operating procedures (SOPs) and plans are developed through a collaborative process that is aligned with national and regional priorities and systems;
- Roles and ways of working are appropriate to the national and regional contexts;
- IHR has short, medium and long-term capacity to support training at national and regional levels.

We have analysed the degree to which the conditions for the remaining 10 externally focused Project assumptions hold in each country, and summarised our findings below. Supporting analysis is presented in Annex 12, while contextual factors are captured under EQ6.3 in the 'Right Way' section below.

All but one of the 10 assumptions analysed appear to be valid and do constrain the Project's achievement of desired outcomes and impact. The only one that seems not to be valid is 'Operational partnerships based on mutual understanding and equity are more effective than strategic partnerships for delivering sustainable change'. Our analysis of how the IHR Project has worked in countries suggests that building strategic relationships (i.e. with NPHI leadership, other national government agencies and HMG agencies) has been key to ensuring more effective operational partnerships.⁷

Theory of Change assumptions	Sierra Leone	Ethiopia	Pakistan	Myanmar	Nigeria	Zambia
Outcome 1 - Technical Capacity Enhanced						
Partner public health workforce support and share ownership of IHR Project activities						
There is political will and partner absorptive capacity to implement the proposed IHR activities						
Improving compliance with IHR will strengthen national and regional health systems						
The outcome of the IHR Project will provide sustainable added value to public health						
Outcome 2 - Sustainable Public Health Systems Developed						
Partner public health workforce can implement roles, responsibilities and plans to the appropriate level of quality						
SOPs and plans provide a mandate for enhancing ways of working, including multisectoral collaboration						
Operational partnerships based on mutual understanding and equity are more effective than strategic partnerships for delivering sustainable change						
Outcome 3 - Leadership Strengthened						
Training, mentorship and simulation exercises are effective, sustainable methods to upskill a public health workforce						

Table 4. Evidence on whether key assumptions hold

⁷ We note concerns raised by PHE that the wording of the assumption reflects a misunderstanding of the intention of the project. The IHR Project team noted that their assumption was in fact that 'Operational partnerships based on mutual understanding and equity are more effective than **purely** strategic partnerships for delivering sustainable change' This observation was made after data collection and analysis had been completed and so we were unable to change the rating in table 4. As noted in finding 8, the IHR Project works at both operational and strategic levels.

Support from public health workforce partners in identifying and releasing appropriate trainers for development			
Building leadership capabilities of national professionals drives system development and promotes public health			

Conditions for the assumption are met Conditions for the assumption are partially met Conditions for the assumption are not met

Not able to analyse or specific area not covered by IHR Project

In reviewing the degree to which country-level conditions are in place for assumptions to hold, there seems to be a high level of variability, with the highest level of positive conditions found in Nigeria and Pakistan. In other countries these conditions are present based either on a smaller subsection of IHR Project activities or show a more mixed picture. This would suggest that the IHR Project's strategy of tailoring its support to the diverse contexts that it operates in is appropriate, with some countries likely to require more sustained efforts over longer periods of time than others. This finding also potentially suggests that longer engagement at strategic and operational levels may have a more positive interplay with Project assumptions as Project teams become more adept at identifying key contextual factors that support Project success as well as working on mitigating any negative contextual factors. This finding corresponds with our Finding 28 on contextual factors being critical to the achievement of Project outcomes. We undertook a comparison of the new 2021 assumptions with the previous assumptions developed in 2018/19 for the Project (also in Annex 12). It is difficult to make a direct comparison, as the outcome areas have slightly changed and are ordered differently to the 2018/19 outcome areas. To some degree the earlier set of assumptions are more genuine assumptions about what is happening or needs to happen in the external environment in order to enable the Project to support countries to achieve higher levels of IHR compliance.

Finding 9: The IHR Project activities that were undertaken were strongly aligned to WHO IHR Benchmark actions.

In assessing the extent to which Project activities were consistent with best practice and evidence-based approaches (EQ4.3), we compared the activities of the IHR Project with the benchmarks provided in the WHO Benchmarks for IHR Capacities guidelines. ^{xliii} Based on the range of activities included in the IHR and the benchmarking, we narrowed our analysis to looking at a) National Laboratory Systems, b) Biosafety and Biosecurity, c) Surveillance and d) Human Resources/Workforce, as detailed in Annex 13.

Through comparing what the IHR Project has done with the benchmark actions we found that there is a good read-across, though activities may occur at different levels of the benchmark actions, and not all activities in a particular benchmark may be supported. This may be because other partners are working in tandem with the IHR Project to support countries in these particular areas, such as WHO on laboratory strengthening or USCDC on field epidemiology workforce development. There are also areas that fall out with IHR's capacity to engage, such as ensuring consistent numbers of workforce cadres.

Finding 10: The Project has done considerable work on developing practices for delivery of training based on international best practice, and there is some evidence that these are starting to be embedded across the 6 Project countries and in Africa CDC.

Use of best practice (EQ4.3) is also a consideration in the capacity building work that is a central offer of the IHR Strengthening Project. There is strong evidence that the IHR Workforce Development team is

contributing more consistently with IHR-related training, using best practice standards as defined by the Kirkpatrick model, which IHR introduced in response to the MTE (as summarised in Annex 14).^{xiiv}

The Workforce Development team has also introduced tools to ensure that for example a) shared expectations are established with in-country sponsors on intended learning outcomes, and b) the best candidates are attending trainings.^{xlv} Other evidence-based models have also been incorporated into the tools, making them more robust, and demonstrate ongoing commitment to training quality improvement as well as QA.^{xlvi} The end-point country case studies (Annex 8) provide evidence that these tools are starting to embed and prove effective.

3.2. Is the Project doing things in the 'right way'?

An examination of whether the IHR Project is doing things in the 'right way' is based on an assessment of whether Project activities and outputs have been implemented and achieved, and an exploration of key factors that have enabled and constrained delivery of the Project. Such factors are defined in terms of effective management, use of adaptive management, role of partnerships, and Project financial management arrangements. We also look at whether the quality inputs have been procured.

Headline messages for 'right ways'

The MTE found that the Project's annual work planning processes were overly ambitious, with significant levels of planned activities not implemented and limited transparency on allocation of financial resources; it also concluded that efficiency and effectiveness could be further enhanced by giving more responsibility and authority to Country Leads; finally it highlighted limitations in IHR's systems to generate evidence on progress, quality and lessons in order to apply adaptive management. Evidence collected through the end-point evaluation shows that progress has been made on all of these issues. Substantial efforts and improvements have been made to Project M&E systems and these are better suited to generate evidence that the Project can use to track and manage for better results; however, there remains scope for further improvements. Changes to Project governance, management structures, communications and financial management/procurement have generally been well made; although (as is to be expected) more can be done to streamline these to ensure efficiency, albeit within the constraints of overarching PHE and DHSC systems and structures.

EQ5: How well have IHR revised 2020 work plans aligned with achieving Project outputs?

EQ5 was subdivided into three specific questions that the team wished to explore further.

- 1. Have activities as expressed in workplans or elsewhere been clearly linked to expected outputs and outcomes?
- 2. Has the implementation of activities led to the achievement of intended outputs?
- 3. To what extent, and how, have Project outputs been routinely assessed for quality?

Finding 11: Implementation of activities has generally contributed to achievement of intended outputs, particularly in addressing shortage skills in public health staff, and enhancing laboratory systems.

Starting with EQ5.2, the seven case studies that we have completed for this end-point evaluation (Annex 8) show that, where activities have gone ahead, implementation generally led to the achievement of outputs. A qualitative overview of the achievement of outputs is provided in Table 5 below. It is important to note that progress may be linked to the duration of Project implementation in each country, given that start dates in were staggered.⁸ We also note that the table below should be read in light of the onset of the Project's country work, while also acknowledging that some NPHI partners did not ask for support.

⁸ Implementation across the Project began in the following sequence (as illustrated by Figure 1 in the Executive Summary): Pakistan (2016), Nigeria, Ethiopia, Sierra Leone (2018), Myanmar, Zambia, Africa CDC (2019).

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Table 5. Qualitative summary of achievement towards outputs

Key:
Fully/mostly achieved
Partially achieved
Limited achievement
N/A – no significant activities

Previous logframe outputs	Africa CDC	Ethiopia	Myanmar	Nigeria	Pakistan	Sierra	Zambia
TOC Outcome Area: System coordination and collaboration							
Output 1.1 Enhanced inter-sectoral collaborations for all-hazards health protection partner countries							
Output 1.2 'One Health' capacity improved through inter-sectoral coordination and collaboration							
Output 1.3 Functional network of EOCs and emergency response systems capable of addressing potential public health threats established							
Output 1.4 PHE technical input complementary to DFID Tackling Deadly Diseases in Africa Programme supported priorities							
Output 1.5 Defined package of technical assistance for antimicrobial resistance shaping national strategy							
TOC Outcome Area: Health protection workforce							
Output 2.1 Workforce needs assessments undertaken and toolkits available for workforce gap analysis							

Previous logframe outputs	Africa CDC	Ethiopia	Myanmar	Nigeria	Pakistan	Sierra	Zambia
Output 2.2 Workforce strategic plans developed & implemented and toolkits available for workforce strategy development							
Output 2.3 Public health leaders developed and mentored and capacity increased for leadership development							
Output 2.4 Increased number of professionals field-deployable through GOARN, Africa CDC or other bilateral and national systems							
Output 2.5 Increased number of public health professionals with shortage skills, with training capabilities increased in partner organisations							
TOC Outcome Area: Public health technical systems							
Output 3.1 Operationalisation of effective emergency preparedness, resilience and response systems							
Output 3.2 Strategy developed and operationalised for surveillance, laboratories and other health protection systems							
Output 3.3 System performance tested through exercises /simulations and/or events, with after-action reviews done and acted upon							
Output 3.4 Laboratory systems enhanced and quality assured, with capacity increased for QA, and laboratory networks strengthened							
Output 3.5 Strengthened systems for detection and response to chemical-toxicological public health incidents							

Considerable progress was made with activity implementation under Output 2.5 ('Increased number of public health professionals with shortage skills indicated by workforce needs assessments, with training capabilities increased in partner organisations'), with the evidence demonstrating that in general those trained did learn the intended skills and found the training valuable.^{xlvii} Good progress was also made with activity implementation under Output 3.4 ('Laboratory systems enhanced and quality assured, with capacity increased for laboratory QA, and laboratory networks strengthened'), with evidence in several countries of improved lab capacity and/or lab networks strengthened.^{xlviii} There was one notable example in Ethiopia of where implementation of some activities did not contribute to the intended outputs. Training and support was provided to St. Peter's Hospital in order to establish a poisons centre (relevant to Output 3.5 – 'Strengthened systems for detection and response to chemical-toxicological public health incidents'), but support was ultimately withdrawn due to a change of leadership and focus at the Hospital^{xlix} and at the time of the valuation it was not clear to what extent, if any, the poisons centre was still functioning.¹

Where only partial progress is indicated, in most cases this is related to activities that involved the development of plans (all-hazards, One Health, AMR, etc.) but it was not clear if the development of these plans resulted in increased capacity and/or collaboration as outlined in the relevant output (see also Finding 14 on the link between quality and outputs). In other cases, partial progress is indicated due to the support only being partially completed and/or recently started (for example, Output 2.3, related to development of public health leaders). More specific analysis of factors behind progress in achieving intended outputs is included in country case studies at Annex 8.

Finding 12: Project work plans and associated documents continue to map activities against logframe outputs, but the link made to the ToC outcomes is not always uniform or explicit. However, clearer links between outputs and outcomes have been outlined in some more recently developed tools.

One explanation for the performance presented above is the extent to which links between activities, outputs and outcomes is clear (EQ5.1). As highlighted in Section 3.2, since the MTE was submitted, the IHR Project team have made considerable efforts to take on the recommendations around the need to revise the Project's results framework and adjust workplans and reporting to align with the revised logframe and indicators. This has included holding an internal ToC workshop, and, more broadly, ensuring that knowledge and awareness of the importance of monitoring and reporting progress against Project outputs and outcomes is improved. Despite this work, at the time of analysis, Project outcomes had not been fully integrated into the 2020/21 work plans or the new Project Initiation Documents (PIDs), although IHR report that a retroactive mapping of the PIDs against outcomes was planned from the outset and in progress. Activities and associated milestones are mapped to the logframe outputs, which are linked to Project outcomes in the detailed Excel workplan by default via the structure laid out. However, in the PIDs for each theatre of engagement, the Project outcomes are not explicitly outlined, and where there is reference to Project 'objectives/outcomes', no link is being made back to the Project outcomes as defined in the revised ToC.

Table 6. Mapping of logframe levels to documents

Document	Activity level	Output level	Outcome level
Latest IHR ToC	N/A	SOPs, plans, strategies and guidelines are developed for IHR Implementation	Plans, strategies, SOPs and guidelines for the prevention, detection and response to public health events are strengthened
2021–22 Logframe (Nigeria example)	Finalisation of the national multisectoral multihazard preparedness and response plan	Strategies and plans developed and implemented, EOCs established and functional, and staff trained for effective multihazard Emergency Preparedness, Resilience and Response (EPRR)	Public health workforce and institutional technical capability strengthened in selected core IHR competencies, for improved prevention, detection and response to public health threats
PID (Nigeria example)	Support the development of the National multisectoral multihazard preparedness and response plan	Outputs are not explicitly mentioned; however, there are items labelled as 'Objectives' which could be considered either outputs or outcomes, but we would consider to be outputs, e.g.: 'National multisectoral multihazard preparedness and response plan is in place and tested'	Outcomes are conflated with objectives – objective given as 'National multisectoral multihazard preparedness and response plan is in place and tested'

As raised in the MTE, up until the end of the 2020/21 Project year, multiple activities also continued to be linked to more than one logframe output. While this may seem pragmatic and reflective of the 'real world', it has implications in terms of how progress is being reported.^{II} It seems, however, that in 2021/22 logframe documents,^{III} activities/deliverables are linked to only one output, and clearer links between outputs and outcomes have also been made in the recently co-developed 'contribution narratives' to capture more qualitative elements of progress.^{IIII} Overall IHR Project team members reported that governance and Project management structures have improved since the MTE was conducted, and that team members appreciate efforts to improve and share updates with the team.^{IIV, IV} Room for further improvement was identified by several IHR Project and HMG stakeholders, specifically in terms of the number of meetings, and clarification on roles and responsibilities:^{IVI}

Finding 13: Project management systems effectively report progress against activities, but there has been less progress in ensuring that progress against outputs and outcomes is adequately captured.

Also related to EQ5.1, an overview of progress against activities and milestones across the Project is provided in Annex 15. This shows that a large proportion of activities were cancelled, for a variety of reasons.^{Ivii} We have observed inconsistencies in labelling an activity or milestone as cancelled, with examples where activities were cancelled after they had been partially or fully implemented.^{Iviii} As a result, Jira reports do not provide a reliable or useful view on the link between implementation of activities and the achievement of outputs. Further, automated Confluence reports do not show cancellations at all, giving an overly positive picture.

The M&E team have made considerable efforts to adapt Jira for use in-Project, in order to report against logframe output indicators, as shown in 16. Currently the data being pulled into these reports is based on

milestones determined by text filters for key terms,^{lix} rather than using the logframe output reference that milestones have been mapped to.^{lx} This illustrates the complex work required to make the Jira and Confluence reporting system fit for purpose. As it stands, while Jira and Confluence have the potential to be able to provide rich and valuable reports of progress against activities and milestones – and, to some extent, outputs – they are not yet providing reliable data that reflects the actual progress being made.

Indicator ÷	Q1 April - June 2020 🗘	Q2 July - September ‡ 2020	Q3 October - December 2020	Q4 January - March 2021 🗘
1.1.1A % of identified SOPs,	AMBER	GREEN	RED	AMBER
plans and/or guidelines	33% complete	66% complete (2	7% complete (1	50% complete
developed/ updated and	(1 out of 3	out of 3	out of 7	(14 out of 28
disseminated, as supported by	milestones	milestones	milestones	milestones
PHE.	delivered)	delivered)	delivered)	delivered)

Figure 3. Partial snapshot of IHR Project output indicators summary from Confluence

There is, however, evidence in other Project monitoring and reporting systems of the importance ascribed to demonstrating progress at outcome level. For example, the standard Annual Review template does not require reporting against outcome-level indicators, and yet IHR team members were clearly cognisant of the need to properly highlight progress at this level when drafting the 2019/20 Annual Review report.^{Ixi} Subsequent revisions of the Annual Review report integrated this thinking, and provided narrative progress summaries towards each revised ToC outcome, linked to the activities and outputs that had been delivered.^{Ixii} The contribution narratives that IHR has recently started to develop, as mentioned above, also highlight the increased importance that is attributed to capturing the links between Project outputs and outcomes, and also, to some extent, JEE indicators.^{Ixiii}

Finding 14: Processes to assess quality of training outputs are evolving and are starting to cascade to country level, but it is neither clear if an agreed set of indicators exists for routine assessment of training quality, nor whether assessment of quality for non-training outputs is being implemented.

Relating to EQ5.3 and EQ7.2,⁹ we looked primarily at whether training outputs are assessed for quality, as this was a key finding in the MTE which identified that: a) technical assistance (TA) in the form of training is a core offer across the six countries and across all Project workstreams; and b) few considerations were given at that time to how to maximise the effectiveness of training. The MTE made a recommendation that IHR ensures reporting not just on quantity of outputs but also on quality and sustainability.

There is evidence that the Project had previously focused on tracking implementation of training interventions (e.g. numbers trained and end-of-course satisfaction) than tracking the quality of training outcomes;^{lxiv} this is not an uncommon challenge across sectors, where teams are held accountable for delivery at activity level and are consequently less focused on achieving sustainable outcomes. In addition, there is recognition that the IHR Project needs to strengthen its focus on long-term issues such as overall staffing and sustainability.^{Ixv} There is some evidence that this shift in thinking has started, and that training follow-up actions are in place at country level: for example in Pakistan, conducting interviews with trainees and trainers themselves to understand how their day-to-day work has been influenced and how behaviour has changed a few months after the event.^{Ixvi} Local teams in Pakistan also record pre- and post-training information and analyse monthly to assess for quality.^{Ixvi}

There is good evidence that the teams know the importance of collecting training data and how it can

⁹ EQ 7.2: Are inputs of an appropriate quality to meet desired outputs?

improve practice, and there are plans to conduct roll this out to other countries. There is some evidence that the importance of collecting data to evaluate the quality of training at country level has commenced. For example, the Zambia Project has produced a robust plan for Geographical Information System (GIS)/Excel training which clearly states learning outcomes for the training, seeks to anticipate challenges with the training plan, and includes an explicit purpose for evaluation of the training;^{lxviii} this plan was then used as a basis for writing the evaluation report.^{lxix} The Pakistan Project team also commissioned an independent evaluation of the effectiveness of their training in order to apply lessons learned to future capacity development activities, but the results of this evaluation were not yet available to the evaluation team.^{lxx}

While these are encouraging examples of progress in measuring training quality, through planning and evaluation of training it is unclear whether there is an agreed IHR project wide strategy or defined process for how all the data on training and non-training outputs that is being collected is further analysed with a view to establishing evidence based common themes and lessons learned and how these findings will be cascaded across all technical and all in country teams to enable and embed quality. Technical teams are responsible for the content and delivery of their own training,^{bx} but respondents reported that there should be more working across teams to ensure a consistent approach to delivery.^{bxi} Related to this, and specifically to Level 2 of the model, our analysis suggests that assessment of a defined level of baseline skills and knowledge is not consistently incorporated into individual technical training materials.^{bxi} While IHR Project staff reported that there are some pre- and post-training assessments from facilitators (who also review the quality of the training and identify key learning points) it is unclear if this is standard practice. Assessment of competency is a key tenet of the Kirkpatrick model, and it will be of significant benefit to future evaluation of training outcomes to have uniformity of approach in what data is being captured about the trainees.

The quality of training also depends on the quality of training materials, and there is good evidence of flexibility in the approach of modifying training content to country context, notably in Myanmar and Ethiopia^{lxxii} and with co-development of training with WFD NIS Zambia and IDSR Pakistan.^{lxxiii}

EQ6 What factors have enabled or constrained successful delivery of the Project?

EQ6 was subdivided into a number of specific questions that reflect potential enabling and constraining factors that the team wished to explore further. Such factors are defined in terms of effective Project management, use of adaptive management, role of partnerships, and Project financial management arrangements. For each factor, a specific question was identified to build on the understanding gained through the MTE. Note that findings for EQ6.5 are incorporated in Section 3.1.¹⁰

EQ6.1: How have changes made to the in-country and international structure of the Project affected the appropriateness and effectiveness of IHR Project management and administration?

Finding 15: Governance (in-country and international structures) and management of the Project has evolved as the Project has matured and, overall, appears to have improved. Despite this, some internal stakeholders see room for further streamlining to improve clarity and reduce duplication of effort.

In line with feedback from the 2018/19 Annual Review, ^{bxiv} the IHR Project's governance structure has adapted to encompass ongoing changes to the SLT, size of the country teams and other contextual factors (see high-level summary of current governance arrangements in Annex 17.^{bxv}

¹⁰ EQ6.5 How effective has the IHR Project been in enhancing and leveraging partnership working with other technical partners working at country and regional levels?

Overall, IHR Project team members reported that governance and Project management structures have improved and are working more effectively compared to when the MTE was conducted, and that team members appreciate efforts to improve and share updates with the team.^{Ixxvii, Ixxvii} Room for further improvement was identified by several IHR Project and HMG stakeholders, specifically in terms of the number of meetings and clarification on roles and responsibilities.^{Ixxviii}

In terms of the breadth of meetings across the Project, a summary of the various governance meetings is provided in Annex 18.**Error! Reference source not found.**^{Ixxix, Ixxx} This shows that some team members c ould be invited to attend up to seven regular meetings in an average month (one fortnightly meeting, three weekly meetings and three monthly meetings), plus additional quarterly meetings^{Ixxxi}. The duration of these meetings is not known in all cases, but there is a clear risk of high transaction costs and repetition across these various fora.^{Ixxxii} This may explain low attendance at some meetings^{Ixxxii} among other concerns raised by some KIs.

Finding 16: The expansion of the SLT has mostly contributed to more effective and efficient leadership of the Project, albeit with some concerns raised around Project management and communication.

Over the course of 2019, the SLT structure and size was adjusted, with leaders assigned to new regional 'portfolios' – Africa and Asia – and a third member of the SLT recruited to focus inter alia on improving processes. Evidence suggests that the addition of a third SLT member has enabled SLT members to focus on their respective strengths.^{Ixxxiv} Overall there was wide consensus across IHR Project team members and wider HMG stakeholders that this expansion of the SLT has been a positive change, with a reduction of the bottlenecks and delays highlighted in the MTE:^{Ixxxv}

There were slightly more mixed views in terms of the split into Africa and Asia portfolios. A majority of those who provided their views believed it was overall a positive move^{lxxxvi} which had resulted in some specific benefits, such as having improved the integration of the Pakistan Project into the overall IHR Project,^{lxxxvii} but there were some reservations and concerns that it made Project management more complex and that there was a risk of 'territoriality' and poor communication between the portfolios.^{lxxxviii}

Finding 17: There is broad agreement that the Project's initial TA delivery model was limited, and that the move to expand country-based teams was an appropriate and positive move to strengthen effectiveness

In all theatres of engagement except Pakistan, the initial delivery model was based primarily on the provision of TA through IHR's UK-based technical teams, who would conduct relatively short-term mission trips to the relevant countries to both provide TA and, more generally, foster ongoing engagement with the relevant partners^{lxxxix}. Once mission trips ended, follow-up communication and mentoring would take place remotely. This was combined with the ongoing engagement with partners by IHR's lead in each country/region, complemented with targeted provision of TA where appropriate/in line with the lead's skills and experience. As highlighted in the MTE, this model of TA delivery was seen as having limited effectiveness by both LMIC partners and some IHR Project staff, especially as the availability of UK-based subject-matter experts was limited, because they were only assigned to the IHR Project part-time. While some IHR Project staff saw this as a pragmatic model in the initial stages of the Project when relationships with partners were still being developed,^{xc} the overall sentiment that this model constrained effective delivery is still shared across stakeholder groups.^{xci}

The COVID-19 pandemic made the limitations of this model even more apparent, as UK-based technical teams were no longer able to travel for much of 2020, and were also pulled into the UK's domestic COVID-19 response. This made ongoing engagement and relationship building with partners even more challenging.^{xcii, xciii} In particular, it was noted by some IHR Project staff that Pakistan, which had a relatively large in-country technical team from the start, had managed to continue with and adapt Project delivery

and partner engagement relatively unhampered.^{xciv} At the same time, COVID-19 forced IHR to review and strengthen its systems and processes for remote delivery of training and capacity building.

The IHR Project team acknowledged these limitations at the time the MTE was conducted, and outlined plans for the expansion of country teams in the subsequent business case. The recruitment of more country-based consultants is thus expected to continue.^{xcv} This is seen as an appropriate development by IHR and wider PHE staff, as well as by NPHI partners, and is expected to improve effectiveness across various areas, including overall Project delivery and partner engagement, better knowledge and understanding of the local culture and health systems, and improved ongoing mentoring, as well as other benefits beyond country level, such as improved overall VfM and sustainability.^{xcvi}

Finding 18: Project management systems and processes continue to evolve and improve, but further refinement can be constrained by the need to work within various overlying frameworks.

The Project's management systems and processes continue to be complex, as found at the time of the MTE, and reflect the overall Project complexity and that of the governance structures previously described. Since the MTE was conducted, the Project Management and M&E teams have pulled several Project management and M&E systems and processes together in one place, via the Jira and Confluence platforms, as a 'One Stop Shop' (the strengths and weaknesses of which are previously outlined under EQ5). Based on this, the aim is for the team to be able to monitor Project implementation, flag any delays or other issues, and share issues with the wider team to support learning and adaptive management.^{xcvii,} x^{cviii} The Project's 'Ways of Working' document on SharePoint^{xcix} provides substantial guidance on using Jira and Confluence, and the main Confluence page links to a Wiki page with general guidance and to other key pages, including the M&E dashboard, TWG reports, workshop evaluation systems and more. The Project Management and M&E teams also feed into various meeting forums, where they provide updates on the Jira and Confluence platform.^c

Strengths and weakness of the configuration and use of the Project's M&E, finance and procurement systems are discussed above (see Finding 13) and below (Findings 23 and 25). The IHR core team acknowledges the substantial effort that has gone into bringing these systems together and that ongoing improvements continue to be made. The overall effectiveness of these systems is, however, still debated, with some wider team members expressing that the systems can be burdensome and have taken time to get used to, and that there is an ongoing need for training and sensitisation to ensure that new and existing team members are able to contribute to and utilise the systems effectively.^{ci, cii}

In terms of broader Project management processes and systems, several stakeholders highlighted that the Project's ability to improve the effectiveness of processes is constrained by the fact that the Project must work within several overarching frameworks and governance structures from HMG (specifically PHE and DHSC).^{ciii} This is well captured in the draft IHR Project business case for the period 2021/22 to 2023/24, which lists the boundaries within which the Project must operate.^{civ, cv} Negotiating this complex landscape has particularly affected areas such as recruitment, travel and procurement but, as covered in more detail under EQ6.4 and EQ6.6, the team have made substantial efforts to ensure compliance while improving the effectiveness of these processes for the IHR Project. A specific example of success in navigating the various frameworks within which the Project operates includes how the Project has found a way to recruit local, country-based staff through FCDO systems, a way that appears to be working relatively smoothly and quickly,^{cvi, cvii} whereas previously there were regular recruitment as no mechanism for recruiting local, country-based staff had been developed.^{cviii}

Finding 19: The value of TA delivered accounts for 60% of total Project expenditure, with the remainder split across management costs (19%), direct costs (7%) and overheads (15%). Analysis suggests that these non-TA delivery costs remain high as a percentage of total Project expenditure as compared to

relevant benchmarks, driven primarily by a charge of almost £1 million p.a. in PHE overheads, as well as HMG platform costs.

Figure 4**Error! Reference source not found.** below presents a breakdown of expenditure for the financial years 2017/18 to 2020/21. Key points to note are as follows:

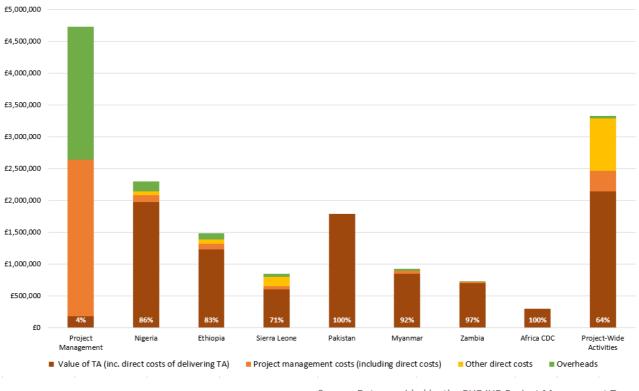
- Expenditure by Project country varies significantly, noting that Pakistan was funded by DFID until March 2019 and activities with Africa CDC started only in 2019), and with considerable expenditure for Project-wide activities.
- The actual cost of TA provided (i.e. the staff time associated with providing TA) and the direct costs associated with delivering the TA (i.e. travel and workshop costs, logistics suppliers, systems subscription services and external evaluation costs) equate to £9.8 million (60% of total expenditure).
- Project management costs, including M&E staff costs, and the direct costs associated with management functions equate to £3 million (19% of total expenditure).^{cix}
- Other direct costs, including in-country HMG platform costs, occupational health and unidentified 'other' costs, equate to £1.1 million (7% of total expenditure).
- PHE overheads are additional to Project costs and equate to £2.5 million (15% of total expenditure).

While comparisons of management costs are difficult due to variations in the mandate and operational structures of other organisations/initiatives, a review of the management costs associated with administering grants for some other organisations suggests that the 19% realised through the IHR Project is relatively high as compared to a government agency, but not necessarily for an international NGO or UN agency.^{cx} The MTE reported that analysis suggested that this was due to the significant number of full-time administrative staff. Although this has not been a focus of the end-point evaluation, we are not aware of any significant reductions in staff numbers or savings made in this area.

The IHR Project Business Case does note that high management costs are accepted as a consequence of the selected Project design (i.e. where bilateral engagement, which incurs 'significant' cost to set up and maintain a country presence, is implemented alongside regional engagement, which would incur additional administrative cost).^{cxi}

Figure 4. Breakdown of expenditure (2017/18 to 2020/21)





Source: Data provided by the PHE IHR Project Management Team

EQ6.2: To what degree has IHR Project communication across PHE improved?

Finding 20: Communications within the IHR Project team and with broader PHE, DHSC and wider (HMG and public) stakeholders has improved, but with room for improvement, including with NPHI partners.

Given the complex structure of the IHR Project previously outlined, there is a need for effective communication between the various countries, technical areas and management functions of the Project; however, communication challenges, especially between the Project management and technical teams, were highlighted in the MTE.^{cxii} A majority of IHR Project and wider HMG staff felt that overall communications within the Project and with wider HMG^{cxiii} had improved since the MTE was conducted.^{cxiv} A specific example of improved lesson-sharing across PHE and the Global Public Health (GPH) programme includes through the Cross-Project Remote Delivery Group, which was established in late 2020, to capture and share valuable lessons being learned during the IHR Project's switch to remote delivery as a result of the COVID-19 pandemic.^{cxv} In spite of the potential risks associated with the volume of meetings (see Finding 15), most people see that these meetings are acting as a reasonably effective way of communicating within and between various teams.^{cxvi} Some specific challenges were, however, highlighted, including the difficulty of keeping the wider team updated with the regular changes to staff and points of contact, which can translate into difficulties in knowing who to contact to ask a specific question or raise a specific issue.^{cxvii}

In terms of communication with NPHIs, while partner institutions^{cxviii} mostly gave positive feedback, there are some specific areas of concern which indicate a need for improvement in Project communication with partners. For example, in Ethiopia there appeared to be some lack of clarity around the Project's reduction in surveillance support: IHR Project staff were clear that a conscious decision was made to reduce support to the Ethiopian Public Health Institute (EPHI) in this area due to the sudden increase of support from other donor partners,^{cxix} yet EPHI stakeholders appeared to lack awareness that any such decision was taken.^{cxx} A similar situation seems to have occurred in Sierra Leone, where the IHR Project chose to end all but skeletal operations once the army took over COVID-19 response, but at the time of data collection this had not been communicated to partners in-country (although there are clear plans in

place to do so now).^{cxxi} Examples also arose in other countries,^{cxxii} with a need for improved communication and lesson-sharing also raised at the recent Esther Effect workshop in Nigeria.^{cxxiii}

Efforts have been made to improve the Project's wider communication and publicity, for example through the recent establishment of a publicly accessible Knowledge Hub (inclusive of an IHR Project 'member area')^{cxxiv} within the Global Health Network's website.^{cxxv} The webpage shares general information about the Project, provides case studies on particular aspects of its work, and links to key resources and publications produced by the Project.^{cxxvi} It also provides access to those wishing to join some of the Project's Technical Assistance resources and workshops, including to the Public Health Emergency Operations Centre (PHEOC) Community of Practice, and links to Africa CDC webinar series supported by the Project via an 'Events' page.^{cxxvii} The Project also recently held a 'celebration event' with over 100 partners and collaborators from 19 collaborating organisations across six countries.^{cxxviii}

EQ6.3: What contextual factors within the IHR focus countries/regions have affected Project delivery?

Finding 21: A variety of contextual factors affected Project delivery, many of which pre-existed but were amplified by COVID-19. However, the Project has strengthened its ability to respond to contextual challenges through improved risk capture and management.

The main contextual factors that affected Project delivery are detailed in Annex 19, indicating those which pre-existed and those which were as a result of or magnified by the COVID-19 pandemic, and can be broadly summarised as relating to: staff capacity (of IHR and partners); travel restrictions; complexity of health systems; logistical challenges; and challenges with partner engagement. Contribution stories (Annex 8) provide further detail on these various contextual factors. It is important to note that some of these factors had an impact beyond Project delivery and also affected outcome-level results, as covered under workstream 3 (Section 3.3).

Two contextual factors were raised by several stakeholders, which appear not to have had an impact on delivery to date but have potential to do so in the future. The unpredictability of Project funding was raised as a concern by several IHR Project and wider HMG stakeholders, with the difficulty of planning a sustainable programme of support and appropriately communicating the situation to partners specifically raised.^{cxxix, cxxx} The other issue raised by a small number of stakeholders was the potential impact of the UK government's (and by extension PHE's) response to the COVID-19 pandemic in the UK;^{cxxxi, cxxxii} however, given that none of IHR's PHI partners raised the issue, the reputational risk around this area and its potential to impact delivery in the future may be minimal, and, as discussed in Section 3.2 (EQ 2), COVID-19 has also provided opportunities for PHE to demonstrate its expertise and value.

Since the MTE was conducted, the Project has improved its ability to manage contextual barriers through improved risk capture/assessment and mitigation, with COVID-19-related risks explicitly captured in the 2020/21 work plans, and a broader risk assessment along with mitigations outlined in the 2021/22 PIDs.^{coxxiii, coxxiv}

EQ6.4: How and to what extent has PHE been able to apply adaptive management principles in its response to the global COVID-19 pandemic and other key contextual factors?

Finding 22: The Project's application of adaptive management principles has strengthened since the MTE; however, monitoring and reporting systems are not clearly supporting adaptive management.

The Project has strengthened its application of adaptive management principles since the MTE, with strong evidence that a majority of the key aspects are now in place (see Annex 16 for further analysis).^{cxxxv} There was broad agreement across IHR Project, wider HMG, GHS donor partners and PHI partners that the Project has continued to be locally led and politically informed, with strong engagement with partners at strategic and operational levels.^{cxxxvi} The Project has also continued to provide flexible support and pivot

as required in line with COVID-19 and other contextual factors, while still working towards overall goals:^{cxxxvii}

Crucially, the Project successfully adapted not just to what they were supporting but also how they were providing support in response to COVID-19 international travel restrictions,^{cxxxviii} and the Project successfully found new ways to engage with partners in line with both HMG requirements^{cxxxix} and connectivity constraints on the ground (see Finding 30).^{cxlcxli}

While substantial work has been undertaken to improve and refine the Project results framework and monitoring systems, there is a mixed picture in terms of the extent to which this is supporting learning and adaptive management. There are some positive indications that, for example, learning from more recent workshops is being captured on Confluence via evaluation feedback forms, and that this is being captured in a 'Learning and Actions' tab^{cxlii} for each workshop, that is then pulled through to an overall 'Summary of Recommendations' page and actioned.^{cxliii} However, we could find no examples of Project progress reports from Jira supporting key learning and subsequent adaptations.

EQ6.6¹¹ To what extent have available resources/finances and financial management systems changed, and how has this impacted the efficiency and effectiveness of Project financial management?

Finding 23: The Project has actively taken on MTE recommendations to devolve financial management to country/regional levels and provide targeted capital expenditure to support delivery of TA, and it has also proactively started to integrate VfM considerations across Project delivery.

Along with management systems more generally, the IHR Project has continued to update its financial management systems in line with recommendations from previous Annual Reviews and the MTE. Improvements have been made in tracking of expenditure (to improve transparency and help technical and country teams track expenditure) and allowing targeted procurement of equipment and supplies for PHI partners.^{cxliv} As with all areas of Project management, COVID-19 brought particular challenges to financial management, contributing to larger than expected expenditure in the final Project quarter of 2019/20;^{cxlv} however, it was noted that, even in this context, forecasting had improved and that the overspend was minimal in the context.^{cxlvi}

The ability of the Project to complement the provision of TA with targeted capital investment was raised as an area of need in the MTE, and it is notable that the IHR team submitted a successful business case to allow for this happen. The ability to back up TA with targeted funds is still seen as important^{cxlvii} (also discussed under Finding 32), but it appears that partner PHIs and some HMG stakeholders are unclear on the extent of potential support and on how to request it.^{cxlvii} In addition to the provision of capital expenditure to support delivery of TA, another key recommendation from the MTE and previous Annual Reviews was to devolve financial management to country/regional levels.^{cxlix} There was broad agreement across the IHR team and wider HMG that this is important, and would be likely to improve the Project's efficiency and effectiveness.^{cl} Some progress has been made in this area;^{cli} however, it was noted that that the process is complex and will take time to roll out.^{clii}

As with Project management more generally, the requirement to work within wider PHE/DHSC/HMG systems was seen as a key constraint to this process, but one which was being worked through as effectively as possible.^{cliii} The IHR Project also made significant efforts to integrate VfM considerations across Project delivery, utilising the 4E + S framework,^{cliv} with the aim of developing 'Guiding Principles for VfM in PHE IHR'.^{clv} The approach was piloted and began early roll-out in 2021 by looking at specific examples,^{clvi} for example with the roll-out of ToxBase in Myanmar, looking across the entire VfM framework and scoring each area from 1 (weakest) to 5 (strongest).^{clvii}

¹¹ As noted above, sub-EQ 6.5 was incorporated in section 3.1.

Finding 24: Despite under-absorption in the early years of the Project, the budget has been fully absorbed over the full implementation period. As reported in the MTE, PHE's MoU with DHSC is structured to incentivise high levels of budget absorption, with a firm target to spend at least 90% of allocated funds each year, requiring justification if this is not achieved. Budget execution is monitored regularly by the IHR Project Management Team and PHE Finance Team, with monthly meetings to review and discuss budget-related issues.

However, in part due to a lack of budget absorption in the early years of the Project, DHSC Annual Review process has identified finance as a risk in 2017/18, 2018/19 and 2019/20.^{clviii} Figure 5 presents a summary of the budget and expenditure for the IHR Project between financial years 2016/17 and 2020/21. Key points to note are as follows:

- The budget for the design phase in 2016/17 was £1 million. However, this was delayed, and expenditure in this financial year was £270,000. These funds were repurposed and an additional allocation of £400,000 was provided to complete the design work in 2017/18. Total expenditure on the design phase was £690,000, still well below the original budget.
- Despite under-absorption in the early years of the Project, in later years the project has more accurately matched spend to forecasts and allocated budgets.

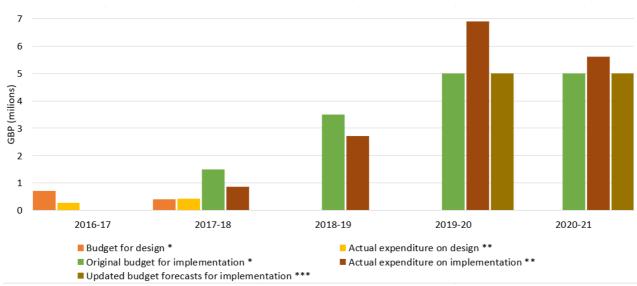


Figure 5. Summary of IHR Project budget and expenditure (2016/17 to 2020/21)¹²

Source: Data provided by the IHR Project Management Team

¹² * Estimates from Business Case and clarified by IHR Project team.

^{**} Data from 'IHR Outturn - 18-19 Reported to DH' provided by IHR Project team.

^{***} Data provided by IHR Project team.

EQ7: Have inputs of an appropriate quality (e.g. staff, consultants, raw materials and capital) been purchased at the best possible price?

EQ7.1 To what extent have changes made to procurement practices worked to ensure that inputs are procured at the best possible price?

Finding 25: The Project has made progress in adapting procurement practices to ensure that inputs are procured at an appropriate price, but wider PHE/HMG systems continue to pose challenges.

As already outlined, the IHR Project is required to work within various broader PHE and HMG management processes, including those around procurement. It is not permitted to bypass these processes completely, but the Project has found ways to adapt these processes (with permission) where possible, and/or find pragmatic workarounds. For example, in line with the process of devolving budgets to country/regional levels, there are efforts to procure more items at a local level, instead of procuring within the UK and then shipping as part of efforts to support improved VfM.^{clix} PHE procurement processes require the use of pre-approved suppliers, and so the Project has utilised nationally-contracted logistics suppliers to navigate the in-country financial systems and ensure that good prices are obtained for supplies.^{clx} The Project team proactively finds ways to navigate and work around these systems, and captures learning via the live 'Ways of Working' page on Confluence. Despite this, the challenges still cause frustration at times:^{clxi}

3.3. Is the Project achieving the 'right results'?

An examination of whether the IHR Project is achieving the 'right results' is based on an assessment of whether Project goals have been achieved; these are defined in terms of system-level changes to IHR capacities as measured in JEEs and SPAR exercises. We then look at the IHR Project's contribution to these changes; and at the extent to which results are likely to be sustained.

Headline messages for 'right results'

The MTE reported indications that the Project was on the right track to achieve its agreed results. The end-point evaluation finds that across a majority of the countries and technical areas in which the IHR Project has been active, capacity to prevent, detect and respond to public health events has strengthened since Project inception. Some limited progress has been made towards the Project's global and regional objectives, for instance with IHR contributing to demonstrable improvements in Africa CDC's capacity over time. Evidence also suggests that the capacity built as a result of the IHR Project has supported the COVID-19 response in many countries, which is a demonstration of the IHR Project's contribution to improved IHR capacity. The high-quality technical assistance provided by the Project has been effective in making a meaningful contribution to the achievement of these results in many countries. Significant steps have been taken to embed sustainability considerations within the design and operationalisation of the IHR Project, and there is some evidence to suggest that many Project outputs are likely to be sustained, subject to the enabling/operating environment being conducive to this.

EQ8: To what extent have Project goals been achieved?

EQ8 was subdivided into two specific questions that the team wished to explore further:

- 1. To what extent have changes made to procurement practices worked to ensure that inputs are procured at the best possible price?
- 2. Are inputs of an appropriate quality to meet desired outputs?

Finding 26: Across all countries and most of the technical areas in which the IHR Project has been active, capacity to prevent, detect and respond to public health events has strengthened since Project inception. This includes progress against all three Project outcome areas (i.e. NPHI leadership,

coordination and collaboration functions; technical capabilities and health workforce capacity; and public health technical systems).

The IHR Project Business Case sets out the expectation for the Project to lead to a significant increase in IHR compliance, as measured through country JEEs, and a measurable increase in the broader public health capacity of the lead national agencies for public health in countries.^{clxii} Table 7 uses a three-point scale^{clxiii} to provide an overview of where the evaluation evidence (both quantitative and qualitative) indicates that overall progress has been made towards strengthening IHR capacity at country level. This is disaggregated by technical area and IHR Project country. Key points to note are as follows:

- All Project countries have demonstrated at least some improvement in IHR capacity in most technical areas.
- Significant gains appear to have been made in all countries for EPRR.
- Gains in other technical areas have been more mixed, with notably less progress made in One Health as compared to other technical areas.

Stakeholders also widely noted that COVID-19 has negatively affected the achievement of outcomes, but (like Ebola in West Africa) has increased political will and provided an opportunity to further strengthen IHR capacity.

Table 7: Assessment of progress made towards IHR capacity strengthening by country and technical area where the IHR Project has been active^{clxiv}

	Coordination, comms & advocacy	One Health	Workforce dev.	Laboratory systems	Surveill- ance	EPRR	Chemicals & poisons
Ethiopia	Significant gains	Minimal/ no gains	Some gains	Some gains	Significant gains	Significant gains	Significant gains
Myanmar		Some gains	Minimal/ no gains	Some gains	Significant gains	Some gains	Significant gains
Nigeria	Significant gains	Minimal/ no gains	Some gains	Significant gains	Some gains	Significant gains	
Pakistan	Significant gains	Some gains	Significant gains	Some gains	Significant gains	Significant gains	
Sierra Leone	Some gains	Some gains	Some gains	Significant gains		Significant gains	
Zambia	Significant gains	Significant gains	Significant gains	Significant gains	Significant gains	Significant gains	

Source: Triangulation of data from successive JEE and e-SPAR assessments, alongside qualitative and any other quantitative data collected through and reported in each of the country case studies

Finding 27: Only limited progress has been made towards the Project's global and regional objectives, caused by difficulty in engaging with the relevant entities. The strongest example of regional engagement has been through IHR's engagement with Africa CDC, which has demonstrated significant improvements in capacity over time.

The IHR Project Business Case sets out the expectation for the Project to lead to:clxv

- The measurable strengthening of regional and sub-regional institutions which strengthen inter-country communication on disease risks and can help mobilise a multi-country response to emerging threats.
- Strengthening of WHO's capacity to support countries and enhance global communication and responsiveness, so that a rapid international response can be mobilised more effectively to emerging disease threats.

The MTE concluded that IHR regional and global work was still in very early stages and needed better definition. It also noted a number of challenges to establishing strong working relationships with the full range of intended entities/stakeholders, and in achieving this objective. Evidence from this end-point review suggests that these issues have remained and that, in practice, the intended regional and global focus of the Project has not been operationalised as intended. Work has, however, progressed with Africa CDC, following the signature of a letter of intent between the two agencies in 2018. Analysis suggests that Africa CDC's capacity has strengthened across areas of IHR Project engagement (One Health, workforce development, surveillance and EPRR), with the most significant gains in EPRR. IHR support has been an important factor in enabling this progress across each of the technical areas through the provision of high-quality TA that directly responded to Africa CDC's needs.^{clxvi}

Progress has also been made with a few other regional partners, despite not being originally intended. This includes work arising from Pakistan in the Eastern Mediterranean region to establish a public health network, Global Health Development/Eastern Mediterranean Public Health Network (GHD/EMPHNET), where it is hoped that a strong working relationship could emerge following the signature of an MOU in 2019.^{clxvii} Work to date has involved some workshops and capacity building activities. There has also been progress from work arising in Myanmar to engage with the Asian Development Bank for long-term laboratory quality improvement, EMPHNET on learnings from COVID-19 in multi-sector coordination, and PSI/DFAT on EOCs and EPRR.^{clxviii}

There has also been progress at global level through work with the Strengthening National Action and Preparedness for Global Health Security (SNAP-GHS) Project, which involved the engagement of IANPHI, Chatham House and WHO headquarters (HQ) to strengthen national preparedness and informed decision making in Nigeria, Ethiopia and Pakistan. The Project identified a series of gaps, challenges and opportunities that country stakeholders agreed to address.^{clxix}

EQ9: How has the Project contributed to the achievement of desired outcomes vis-à-vis the actions of governments and other donors/partners?

For EQ9, we explore two sub-EQs:

- 1. What were the main success factors contributing to achieving the Project outcomes?
- 2. In what ways did IHR support, vis-à-vis the support provided by other partners, contribute to the presence of these factors and desired outcomes?

Finding 28: Analysis suggests that the IHR Project has, by and large, been successfully implemented and the technical assistance provided has been effective in making a meaningful contribution to the achievement of IHR capacity strengthening in many countries.

The sections above demonstrate that the design of the IHR Project has been broadly appropriate (i.e. well targeted to country needs and adapted to country context) and that, despite substantial contextual issues affecting Project delivery, the Project has flexibly adapted and implemented what could reasonably be expected. Evidence from all case studies, and global data collected, suggests that very high-quality support has also been provided through the IHR Project, and that in many cases this has been an important factor in leading to the observed improvements in IHR capacity. For instance:

In Ethiopia,



significant improvements in **EPRR capacity** were observed over time, with analysis suggesting that IHR's support for developing SOPs, guidance and tools, as well as systems advancement and technical training for health workforce development, had made a contribution to this progress, alongside the support provided by other partners.^{clxx}

In Myanmar,



PHE, as the only partner engaging this space, made a significant contribution to the observed gains made in strengthening **poison systems capacity**. This involved significant support to improve the enabling environment and implementing a series of activities to strengthen technical systems and build the capacity of the health workforce.^{clxxi}

In Nigeria,



stakeholders noted the significant strengthening of **human resource/workforce capacity** over time, as supported by the presence of various NCDC strategies, policies and processes, and the technical capacity of its staff. IHR has been a very active partner in this space, having provided a holistic package of support across many of these areas and delivering various training and workshops for core skills and technical capacities. This work has benefited from the recruitment of a local staff member who sits within NCDC, also enabling continued support throughout the COVID-19 pandemic.^{clxxii}

In Pakistan,



Pakistan the IHR Project has worked to implement the IDSR component of the DHIS2 data management system, as well as supported the strengthening of public health laboratory networks, to facilitate **surveillance system strengthening**. In recent years there have been significant gains in strengthening surveillance capacity in the sub-national areas of the country where the Project is active; analysis suggests the Project has made a vital contribution towards this.^{clxxiii}

In Sierra Leone,



IHR's work for laboratory strengthening included leadership and management capacity building, as well as significant technical training and support to establish and strengthen various SOPs/manuals, systems and processes. Evidence suggests that this holistic package of support strengthened **capacity across the three IHR Project outcome areas**. This capacity was demonstrated throughout the COVID-19 pandemic, where national laboratories were used for testing functions, as compared to Ebola in 2014, where international laboratories were required.^{clxxiv}

In Zambia,



IHR's work to build **surveillance capacity**, including through remote training of Zambian National Public Health Institute (ZNPHI) staff in spatial analysis and use of GIS software in collaboration with JICA, has positively contributed to progress in strengthened capacity in this area.^{clxxv}

Finding 29: Evidence also suggests that the capacity built as a result of the IHR Project has supported the COVID-19 response in many countries, a further demonstration of the IHR Project's contribution to improved IHR capacity.

The IHR Project has supported the COVID-19 response very flexibly in many of the Project countries, such as through the sharing/adaptation of guidelines/SOPs/protocols, remote learning, and the provision of reagents, supplies and training support. The capacity built through the Project has also been utilised in the response effort. For instance:^{clxxvi}

In mostIHR's support for biosafety and biosecurity capacity building was well received byProjectcountry stakeholders and highly relevant for COVID-19 testing practices.countries,Countries,

In Ethiopia,



IHR's work to build EPRR capacity, and specifically its support for incident management structures and trainings on GIS, were highly utilised in the EPHI's COVID-19 response efforts.

In Myanmar,



IHR supported the COVID-19 response in a highly flexible manner, including as part of the Coronavirus Preparedness Technical Working Group and (alongside UK-PHRST) to enable NCDC to become one of the first sub-Saharan African countries to commence validated testing for COVID-19, and with evidence also showing that previous support to build human resource, laboratory, surveillance and EPRR capacity was utilised for the response effort.

In Nigeria,



a multi-sector outbreak control plan, which the IHR Project played a very active role in developing (as recognised through an award presented to IHR by the provincial minister of health for the province), guided the COVID-19 outbreak response in Khyber Pakhtunkhwa (KP) province.

In Pakistan,



technical advice was provided to develop a health sector contingency plan for managing and coordinating the response.



Leone,

IHR's work to strengthen laboratory leadership, management and health workforce capacity, as well as QA standards, was utilised during the COVID-19 pandemic for testing functions, which were reported to have worked dramatically better than in previous outbreaks.

In Zambia,



The Project's support helped to build capacity in routine surveillance (as above) which was utilised for the COVID-19 response across different clusters of the ZNPHI.

The IHR Project's support in strengthening Africa CDC's capacity has also been utilised during the COVID-19 response, including through its role in assisting the African Volunteer Health Corps (AVoHC) deploy its rapid response teams^{clxxvii} and supporting the Africa Task Force for Novel Coronavirus (AFCOR), established by Africa CDC. This relationship, as acknowledged by the Minister for Africa, was also the basis for the UK HMG's contribution to Africa CDC's COVID-19 response fund.

Finding 30: A range of contextual factors at country level has also been critical to the achievement of outcomes, which the Project has also often supported.

This has included the following, which have acted as enablers for success in some countries and constraints in others:^{clxxviii}

- Enabling environment: Identified as a critical enabling factor for the achievement of results in Ethiopia, Nigeria and Zambia, while also acting as a constraining factor for Africa CDC, where progress has been inhibited by the bureaucratic environment in which it operates, and in Myanmar, where the lack of single focal point for IHR necessitated that PHE coordinate across different agencies, which took significant effort and delayed implementation or meant that activities were not possible to implement as intended in some instances (e.g. for One Health). In Sierra Leone, while political will is felt to be strong, the government's take-up of some IHR outputs and recommendations was slow and hampered Project results. In Pakistan, the enabling environment was generally considered as a positive factor in the provinces in which the Project is active, but there is also evidence that this is limiting further scale of Project activities, such as in Punjab province (home to around 50% of the population), which has not engaged with IHR's work. The IHR Project has not had an explicit strategy to influence political will and/or the broader enabling environment, although in some instances has done so through advice and advocacy (e.g. in Nigeria and Zambia, where PHE successfully advocated for the NCDC establishment bill and the Zambia National Public Health Institute (ZNPHI) Act, respectively).
- NPHI leadership and management capacity: Identified as an enabling factor for Africa CDC and in Nigeria and Pakistan, and a constraining factor in Ethiopia, Myanmar, Sierra Leone and Zambia. This has been a core area of work in some countries (e.g. in Nigeria, where it has been an important component of the Project's success) and become a much stronger focus in others during the course of Project implementation.
- Sufficient domestic financial resources to implement strategic plans: Identified as a factor constraining further progress towards IHR capacity strengthening, particularly in Ethiopia, Nigeria, Sierra Leone and Zambia. The IHR Project has not had an explicit strategy to influence domestic resource allocation and we are not aware of instances where it has done so.
- Availability of NPHI stakeholders to engage in capacity building: Identified as an enabling factor in Nigeria and Pakistan, and evidence suggests that IHR staff have responded extremely flexibly to NPHI stakeholder availability to ensure that this not hampered implementation/results. Despite this, it has remained a challenge for Africa CDC and in Myanmar, Sierra Leone and Zambia. In Zambia, for instance, there is only limited human resource capacity, which is continually stretched between competing priorities, such as other donor/partner Projects, cholera outbreaks in border areas and other national and international public health threats. COVID-19 has also further constrained both IHR and country stakeholder availability, even for activities being delivered remotely.
- Functionality of mechanisms to coordinate partner engagement: Identified as an enabling factor for Africa CDC and in Myanmar, Nigeria, Pakistan and Zambia, and a constraining factor in Ethiopia and Sierra Leone. While not a technical activity per se, IHR (usually the Country Lead) has played an active role in supporting partner engagement functions, which evidence suggests has been an extremely useful and value-adding function, particularly in Pakistan and Nigeria but also in Ethiopia, Myanmar, Sierra Leone and Zambia.
- Strong culture of lesson learning and course correction: Identified only in Nigeria as an enabling factor, with evidence that IHR's support (e.g. through various After-Action Reviews and simulation exercises) has helped to embed these processes and a culture of learning within NCDC.

Finding 31: A number of Project-specific factors have enabled the Project's ability to influence and contribute towards the achievement of outcomes.

Analysis suggests that key strengths of the Project have been: clxxix

- Approach to building strong working relationships through joint activity design & delivery: This was noted as a critical success factor in all case studies. IHR's approach has worked particularly well in Nigeria and Pakistan, where strong strategic and technical working relationships have been established between IHR and Nigeria CDC/Pakistan NIH and also between IHR and other partners, where the Project and the implemented activities have been viewed very positively by stakeholders. This was also noted as an extremely positive aspect of IHR's support in Myanmar, where many activities were designed and delivered jointly with WHO. Relationships have been more challenging to establish in other countries, such as in Sierra Leone and in Ethiopia, where this was raised as an issue negatively influencing results: (a) with St Peter's Hospital, where there were changes in leadership and it was not possible to establish appropriate or consistent engagement; and (b) there were some examples of miscommunication of priorities, and the NPHI did not appear to be aware of PHE's decision to reduce support to surveillance.
- Country Lead role has garnered buy-in and supported effective coordination and implementation: As noted in the MTE, IHR public health Country Leads and technical specialists have contributed to the Project's credibility and influence in countries, and this has continued to be highly important in many countries. For example, in Ethiopia and Nigeria, the Country Lead has worked to effectively build strong relationships with NPHI leadership and other agencies to facilitate open dialogue on needs and priorities, and to coordinate implementation.
- Willingness to flexibly respond to NPHI needs and work in areas of very low capacity and/or areas that other partners are not working in: There are examples of this across all Project countries, for instance: IHR's laboratory support in Nigeria being focused on specific pathogens that other donors were not supporting; work in chemicals in Ethiopia and Myanmar; supporting 'points of entry' training in Pakistan for the COVID-19 response. This has also involved not working in some areas that were identified by PHE as being a high priority but where there was little country appetite, such as in training for After-Action Reviews in Pakistan, and in chemicals and poisons in Nigeria. The IHR Project's flexibility has also been demonstrated, particularly in countries with an in-country staff presence, such as in Nigeria, through its response to COVID-19, often providing a significant amount of support that was outside of the original scope of work.
- Ability to learn lessons and adapt the Project approach based on evidence of what works, such as through the delegation of decision-making power to country level, and the employment of more country-based staff to work alongside NPHIs on a continuous basis. This was identified as a particular success factor in both Nigeria and Pakistan.

Finding 32: A number of other Project-specific factors have constrained the Project's ability to influence and contribute towards the achievement of outcomes.

COVID-19 has clearly subsumed IHR and NPHI staff time and constrained what has been possible to implement and achieve across all case studies. The effectiveness of the Project also appears to have been constrained by:^{clxxx}

The Project's design to focus on building national capacity and not to meaningfully engage in sub-national capacity building efforts (except in Pakistan): This factor was raised in a number of countries and is related to the central focus of the Project on building national capacity, which is in turn related to the IHR Project objectives and the levels of human and financial resources at its disposal. While stakeholders generally acknowledged this and recognised that it is a good strategy to first build national capacity and then move to subnational activities, many were unaware of any IHR intent to shift focus in this way over time. The shift in JEE methodology to more fully capture sub-national capacity within its scoring system may also necessitate greater emphasis in this area if IHR is to demonstrate quantitative improvements in capacity. We note that the Project does engage in some subnational activities opportunistically, such as in Myanmar with PSI, which stakeholders indicated had expanded PHE's reach to the sub-national level in a catalytic manner.^{clxxxi} This finding does not apply to Pakistan, where the Project is focused on a few sub-national areas only. However, this approach presents a separate challenge whereby the work of the Project may not be sufficient to meet the Project goals of increasing IHR compliance and the broader public health capacity of the lead national agencies for public health in-country. This was demonstrated in Pakistan, for instance, when the Integrated Disease Surveillance and Response (IDSR) system was not used to support COVID-19 surveillance functions, despite being purpose-built to do so for public health events.

- The limited time that IHR technical staff can spend in-country: As highlighted in Finding 18, this issue was raised in a number of countries during the MTE and, while exacerbated by COVID-19 which was well understood by country stakeholders was reiterated in both Ethiopia and Nigeria in the end-point evaluation. In Ethiopia, the short visits by UK-based subject-matter experts constrained successful implementation of activities and follow-ups, and also meant that momentum was often lost. The issue has, though, been mitigated at least to some extent –through increasing locally based technical staff in all countries and regions. The issue was also raised by a number of global stakeholders who attributed the issue to challenges in working across the different components of IHR, with some areas being less invested in and less willing to devote resources to the IHR Project than others.
- Issues with remote delivery of activities: This relates to technical issues and the perception of reduced effectiveness of remote delivery, as compared to in-person delivery, which was noted in all countries, but Ethiopia in particular. This was particularly problematic for delivery of activities outside the capital city, where Internet connections are weak. In Zambia remote delivery was seen more positively, helping to overcome difficulties in arranging in-person training activities, and with a series of earlier learnings applied^{clxxxii} it was possible to successfully deliver technical training and capacity building activities to a high quality.^{clxxxiii}
- Lack of awareness/understanding of country context and/or systems and processes among IHR technical staff: This issue was raised in the MTE and reiterated in Ethiopia, where it was seen as a considerable constraint to effective delivery, in part related to language barriers between IHR and NPHI staff. The issue was also noted in Pakistan, although was acknowledged to have reduced over time. It was not, however, mentioned in other countries, and in Myanmar the Country Lead was noted as having helped to ensure that activities were adapted to the cultural context. IHR was also perceived to have a good understanding of the context in Zambia and in the African context by Africa CDC stakeholders.
- PHE's policy not to support programme funds, including commodities/equipment: This issue was raised for Africa CDC as well as in Ethiopia, Pakistan, Myanmar, Nigeria and Sierra Leone. While it does not apply universally to all technical areas, it was raised where there are perceived to be significant or fundamental issues that technical assistance alone cannot solve, and in these areas the utility of technical assistance alone is questionable. In Sierra Leone, there is a clear expectation that donors provide programme funds to support implementation of proposed solutions, not just technical assistance. In Myanmar, IHR did procure reagents and consumables for diphtheria testing, although faced numerous challenges with

procurement and importation into the country (related to the issue below), yet did not provide testing consumables for the COVID-19 response despite doing so for other IHR countries. IHR did note that the constraints in terms of accessing programme funds derive from conditions of the Project funding and are not by design.

Sub-optimal PHE systems and processes, despite improvement throughout Project lifecycle: This issue was raised in a number of countries during the MTE and reiterated for Africa CDC, in Ethiopia and Myanmar. In Ethiopia these issues relate to a lack of in-country logistical support to facilitate short-term visits, technical issues with telephone and Internet connectivity at Saint Peter's Hospital, and also with noted issues with work plans. In Myanmar, an issue arose whereby IHR was not able to directly transfer video training materials for long-term use due to General Data Protection Regulations (GDPR).

EQ10: Are Project outputs and outcomes likely to be sustained?

For EQ10, we explore sub-EQs relating to: the extent to which what extent has sustainability and transition planning have been strengthened; and the main factors/conditions that are likely to support and/or constrain country prospects for sustainability, and to what extent IHR support is focused on establishing/addressing these.

Finding 33: Significant steps have been taken to further embed sustainability considerations within the design and operationalisation of the IHR Project over time.

The MTE found that the Project had given limited attention to how IHR capacities would be sustained beyond when Project funding finishes. End-point analysis indicates that this has been meaningfully addressed. In terms of the prospects for sustainability of Project outcomes, we have identified a number of positive findings:

- First and foremost, the objectives and design of the IHR Project and the nature of the activities implemented are inherently sustainable. The Project is focused on building national leadership, management and workforce capacity alongside strengthening systems and processes, and evidence suggests that the Project has made a positive contribution to a series of sustainable outcomes achieved.
- Further, there is strong evidence to suggest that the issues raised in the MTE around a lack of planning for sustainability have been meaningfully addressed. Most notably, the Project now has a Sustainability, Equity and Inclusion Plan in place, and analysis suggests that sustainability considerations are much more explicitly and systematically expressed within workplans at country level and in M&E efforts, including internal VfM assessments.^{clxxxiv} The MTE also noted that patchy implementation across the workplans meant that a holistic approach was not being implemented, risking longer-term gains. As per findings under EQ9, there is now much greater evidence of the intended holistic approach being adopted and this successfully contributing to the achievement of outcomes. There is also evidence of strong partnership coordination mechanisms being in place, and IHR having worked to establish/strengthen these in many countries, addressing another issue raised in the MTE.

At the same time, some concerns remain which IHR could look to address going forward.

The MTE also noted the risk that gains made have, on occasion, been dependent on a few individuals. For instance, IHR's work to establish a poisons centre at St Peter's Hospital in Ethiopia was undermined by a key staff member leaving. This can also pose a risk where key individuals are political appointments and, as such, may leave post in a short time. Evidence suggests that the Project has sought to mitigate this risk by increasingly focusing on building

broad-based leadership and management capacity within NPHIs, thereby reducing the reliance on individuals to achieve and sustain gains.

- Related to the previous point, one issue that has not been fully addressed relates to stakeholders frequently leaving roles once trained. This is a perennial problem for sustainable development, and not one that IHR can solve. The Project has, however, made efforts to ensure that it trains the right people, such as in Nigeria, where efforts were made to restructure human resourcing arrangements and then train those recruited to suitable positions, and also in Myanmar, where IHR has worked to develop a career path for toxicology within the public health system and generate interest in the profession for staff to pursue in the medium to long term.
- One factor that appears to have hampered planning for sustainability is how IHR has communicated the intended duration of its plans to transition out. This remains unclear to many stakeholders across the IHR Project countries, and has not been aided by the funding uncertainty created by UK spending reviews and PHE's transition into the UK Health Security Agency (UKHSA). In Sierra Leone, despite the evaluation's data collection process taking place after PHE's decision not to provide any further support after March 2021, at the time of data collection, a number of stakeholders were unaware of this decision, and were surprised by the immediate evacuation of IHR's staff due to COVID-19; although we note that plans are now in place to inform stakeholders of IHR plans in Sierra Leone. Stakeholders noted that the lack of communication and planning could have negative effects on the prospects for some activities being continued, and should have been handled differently.

Finding 34: There is evidence to suggest that many Project outputs and outcomes are likely to be sustained, subject to the enabling/operating environment being conducive to this.

As above, the Project's focus on building national leadership, management and workforce capacity alongside strengthening systems and processes is inherently sustainable. As such, we would expect many of the gains in capacity at country level and across technical areas to be sustained without any further or ongoing donor support. We have also identified a number of factors in place at country level that are likely to enable outcomes to be sustained. These include:

- High-level political awareness of the importance of IHR capacity following the COVID-19 pandemic, leading to greater domestic prioritisation of this issue.
- Provincial/regional governments assuming greater responsibility for IHR functions, such as in Nigeria (where national funding to NCDC has also increased), and even establishing long-term sub-national financing arrangements in Pakistan.
- Many strategic and operational plans, and in some cases changes to key legislation, having been approved across countries, including those supported by the IHR Project, committing country stakeholders to further strengthening IHR capacity over time.^{clxxxv}
- Partners being identified and engaged to continue areas of work supported through the IHR Project, such as in Myanmar, where WHO has been engaged in this manner as well as the Asian Development Bank for laboratory quality improvement.
- The COVID-19 pandemic putting into practice systems/processes that IHR has supported (as noted above), further embedding them in national processes and improving sustainability prospects.

The enabling/operating environment should also be recognised as a key factor for Project success and sustainability, as demonstrated by the aftermath of the military coup in Myanmar, which has devasted any prospects for sustainability, and also the COVID-19 response in Sierra Leone, which was led by the

military instead of the NPHI which the IHR Project had been supporting, and which contributed to IHR staff leaving Sierra Leone earlier than planned.

4. Conclusions

Based on the findings presented in Section 3, we have drawn the following set of conclusions across the three 'rights' workstreams. These have been rationalised to strengthen the narrative flow and ensure coherence, mitigating the challenge (in terms of a somewhat stilted flow) that comes from explicitly structuring the report around EQs and sub-EQs. It is important to note that IHR were not expecting formal lessons learned, as separate from conclusions, in the end-point evaluation.

- 1. The IHR Project has contributed positively towards progress in strengthening IHR capacity in all countries and most technical areas in which the Project has been active, despite significant challenges posed by COVID-19 and various country-contextual factors. While less progress has been made against global and regional goals, the Project should overall be deemed as a success. In many respects, as highlighted in the conclusions above, there is a clear case for IHR to continue to do what it has been doing at country level but with some refinements and modifications based on findings from the end-point evaluation. Factors that may increase effectiveness are discussed below. However, as per the original business case, and reflecting on both experience in this phase and direction of travel, there is scope for IHR to strengthen its focus on regional-level work as one way to amplify its impact. Lessons from work with Africa CDC, World Health Organization Regional Office for Africa (WHO AFRO), EMPHNET and, indeed, best practice in implementing regional-level capacity building interventions should be used to inform design of regionally focused work in any future phases.
- 2. The Project remains highly relevant, both in terms of partner country and UK health security priorities and concerns, and implementation of activities has generally contributed to intended outputs. EQ1 and EQ2 present five findings, all with strong supporting evidence, relating to the relevance of Project activities and the extent of alignment and coordination with national and UK priorities. This is consistent with findings presented in the MTE. On this basis, we conclude that the Project remains highly relevant. Relevance is supported by IHR's focus on understanding and meeting country needs, and flexibility to adapt to changing circumstances, as demonstrated during the COVID-19 pandemic. This is, in turn, enabled through establishing strong relationships with partner PHIs built by country-based teams.
- 3. Among the stakeholders that the IHR Project works with, it continues to be seen as a highly valued source of technical knowledge, skills and experience, and this is a key strength of the Project. We present evidence in a number of places throughout the report (EQ3, EQ8, EQ9) that the quality and competence of IHR's technical assistance is a key factor in the results that the Project has achieved and contributed to.
- 4. A key area for consideration relates to concerns that the Project remains limited to technical assistance and capacity development (and is limited in its ability to provide complementary capital investments). Evidence to support this conclusion is presented primarily in EQ6. While capital investment was never within the IHR's mandate and, indeed, one of the Project's comparative advantages is that it provides TA that is complementary to what others provide there may be exceptional cases, where others do not provide support to resource intensive areas (e.g. laboratory strengthening), when it could be highly impactful for IHR to provide other types of support, while being careful to make sure it does so in a manner that is sustainable and strongly focused on the three ToC outcomes. The IHR team recognises this and have adapted (in some countries the Project has been able to collaborate with other partners to ensure that both technical and material support is provided), but it is not clear how and when this is an option.
- 5. The Project has evolved as it has matured, to respond to experience and changes in context and to evaluation findings. Project systems, while constrained by PHE/HMG overarching frameworks, are now better suited to international work and provide a more solid foundation for any subsequent phases of the Project this is perhaps one of the most significant legacies of phase 1 (2016–21). At the outset, the Project relied on PHE systems and ways of working that were not designed to support

and facilitate the establishment of key functions at country level. A key feature of IHR's challenges and work during the last five years has been the identification and implementation of solutions to either refine or work around PHE/HMG internal processes; this has been the case for recruitment, financial management, procurement, reporting and Project management (as detailed in findings for EQ6 and 7, most of which have strong supporting evidence). Much progress has been made, and some constraints remain which IHR will need to continue to work to resolve. However, COVID-19 and the resulting understanding of key stakeholders (country and UK domestic) of the Project's added value may provide a basis for IHR to build a strong case for further reform. The reorganisation of delivery of UK ODA (through FCDO) and health security (through UKHSA) may provide a platform to make this case to key domestic stakeholders.

- 6. While the Project has successfully adapted to support consistent and effective delivery, some internal systems and structures would benefit from further review to maximise efficiency and effectiveness. As described in EQ6 and conclusions 5 and 7 Project systems have evolved. While this has mostly been a positive story, some concerns have been raised about the transaction costs associated with, for example, Project reporting, internal coordination and communication (specifically in terms of volume of meetings), potential for ongoing refinement to the allocation and communication of roles and responsibilities. It is also anticipated that the move to increase Project staffing at country level will come with a new set of challenges from which IHR can learn from other organisations. It will, however, be important to ensure that the balance between delegated authority and centralised Project management systems is well made.
- 7. The use and development of a Project ToC and results framework has evolved to strengthen coherence, but there is a need (reinforced by COVID-19) to continue this work to support design of phase 2, including to ensure better alignment, identification of underpinning assumptions and use of evidence/best practice to explicitly inform the design of interventions; this needs to then read across to Project M&E systems. We have presented evidence of maturing use of the ToC and results framework to support Project design under EQ4 and EQ5. Best practice is to continue to review these documents based on experience with implementation, to support adaptive management and to enable the Project to strategically and intentionally respond to changes in context. This is particularly important at this time given the range of implications that IHR faces as a result of the COVID-19 pandemic. These include changes in country-level contexts, whether in terms of political profile of IHR, availability of funding, or partner landscape. There will most likely be opportunities to build on the awareness, understanding and profile created by COVID-19, both for IHR as a mechanism to strengthen GHS and for PHE as a valued partner to support IHR strengthening (both at country level and domestically in the UK - a member of the IHR Project team noted that the New Variant Assessment Platform (NVAP) would not be happening without relationships that the Project has established). There will also be changes to international guidance and thinking, not least in terms of IHR monitoring processes as discussed during 2021. All of these contextual changes need to be reflected on in a systematic and structured way, and the ToC and results framework provide a good basis to do such thinking.
- 8. We have identified key strengths of the Project that have been critical to enabling progress, and issues that have constrained further progress, both of which could be more explicitly factored into the IHR Project planning for a next phase. As highlighted under EQ9, there is medium/strong evidence on a range of factors that influenced Project outcomes and IHR's ability to deliver these. Enabling factors include: 1) flexible, high-quality and well targeted support provided by Project staff, including Country Leads a key feature of this support is that it is also holistic in its approach to building leadership and management capacity, technical systems, health workforce capacity and also, in some cases, the operational capacity of the NPHI; 2) the approach to building strong working relationships with NPHIs and partners through joint activity design & delivery; 3) the ability to learn lessons and adapt the Project approach based on evidence of what works, such as through the employment of more country-based staff to work alongside NPHIs on a continuous basis; 4)

strengthened emphasis on ensuring that Project outputs and outcomes are sustained. <u>Issues that</u> <u>have constrained further progress</u> towards IHR capacity building relate to: the Project's primary focus on building national IHR capacity and not sub-national IHR capacity (except in Pakistan); the limited time that IHR technical staff can spend in-country, particularly affected during the COVID-19 pandemic; and some PHE policies (e.g. not to support commodities/equipment) and sub-optimal systems and processes, despite improvement throughout Project lifecycle. There is already evidence that IHR is taking action to address some of these factors, e.g. in terms of plans to strengthen countrylevel teams. But there are some areas where there is scope for stronger attention – including in terms of strengthening adaptive management and strengthening work at sub-national level. There is also scope for IHR to more systematically identify and analyse these factors and to identify strategies to maximise or mitigate them (including whether factors are within or outside IHR control).

5. Recommendations

Following on from the above conclusions, we make a number of recommendations to strengthen the Project in its next phase. These are based on initial suggestions made during a co-creation workshop with IHR staff in June 2021, and have been refined by the evaluation team to ensure a clear line of sight with our conclusions. We have prioritised these using the following terms:

- **Continue and embed:** where IHR already has articulated plans which should be continued and incorporated across the Project's portfolio.
- Adapt: look into ways of correcting the course of the Project to enhance opportunities to achieve and sustain Project outputs and outcomes.
- Prioritise: take action now to strengthen systems and processes.

Continue and embed

1. The Project team should continue with plans to strengthen country-level capacity and maintain mechanisms that allow flexible support to changing country and regional contexts. It will be important to think through how to manage larger in-country teams to ensure efficiency, reduce duplication of effort (including clarifying roles and responsibilities vis-à-vis UK-based technical teams) and ensure subsidiarity as much as possible; this could involve delegating further Project Management (PM) functions to countries.

Adapt

- 2. The IHR Project team should review Project's systems to identify further adaptations that will maximise efficiency and effectiveness. Given the extent of evolution in the Project systems during the past five years, the transition to its second phase (if approved in the next Comprehensive Spending Review) provides an opportunity to look at how governance processes and systems can be streamlined to reduce inefficiencies. This may require close work with other parts of PHE and HMG to identify flexibilities in HMG corporate systems and to establish global work as a collective concern within PHE.
- **3**. The Project team should review the model and make revisions to improve its effectiveness, including specifically in relation to availability and use of Project funds, capacity building at subnational level, engagement in national policy dialogue, and modifications to training provision (focus and evaluation). Each of these is described below.
 - On the use of Project funds for capital investment, it would be useful to have clear decision criteria for requests for targeted grants/funds from the IHR Project budget and mechanisms to link with appropriate HMG teams/departments where the IHR Project is unable to assist; these requests should be documented with outcomes, to inform future funding bids/IHR remits.
 - Considering options to strengthen Project implementation at sub-national level, IHR staff recognise the potential value in this but noted limitations here in terms of limited funding and human resources; the risk is that work at sub-national level would stretch existing resources too thinly. However, there is scope to look this more closely and consider a range of options with their costs and benefits, as well as potential to share sub-national capacity development efforts with other development partners and governments. The Pakistan IHR team has provided a model for how sub-national support can be done.
 - Continue the trend towards prioritising leadership and management development in capacity building efforts. This is a strategic investment with the potential to support sustainable systems-level change. At the same time, continue to strengthen training

interventions so they include pre- and post- assessment, evaluation feedback (from participants/facilitators), and follow-up three months later (to capture changes after training). Explore further use of 'train the trainer' models to support sub-national reach (in line with previous bullet point).

- Formalise mechanisms to establish clear, transparent joint agreement on actions with PHIs. The Project has done this in some countries (e.g. Sierra Leone) and report that it is effective; while it did not feature strongly in our end-point report, IHR staff suggested this would be good to formalise going forward.
- Explore mechanisms for more active Project engagement in national policy discussion, drawing on HMG levers. While also not a strong feature of the end-point analysis, IHR staff highlighted the potential value in more upstream engagement, and evidence suggests that this is a useful strategy for achieving system-level, sustainable change.

Prioritise

- 4. The IHR Project should review and strengthen strategic focus of communication with HMG stakeholders. Effective partnerships across HMG are important for a number of Project-related issues, including embedding PHE's reputation as a trusted partner for international work on GHS, on the mandate and scope of the Project, the application of HMG/PHE corporate systems, the Project's ability to leverage additional funding through other channels, and leveraging HMG diplomatic networks to support political engagement at country and regional levels. IHR could conduct an internal review of how the Project has influenced PHE and HMG processes in order to establish what more can be done to increase the Project's flexibility to operate internationally. There is also scope to strategically highlight IHR's value-add through publicising Project activities and successes, which may be useful in articulating a strong case for future funding as part of the next Comprehensive Spending Review and to mitigate challenges around unpredictable funding. The creation of UKHSA and the merger of DFID and FCO may provide opportunities to promote IHR work, and the Project will need to maintain visibility of its work in the plans of these organisations.
- 5. The Project team should review the Project's intervention logic and revise the ToC, underpinning assumptions and results framework. COVID-19 has changed the context within which the Project is being implemented in a range of ways highlighted in this report, and these need to be systematically considered and appropriate changes to the ToC identified. This could include, for example, more fully mapping out what actions are needed to advance a country to the next WHO benchmark action level, as well as how (and by whom) these actions are being taken forward and then monitored. Underpinning assumptions should then be reviewed, including to identify those that are within and outside control of the Project. This process should be complemented through adaptations to the results framework to strengthen processes to capture formal lessons and ensure learning is accessible and shared across the Project in a formal way.
- 6. The Project team should set out and implement a clear strategy and goals for regional-level engagement to support IHR capacity building. This should reflect on lessons and experiences from phase 1, recognising that it takes time to scope out and identify the appropriate regional partners to engage with, particularly where similar bodies to Africa CDC do not exist. There would be resource implications and potential trade-offs to consider in this process, but IHR has expressed a strong interest in doing this.
- **7. DHSC should provide multi-year commitment to continue the IHR Strengthening Project.** The first phase of the Project has built a strong foundation on which further gains can be based, but sustainable capacity building and system strengthening requires long-term, predictable financing to

facilitate identification and implementation of strategic actions to strengthen national and regional IHR systems and processes.

6. Annexes (Vol. 2)

List of acronyms

Annex 1	Terms of reference
Annex 2	Methodology
Annex 3	List of people interviewed
Annex 4	KII guide
Annex 5	Bibliography
Annex 6	Use and influence plan
Annex 7	Tool for contribution analysis
Annex 8	Contribution stories

- Africa CDC
- Ethiopia
- Myanmar
- Nigeria
- Pakistan
- Sierra Leone
- Zambia
- Annex 9 Overview and strength of evidence for key findings
- Annex 10 Additional evidence supporting analysis of 'right things' (as presented in Vol. 1 Section 3.1)
- Annex 11 IHR Strengthening Project Theory of Change and logframe
- Annex 12 Evidence on whether key assumptions hold
- Annex 13 Comparison of IHR Project activities with the WHO Benchmarks for IHR Capacities guidelines
- Annex 14 Kirkpatrick model
- Annex 15 Jira evidence on implementation of Project activities
- Annex 16 Summary of the effectiveness of the IHR Project's adoption of adaptive management principles
- Annex 17 High-level governance arrangements for the IHR Project
- Annex 18 Governance meetings for the IHR Project
- Annex 19 Contextual factors which affected Project delivery
- Annex 20 Line of sight between findings, conclusions and recommendations

Final Report

¹ The UK considers IHR to be the primary international instrument to help protect countries against the public health risk and emergencies of the sort described above, and compliance with IHR is a key strategic objective of the UK 2015 Aid Strategy.

^v The UK considers IHR to be the primary international instrument to help protect countries against the public health risk and emergencies of the sort described above, and compliance with IHR is a key strategic objective of the UK 2015 Aid Strategy which led to the creation of the Ross Fund, a portfolio of global health security Projects, led by either Department for International Development (DFID) or DHSC.

vi The Joint External Evaluation for IHR uses a standard tool to assess country readiness to respond to epidemic outbreaks. Using the tool is a

voluntary exercise. The benchmarking tool is comprised of 18 modules, and countries can decide which are the most relevant for their situation. See https://apps.who.int/iris/handle/10665/311158

vii World Bank classification of countries for the current fiscal year is available here:

https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups

viii All statistics taken from https://data.worldbank.org/country

^{ix} For example, Ethiopia has the longest established Public Health Institution in Africa (since X), whereas Sierra Leone is in the process of establishing its National Public Health Agency (NPHA).

* E.g. general elections in Sierra Leone in 2018, which created some delays in implementation of the Project.

xi E.g. in Myanmar from February 2021, which led to a halt in interactions between PHE and Government staff.

xii https://wmich.edu/sites/default/files/attachments/u350/2014/UFE_checklist_2013.pdf

xⁱⁱⁱ We have, based on the finding of the MTE, produced a two learning briefs and submitted a manuscript to the Globalization & Health journal summarising MTE findings.

xiv Country workplans Dec 2019.

^{xv} PHE Project Work Plan 2020-21 (Ethiopia, Nigeria, Myanmar, Pakistan).

xvi See contribution stories (Annex 8).

^{xvii} IHR Strengthening Project Support to HMG international missions.

x^{wiii} 200300_DHSC briefing - GHOG_Submission_IHR Project_Nov20.docx, 200303_DHSC PB Paper D - Global Health Security COVID19 Response Activities_Jan 2021-IHR.doc);

xix 200144_200501 Annual Review V1.0.docx.

** KIINotes_Ethiopia_EPHI_IHRPartner22.docx.

^{xxi} DPs: FCDO, USCDC, WHO.

^{xxii} KII FDG IHRPartner50.

xxiii KI IIHRP-G2, KIIIHRP-G3, KII IHRP-DP3, KIIIHRP-DP1.

xxiv KIINotes_IHR Africa CDC__IHRpartner9.docx.

xxv KIINotes_IHR Africa CDC__IHRpartner9.docx.

xxvi 200303_DHSC PB Paper D - Global Health Security COVID19 Response Activities_Jan 2021-IHR.doc.

xxvii 200209_GHME-Zambia-210920-2000-188.

xxviii 164808 (2)_IHR Strengthening Project support to HMG missions_V2.00.

^{xxix} Ibid.

^{xxx} KII FGD1c.

^{xxxi} KII HMGTeam15

^{xxxii} Fleming Fund is active in all IHR Project countries except Ethiopia, although we note that the Fleming Fund grant in Sierra Leone was only signed in December 2020, thereby limiting scope for PHE engagement.

xxxiii 200144_200501 Annual Review V1.0.

xxxiv 159379 (13)_FW OFFICIAL RE updated workplan document.

^{xxxv} KII HMGTeam31.

^{xxxvi} 200184_20200619 Annual Review V4 Final.

xxxvii KIIs with HMGTeam15 OtherGHS2.

xxxviii 200184_20200619 Annual Review V4 Final.

xxxix 200303_DHSC PB Paper D - Global Health Security COVID19 Response Activities_Jan 2021-IHR.

x¹ TDDAP links with the PHE primarily at the institutional level and has little overlap with in-country IHR Projects.

^{xli} KII IHRATeam12, IHRATeam17, OtherGHS2.

xiii Vogel, L (2012) https://assets.publishing.service.gov.uk/media/57a08a5ded915d3cfd00071a/DFID_ToC_Review_VogelV7.pdf

xiiii WHO (2019) Benchmarks for IHR Capacities. Geneva, World Health Organization.

^{xliv} KIINotes_FGD4 (M&E staff)_13May2021.docx.

^{xlv} J Moll P Robinson V5.1.

xivi AGES model The Science of Making Learning Stick: An Update to the AGES Model (Vol. 5) by Josh, D. et al. Available at:

https://www.chieflearningofficer.com/2019/11/12/the-ages-model-can-help-learning-stick/

xivii See contribution stories for references. It must be noted that an increase in the number of professionals trained in certain skill areas does not necessarily result in increased capability.

xlviii See contribution stories for references.

x^{iiix} According to PHE IHR staff, due to a lack of the required level of engagement from St. Peter's staff, exacerbated by a change of leadership and change of priorities at the Hospital with the onset of COVID-19.

See Ethiopia contribution story.

^{II} For example, completion of one activity will be reflected as progress against more than one outputs.

[&]quot; List EQs or note where they sit in the report.

^{III} For each of the six focus countries plus Africa CDC, available in full at Annex 8.

^{iv} Progress in Pakistan represents sub-national progress in the geographic areas where the IHR Project is active, unlike for other countries where national progress is presented.

Background documents – IHR nested logframes for all countries, 2021-22.

III PHE 2019 Ways of Working (March 2019); PHE 2019 Ways of Working (November 2019); Annual Review IHR fin _clean+DHSC.

^{IV} KII notes – FGD1a, FGD1b, FGD1c, IHRATeam17, HMGteam31, Colin Brown, FGD4, HMGTeam31.

¹/ IHRa M&E Quarterly Meeting Notes and Actions 10 July 2020 v5; 200144_200501 Annual Review V1.0.

^{IVI} KII notes – FGD1a, FGD1c, FGD1b, FGD5, IHRATeam17, FGD7, HMGTeam31, Colin Brown, HMGTeam31, IHRATeam12.

^{Ivii} Some purely technical/administrative reasons, for example because an activity was mistakenly 'duplicated' on Jira, or due to problems with implementation. Others were permanently cancelled due to it no longer being a priority for the NPHI in question, or to being postponed until a time in the future when, for example, the COVID-19 situation had improved and in-person training was possible.

^{Will} For example in the case of several activities that had been conducted with St. IHRBTeam29's Hospital in Ethiopia.

 $^{\mbox{lix}}$ Such as 'SOPs', 'Plans' and 'Guidelines' for indicator 1.1.1A shown in Figure 5.

^{Ix} For example, Output 1.1.1. is 'SOPs, Plans and Guidelines developed and available for IHR technical areas' and the indicator is '% of identified SOPs, plans and/or guidelines developed/ updated and disseminated, as supported by PHE'. For an automated report to be pulled through, all milestones under Output 1.1.1 would have to be framed based on this indicator, e.g. 2020/21 milestone might be '80% of identified SOPs... developed/updated and disseminated', and then activities under this would have to also be in line with this, i.e. 'SOP on laboratory samples handling developed', 'SOP on COVID-19 infection control procedures developed'. Currently many milestones do not relate directly to the indicator to be measured, and so the M&E team have taken a pragmatic approach and used text filters to try and pull through relevant milestones. However, this is not following the logic of the logframe, and potentially misses relevant milestones. For example, a milestone mapped to Output 1.1.1 in Jira is 'Production of methodology for ... VRAM for chemicals in Ethiopia' – this milestone that is directly relevant to the indicator, however, as it does not contain the word 'SOP', 'Plan' or 'Guideline', it will not be pulled through to the progress chart on the dashboard in Figure

5.

^{lxi} 200144_Annual Review V1.0.

🔤 Annual Review V2.0; 20200619 Annual Review V2.1; 20200619 Annual Review V4 Final; 20200619 Annual Review IHR fin _clean+DHSC.

^{Ixiii} Contribution Narrative poisons Centre and Clincal_toxicology_V01.00.

^{lxiv} KIINotes_FGD1c (PM staff)_12May2021.docx.

^{lxv} KIINotes_FGD1a (PM staff)_7May2021_FINALISED.docx.

^{Ixvi} KIINotes_FGD4 (M&E staff)_13May2021.docx.

^{lxvii} KIINotes_FGD1c (PM staff)_12May2021.docx.

Ixviii GIS Excel Training Zambia.

kix Report_IndeapthEvaluation_GIS_20210415_AD_JP DRAFT CONFIDENTIAL.

^{lxx} Report_IndeapthEvaluation_Final Report_20210708.

^{lxxi} KII Notes_FGD3 - EPRR

^{lxxii} KII Notes_FGD5_CRCETeam.docx.

^{bxxiii} KIINotes_FGD4 (M&E staff)_13May2021.docx.

^{lxxiv} Annual Review IHR fin _clean+DHSC.

^{bave} PHE 2019 Ways of Working (March 2019); PHE 2019 Ways of Working (November 2019); Annual Review IHR fin _clean+DHSC. An organogram of the proposed IHR Project governance structure for the future round of the Project can be found in Annex 2.

^{bxwi} KII notes – FGD1a, FGD1b, FGD1c, IHRATeam17, HMGteam31, Colin Brown, FGD4, HMGTeam31.

^{bowii} IHRa M&E Quarterly Meeting Notes and Actions 10 July 2020 v5; 200144_200501 Annual Review V1.0.

^{koviii} KII notes – FGD1a, FGD1c, FGD1b, FGD5, IHRATeam17, FGD7, HMGTeam31, Colin Brown, HMGTeam31, IHRATeam12.

^{lxxix} PHE 2019 Ways of Working (March 2019).

^{lxxx} PHE 2019 Ways of Working (November 2019).

^{bood} In many cases, it is not all members of a team (PMs, SLT, technical delivery teams) that are expected to attend a meeting, but a representative. For meetings involving country leads, however, it is usually all CLs that are expected to be involved. While it is unlikely that monthly and quarterly meetings would occur in the same week, it is not out of the question.

^{lxxxii} Which was explicitly raised as an issue by one team member (KII notes – FGD5).

Ixxxiii TWG minutes from 2019.

^{lxxxiv} KII notes – FGD4, IHRBTeam29, IHRATeam17, HMGTeam26.

Ixxxv FGD1a, FGD5, FGD1c, FGD4, IHRBTeam29, IHRATeam17, HMGTeam26, IHRATeam12, FGD7.

^{lxxxvi} KII notes – FGD7, FGD4, FGD1a, HMGTeam28, IHRATeam17.

^{Ixxxvii} KII notes – FGD4.

^{Ixxxviii} KII notes – FGD7, FGD1a.

^{lxxxix} IHR business case draft v18 clean

^{xc} KII notes – IHRATeam12, FGD1c, IHRATeam17.

x^{ci} KII notes – IHRPartner22, IHRBTeam2, IHRATeam17, IHRPartner17, HMGTeam31, HMGPartner35, IHRBTeam29, FGD1a, HMGTeam28, FGD1b, FGD5.

xcii KII notes – FGD1c, HMGTeam28, HMGTeam26.

xciii 200224_PID v2 - Pakistan - SLT suggestions; 200276_2c - IHR Strengthening Project - Evidence of Impact and Case Studies.

xciv KII notes – FGD1c, IHRBTeam8, Pakistan In-country PHE IHR staff FGD.

xcv KII notes – FGD1b, FGD1a, FGD1c, IHRATeam17; IHR Full Business Case 3.0 Final 12_01_21_version.pdf.

xvvi KII notes – FGD1c, IHRBTeam29, IHRBTeam2, HMGTeam28, FGD1b, FGD5, IHRATeam17, HMGTeam26, IHRATeam12, FGD4, IHRPartner17.

xcvii 200323_IHR ToC workshop 25.01.21_full_slides_&_notes; IHR Project Confluence Homepage.

^{xcviii} KII notes – FGD4, FGD1a, FGD1b, IHRATeam17.

^{xcix} Ibid.

^c Background document – ToRs.

^{ci} KII notes – FGD1a, FGD1b, FGD4, IHRATeam17, FGD5.

^{cii} 200315_IHR ME quarterly meeting October 2020_notes_Final.

ciii KII notes – FGD1c, FGD1b, FGD5, IHRBTeam36.

c^{iv} Including PHE and DHSC internal policies, procedures and governance processes, ODA-country eligibility; transparency, accountability and VfM considerations; IATI measures; ICAI standards and One HMG platform.

^{ev} 200312_IHR Full Business Case 3.0 Final 12_01_21_version. The business case was drafted when a multiyear spending review was expected, but it was never finalised due to the change to a one-year review.

^{cvi} 164868 (2)_20200619 Annual Review IHR fin _clean+DHSC; 200144_200501 Annual Review V1.0.

^{cvii} KII notes – FGD7.

^{cviii} IHR Annual Review submission final 09_09_19; 200241_07 - GPM September 2018_IHR only; 200240_06 - June GPM 2018_IHR only; 200239_05 - May 18 IHR Strengthening Project; 200238_04 - April 18 update IHR Project; 200353_TWG Technical activity update (16th Oct 2019)_v2 (1); 200237_03 - March GPM 2018_IHR only.

^{cix} Note that this includes 50% of Project Lead and Country Lead salary costs for the financial years 2018/29 and 2019/20, as reported in the MTE, and follows PHE's determination for 2019/20 and 2020/21, as per the data provided by the PHE IHR Management Team.

For USAID, overheads charged by contractors/grantees vary between 7%–30% of grant value, depending on whether the contracted agency is profit or not for profit. Accessed here.

For DFID grants made through the Global Partnership for Education, overall program management and administrative costs can go as high as 30% in rare cases where there are lower value grants in fragile and conflict-affected states. Accessed <u>here</u>.

The Bill and Melinda Gates Foundation place a cap on indirect (i.e. general overhead and administration) costs of 15%, although direct program management costs (which could include staff salaries, travel expenses, materials) could be charged in addition to this. Accessed <u>here</u>. Analysis of grants provided through PEPFAR between 2007 and 2016 found that indirect costs accounted for between 8-20% of total grant value,

although again this does not include direct program management costs. Accessed here.

Program management accounts for 7% of Gavi's total HSS support over the strategic period 2016–20, of which the vast majority is provided to governments. Accessed here.

Analysis of Global Fund grant budgets indicates that across the entire Global Fund portfolio for 2018–20 and 2021–23 grants, Project management costs as a proportion of total grant value were, on average, 7% for government PRs, 20% for multilateral PRs, 19% for private sector PRs and community sector PRs, and 15% for other types of PR.

TB REACH application guidelines state that human resource, M&E and administrative overhead costs should account for no more than 32% for grants up to US\$1 million, provided mainly to NGOs. Accessed <u>here</u>.

^{cxi} PHE (2016) International Health Regulations (IHR) Project Business Case – draft v18 clean.

^{cxii} PHE IHR Project Midterm Evaluation Report.

^{cxiii} Including PHE, DHSC and with other departments.

^{cuiv} KII notes – FGD1c, IHRBTeam36, FGD4, FGD1a, FGD1b, HMGPartner35, IHRATeam17, HMGTeam31, HMGTeam28, IHRATeam12, IHRBTeam8. This was also reflected in comments from DHSC the 2019/20 Annual Review (Annual Review IHR fin _clean+DHSC).

^{cxv} ToR - cross-Project remote delivery group_Final.

^{cxvi} KII notes – IHRBTeam8, FGD1c, IHRBTeam36, FGD4, FGD1a, FGD1b.

^{cxvii} KII notes – FGD1a.

cxviii KII notes – IHRPartner12, HMGPartner35.

^{cxix} See Ethiopia contribution story.

^{cxx} KII notes - IHRPartner22, IHRPartner66, IHRPartner14.

^{cxxi} OTHERGHS32, OTHER REFs.

^{cxxii} KII notes – FGD1a, IHRPartner14, OTHERGHS32, IHRPartner65.

 $_{\rm coxiii}$ 200191_Esther effect evaluation in Nigeria recommendations TWG August 2020 with update by Sola vs 2.

cxxiv Available at https://gphihr.tghn.org/

^{cxxv} Available at https://tghn.org/

cxxvi Available at https://gphihr.tghn.org/resources/publications/

cxxvii Available at https://gphihr.tghn.org/resources/events/

coxviii PHE (2021) Celebrating five years of the International Health Regulations Strengthening Project. Accessed 03 June 2021 from

https://gphihr.tghn.org/news/celebrating-five-years-ihr-Project/

^{cxxix} GPM Quarterly Meeting - IHR Sep_V5_Final; Annual Review V1.0; PID v2 - Ethiopia - SLT suggestions; A review of the PHE IHR Strengthening Project in SL Nov 2020 v2 - OFFICIAL SENSITIVE; Minutes of IHR Technical Working Group Final V1.00; IHR Project - preparing for the final year Strategic discussions 13 Jan 2020; Appendix 01 - IHR Project Proposed Activity Domain; IHR Strengthening Project Bulletin - 28 January 2021

^{cxxxi} KII notes – HMGTeam31.

^{cooxii} 200225_A review of the PHE IHR Strengthening Project in SL Nov 2020 v2.

cxxxiii As outlined in the revised ToC.

^{coxxiv} PID v2 - Ethiopia - SLT suggestions; PID v2 - Myanmar - SLT suggestions; PID v2 - Nigeria - SLT suggestions; PID v2 - Zambia - SLT suggestions; PID v2 - Pakistan - SLT suggestions; PID v2 - Africa CDC_WAHO - SLT suggestions_MM_22i21.

^{coxx} Although there have been some challenges in certain contexts, as elaborated in the relevant contribution stories.

^{coxvi} KII notes – IHRPartner9, IHRPartner19, IHRBTeam36, OTHERGHS50, HMGTeam23, IHRBTeam2, IHRParter59, HMGTeam28, HMGTeam16, FGD1b, IHRBTeam8, IHRPartner5, OtherGHS5, FGD5, IHRATeam17, IHRPartner62, OtherGHS33, IHRPartner63, OtherGHS34, IHRATeam12.
^{coxvii} Ibid.

^{coxviii} The impact of COVID-19 international travel restrictions was not as significant to the Pakistan Project, with its larger in-country team. ^{coxvix} Which, for example, rule out the use of Zoom, for security reasons. ^{cil} IHR Update for Advisory Board; 2c - IHR Strengthening Project - Evidence of Impact and Case Studies; Briefing for Helen Tomkys _V3; GHME-AfricaCDC-200420-2117-30.

^{cxli} KII notes – IHRBTeam2, FGD5, IHRATeam12, IHRATeam17.

^{cxlii} See https://digitaltools.phe.org.uk/confluence/display/IMI/2021-03-12+%281650%29+Esther+Effect+Workshop+Evaluation+Form#tab-Learnings+and+Actions for Ethiopia workshop example

Contractions for Europia workshop example

^{cdiii} See https://digitaltools.phe.org.uk/confluence/display/IMI/Ethiopia+Evaluation+Forms for Ethiopia example.

^{cxliv} 2019/20 Annual Review V4 Final; KII notes – FGD1a; FGD1b.

^{cdv} As a result of, e.g. cost of repatriating staff; capital expenditure to support COVID-19 related Project delivery in Pakistan.

^{cdvi} IHR Project Annual Review 2019_20 Independent reviewer Comments Log_TB+DHSC comments.

^{cxlvii} KII notes – FGD1a. IHRBTeam2, IHRParnter17, HMGPartner35, IHRBTeam8, IHRPartner63.

^{cxlviii} KII notes – IHRPartner17; IHRPartner14; IHRPartner63; HMGPartner35, IHRPartner1.

cdix 2019/20 Annual Review V4 Final; 2018/19 Annual Review; IHR Project Annual Review 2019_20 Independent reviewer Comments Log_TB+DHSC comments; PHE IHR Project Mid-Term Evaluation Report.

^{cl} KII notes – FGD1b; FGD1c, FGD1a, IHRATeam12; IHRATeam17.

^{cli} For example, since the MTE was conducted, in-country staff have been provided with Government Procurement Cards which support local procurement of day-to-day supplies, and in-country supply contracts have been set-up to further support local procurement (KIIs – FGD1b; FGD1a).

^{clii} KII notes – FGD1b.

^{cliii} KII notes – FGD1b, IHRATeam12.

cliv Ibid.

^{clv} Value for Money QA TWG 20200811 Final.

^{clvi} ME CRCE VFM presentation; VFM Progress updates_M&E IHR quarterly meeting; WD VFM worked example GPH M&E_IHR Jan 21.

^{clvii} Ibid.

^{clviii} Successive annual reviews from 2017/18 to 2019/20.

^{clix} KII notes – FGD1b.

^{clx} Ibid.

^{clxi} KII notes – FGD1b, IHRATeam12, IHRATeam17.

clxii PHE (2016) International Health Regulations (IHR) Project Business Case – draft v18 clean.

^{ctviii} **Significant gains:** As demonstrated by an increase in JEE/eSPAR scores of more than 30% since Project inception and/or well triangulated qualitative evidence indicating that substantial gains in capacity have been made; **Some gains**: As demonstrated by an increase in JEE/eSPAR scores of between 10% and 30% since Project inception and/or well triangulated qualitative evidence indicating that at least some gains in capacity have been made; **Minimal/no gains**: As demonstrated by an increase in JEE/eSPAR scores of less than 10% since Project inception and/or well triangulated qualitative evidence indicating that at least some gains in capacity have been made; **Minimal/no gains**: As demonstrated by an increase in JEE/eSPAR scores of less than 10% since Project inception and/or well triangulated qualitative evidence indicating that gains in capacity have been at most minimal. While the evaluation team acknowledges that this methodology lacks precision, it is nonetheless helpful in interpreting where progress has and has not been made across the Project portfolio. ^{ctviv} Progress in Pakistan represents sub-national progress in the geographic areas where the IHR Project is active, unlike for other countries where national progress is presented.

^{clxv} PHE (2016) International Health Regulations (IHR) Project Business Case – draft v18 clean.

^{clxvi} See Africa CDC case study.

clavii Memorandum of Understanding between PHE and GHD/EMPHNET, signed on 6 October 2019.

clxviii See Myanmar case study.

clxix Qualitative evidence and reported in IHR Project presentation of evidence of impact, and in Annual Reviews.

^{clxx} See Ethiopia case study.

^{clxxi} See Myanmar case study.

clxxii See Nigeria case study.

^{clxxiii} See Pakistan case study.

 $^{\mbox{\scriptsize clxxiv}}$ See Sierra Leone case study.

^{clxxv} See Zambia case study.

cloxvi All data taken from country case studies, and the IHR Project's own presentation of evidence of impact.

chowii This is an online directory of emergency responders and rapid response teams for AU Member States. Available at

https://avohc.africacdc.org/login/index.php

clxxviii All data extracted from country case studies.

clxxix All data taken from country case studies.

^{clxxx} All data taken from country case studies.

^{clood} A strong working relationship has been established between PHE and PSI, with PHE guiding the design of PSI's work. Their engagement in implementation has also been highly complementary, with PHE bringing technical expertise and PSI bringing capacity and knowledge of enacting change at the community level, in line with national guidelines. PSI also facilitated the delivery of some training where PHE staff could not be present in-country.

^{cloxdi} The key learning points for remote delivery were that: audio-visual equipment should be tested at the training venue in advance; separate laptops are required to enable video calls between UK-based trainers and breakout groups of training participants; extra time in each training session is required for participants to ask questions; and time is also required between each training session for the trainers to discuss how the training is progressing, identify issues and work with in-country facilitators to resolve them.

clxxxiii Zambia case study and PHE reporting of IHR Project evidence on impact.

clocal By way of example, in Zambia NPHI staff were trained by PHE in spatial analysis using an open-source, license-free software package, specifically as the license fees for these packages were acknowledged to often be a barrier to spatial analysis being a routine part of NPHI's work.
clocal All country case studies contain evidence of this, as does the Project's Sustainability, Equity & Inclusion plan.