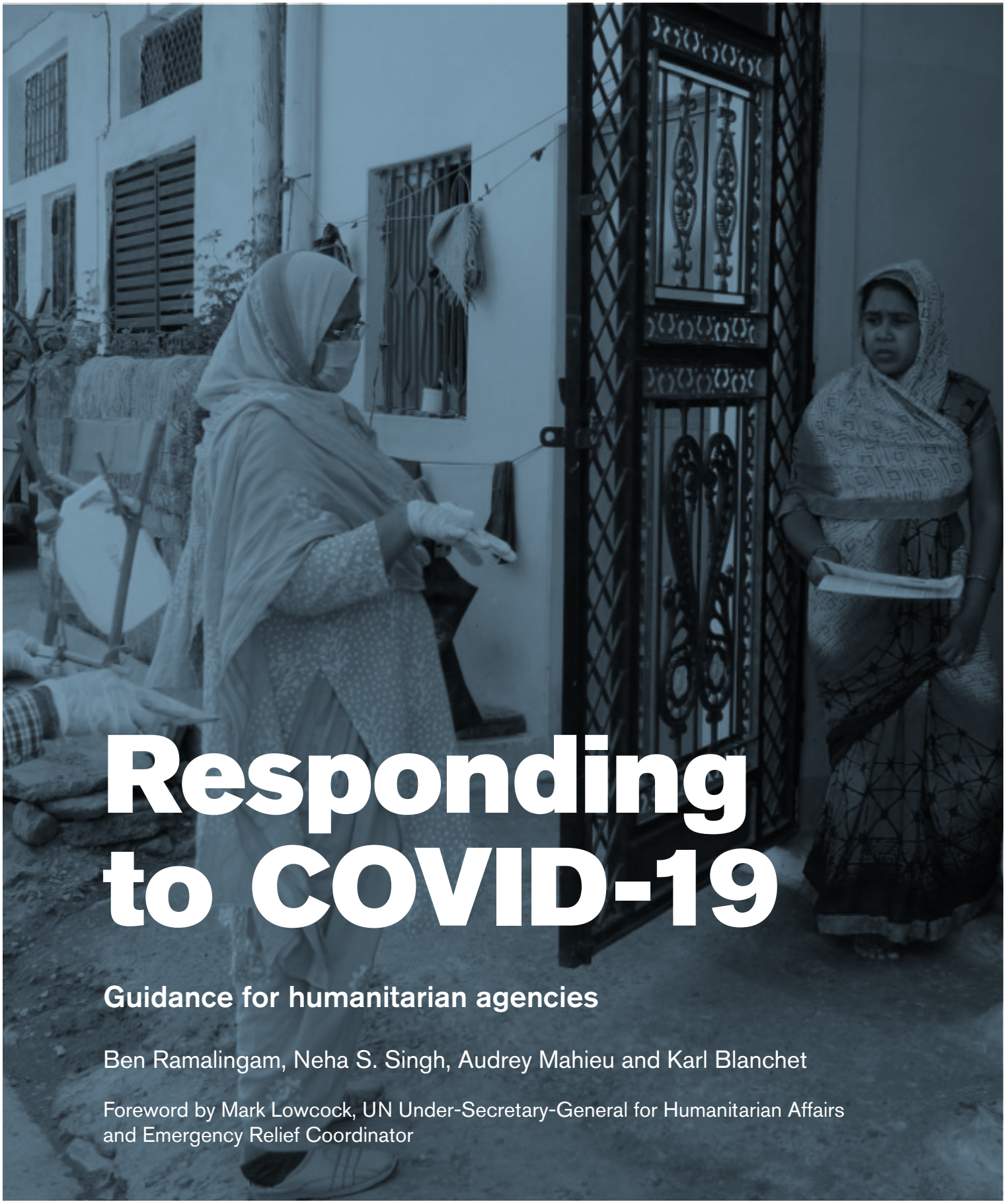

Responding to COVID-19

Guidance for humanitarian agencies

Ben Ramalingam, Neha S. Singh, Audrey Mahieu and Karl Blanchet

Foreword by Mark Lowcock, UN Under-Secretary-General for Humanitarian Affairs and Emergency Relief Coordinator

RAPID LEARNING REVIEW

ALNAP

ALNAP is a global network of NGOs, UN agencies, members of the Red Cross/ Crescent Movement, donors, academics, networks and consultants dedicated to learning how to improve response to humanitarian crises.

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Geneva Centre for education and research in humanitarian action

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Contents

TABLES, BOXES AND FIGURES

Abbreviations and acronyms

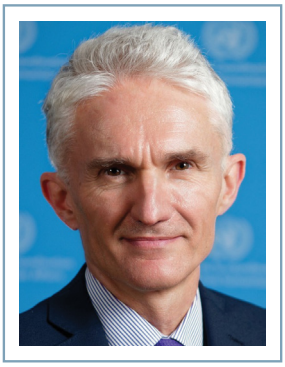
AAP	accountability to affected people
ALNAP	Active Learning Network for Accountability and Performance in Humanitarian Action
COVID-19	coronavirus disease 2019
CSO	civil society organisation
HIV/AIDS	human immunodeficiency virus infection and acquired immune deficiency syndrome
IASC	Inter-Agency Standing Committee
IEC	information, education and communication
IPC	infection prevention and control
OCHA	United Nations Office for the Coordination of Humanitarian Affairs
PCR	polymerase chain reaction
PPE	personal protective equipment
SARS	Severe Acute Respiratory Syndrome
UNHCR	United Nations High Commissioner for Refugees
WASH	water, sanitation and hygiene
WHO	World Health Organization

Key to design features

Icon

Key resources

Foreword



Mark Lowcock

United Nations Under-Secretary-General for Humanitarian Affairs and Emergency Relief Coordinator

COVID-19 is threatening the lives and livelihoods of people in nearly every country on our planet. The spread of this disease is an unprecedented global challenge, requiring what the United Nations Secretary-General describes as a 'whole-of-humanity' response, supported by everyday people, governments, civil society and the entire international community.

Humanitarians and health workers are on the frontlines of the COVID-19 response. The collective expertise of the humanitarian community – local, national and international actors – will be critical to saving lives and protecting vulnerable populations from COVID-19.

As the pandemic evolves, and alongside it the humanitarian response, it is crucial that humanitarian actors make the best decisions possible as they adapt to the challenging and resource-constrained contexts in which they are operating. It is critical that we draw quickly upon evidence and lessons learned from the variety of approaches to containing the spread of COVID-19 around the world, as we also learn from other epidemic responses in humanitarian contexts.

This is an excellent resource for doing just that. In addition to insightful perspectives from frontline responders and a variety of experts, this Rapid Learning Review for humanitarian organisations working on COVID-19 provides vital insights and applicable lessons based on a review of evidence from the ongoing pandemic response and integrates key findings from previous epidemic outbreaks.

It sets out clear operational lessons, offering guidance to humanitarian agencies in preparing, adapting and scaling up their efforts in response to COVID-19. Taken together, this reflects the best available current knowledge on the implications of COVID-19 for humanitarian settings, and is a crucial resource for our community.

As the humanitarian community responds to one of the most far-reaching and significant challenges of our lifetimes, it will be more important than ever to continually share with each other learning, knowledge and expertise. I hope that the actions and principles in this paper are widely read, discussed and applied, resulting in a strengthened humanitarian response to COVID-19 that protects and saves lives and dignity in vulnerable countries around the world.

Background and aims

This Rapid Learning Review is a tailored guidance document for developing a health response to the novel coronavirus disease 2019 (COVID-19) in humanitarian settings. It is intended for humanitarian operational decision-makers and senior leaders responsible for developing and supporting their organisations' response to COVID-19, and aims to rapidly assist frontline staff working on international, national and local humanitarian responses to the pandemic. The key question this paper seeks to answer is:

> **How should humanitarian organisations prepare and respond to COVID-19 in humanitarian settings in low- and middle-income countries?**

The paper offers key actions, insights and ideas for humanitarian actors to consider in their COVID-19 responses. While this paper draws significantly on the extensive health guidance provided by the World Health Organization, its target audience is primarily humanitarian actors, not governments or ministries of health.

The guidance outlined in this paper applies to situations in which humanitarian responders are working alongside and with official government health system actors, and those in which humanitarians may be the principal coordinators and implementers of COVID-19 response. This includes individuals working for international humanitarian agencies; however, given how much the operational response to COVID-19 will necessarily rely on national and local actors, an important audience for this paper are the humanitarian decision-makers in national and local organisations preparing to support community-led efforts.

Similarly, while the entry point for this paper is health, the 14 key actions and 7 operational principles outlined also have implications for other humanitarian sectors – notably water, sanitation and hygiene (WASH), shelter, and food security and nutrition. As such, it emphasises the need for effective multistakeholder coordination.

Readers should bear in mind the following factors and limitations when applying the actions, insights and ideas outlined in this paper to their own contexts:

- The authors set out to emphasise lessons for humanitarian settings specifically affected by conflict. However, the evidence base upon which the team drew included several infectious disease outbreaks in the context of natural disasters. Although the lessons that follow are all cross-applicable to COVID-19 outbreaks in natural disasters, it is important to note that the translation of these lessons into implemented interventions will require contextual adaptations.
- While there are a number of similarities with previous humanitarian epidemic responses (e.g. Severe Acute Respiratory Syndrome (SARS) and Ebola virus), a simple 'cut-and-paste' application of lessons from the past is not advisable because each epidemic is different despite responses usually being the same; moreover, COVID-19 is particularly unique in being a global pandemic.
- The majority of COVID-19 response strategies have been designed for high-income countries and require significant adaptations for use in humanitarian responses.
- Humanitarian responses are challenged by the fact that there are major COVID-19-related crises ongoing in every country in the world, and that typical operations – built on deployment of international staff and resources – will not be possible in many settings due to international travel restrictions and border closures.

This paper summarises and synthesises the best available knowledge and guidance for developing a health response to COVID-19 in humanitarian settings low- and middle-income countries as of April 2020. Given how little is known about COVID-19 as a new disease, and given the lack of availability of high-quality evidence on epidemic response in low- and middle- income countries, the learning in this paper may be subject to revision and change as the COVID-19 situation evolves.

There are still many outstanding questions, both for the international community as a whole, and for humanitarian actors in particular. Readers of this paper should bear this in mind and use this paper in concert with other, context-specific sources of evidence.

As part of its mission to support continuous learning across the humanitarian system, ALNAP will provide routine updates to the paper over 2020 to reflect emerging knowledge and evidence on the most effective approaches to COVID-19 response.

Box 1: Key questions for future and ongoing research and learning efforts

- How does COVID-19 behave in low-resource and humanitarian settings?
- Which populations are at higher risks of severe illness from COVID-19 in humanitarian settings?
- What are the most effective strategies or combination of strategies to reduce transmission in these settings?
- What can be feasibly done when there are limited supplies (e.g. PPE, ventilators, oxygen) and capacity and recommended public health measures and treatments cannot be implemented?
- What is the best way to prioritise and maintain essential routine health services?
- How should trade-offs be made between investment in COVID-19 responses and dealing with other drivers of mortality?
- How should trade-offs be made between containment measures and the secondary impacts of COVID-19 (e.g. socioeconomic) on populations?

As Colombia braced for the arrival of COVID-19, MedGlobal volunteers provided basic medical care to nearly 1,500 Venezuelan refugees and internally displaced Colombians living on the outskirts of Cúcuta. Photo credit: MedGlobal.

Methodology

The methodology for the research informing this paper is broadly aligned with that described in 'Lessons Papers: A methods note', developed by the ALNAP Secretariat in 2017 (Dillon and Campbell, 2018), and combines a review of relevant literature and a global stakeholder consultation with key informants:

- **Literature review:** The present paper distils evidence and recommendations from peer-reviewed research on operational responses to COVID-19, previous relevant outbreak and epidemics responses (including Ebola, cholera, Middle East Respiratory Syndrome (MERS) and SARS), and related evaluations and synthesis reports featured in the ALNAP Humanitarian Evaluation and Learning and Performance (HELP) Library. The research team employed rigorous systematic review principles to identify relevant information from peer-reviewed and grey scientific literature on COVID-19 and lessons papers or systematic reviews on Ebola, cholera, SARS and MERS. We included any English-language papers containing scientific evidence for COVID-19 published from January 2020; and any papers including lesson learned based on scientific evidence for previous outbreaks published from 2014. We identified 272 relevant papers after screening 7,680 records.
- **Key informant interviews:** The authors undertook a global stakeholder consultation with key health programme implementers and leaders working on the COVID-19 response in humanitarian contexts at local, national and international levels. We interviewed 33 respondents identified via snowball sampling (wherein existing respondents identified future respondents) and aimed to minimise sampling bias by ensuring our initial sample was diverse according to organisational type, geography, gender, function/role and level (e.g. operational/policy).

The methodological approach was both exploratory and explanatory; each data source was used to generate new evidence and findings from both literature review and interviews were triangulated in order to validate them. For example, the results of the literature review were shared concurrently with the study member leading key informant interviews to refine probes for the topic guide and ask for clarifications from respondents during the interviews. Findings from the literature review were also used iteratively to complement the qualitative findings.

The methodology diverges from those described in Dillon and Campbell (2018) in the following ways:

1. The authors did not assess the quality of literature on which it drew; this was not deemed as a priority particularly because, similar to previous ALNAP Lessons Papers, most literature reviewed was of overall poor quality in terms of study designs and methodologies, which is to be expected given that many studies aimed primarily to be accessible rather than to demonstrate methodological rigour.
2. Given the rapid nature of the review and evolving evidence on COVID-19, the authors did not extract data from all included literature. Rather they stopped reading and extracting relevant data when they hit theoretical saturation, especially after triangulating findings with those from the key informant interviews, to reduce bias and errors in interpretation.
3. Given the rapid nature of the review, the literature search on past outbreaks focused on peer-reviewed and grey literature reviews and lessons papers (including those in the HELP Library). The authors also drew heavily on the literature survey carried out for the ALNAP Lessons Paper on Ebola and cholera epidemics (Lamoure and Julliard, 2020).

Actions for humanitarian responders

1. Support national efforts to assess COVID-19 impacts and surge capacities
2. Develop and communicate clear scenarios, guidance and protocols
3. Support integrated and coordinated decision-making and oversight
4. Prepare across the continuum, from community to health facilities
5. Prioritise people, money, essential services, and goods
6. Ensure that PPE for health workers and support staff is available
7. Prioritise syndromic facility-based surveillance
8. Adapt the testing approach to transmission scenarios and testing capacity
9. Targeting should account for and support the most vulnerable groups
10. Employ containment approaches to reduce transmission
11. Support socially and economically sensitive approaches to quarantine and isolation
12. Implement WASH interventions for effective infection prevention and control
13. Adapt health facilities and protocols
14. Deliver appropriate and relevant critical care measures

Actions for humanitarian responders

A. Preparing the health system

ACTION 1

Support national efforts to assess COVID-19 impacts and surge capacities

In February 2020, the World Health Organization (WHO) called upon **all countries to prepare for and respond to COVID-19 through preparedness and response actions** in line with the global strategic preparedness and response plan (WHO, 2020a). While the COVID-19 preparedness plans have specific features, the process is one that will be familiar to many humanitarian organisations, as summarised by UNHCR: 'a process, in anticipation of potential crises, of developing strategies, arrangements and procedures to address the humanitarian needs of those adversely affected by crises' (UNHCR, 2015).

Evidence from previous disease outbreak and epidemic responses, supported by the stakeholders interviewed, is that **effective joint epidemic preparedness plans deliver significant benefits to subsequent interventions** (Okunogbe, 2015). Given that planning and preparedness is already underway, humanitarian organisations can provide **technical advice and input into the assessment process at national and subnational levels** so as to strengthen the quality of the process and to help fill any gaps in preparedness and planning capacity.

Humanitarian organisations – especially national and local actors – have a specific role to play in ensuring **that preparedness processes are as inclusive as possible**, especially of the most vulnerable groups. Information on vulnerable groups may already be available through appropriate mechanisms, such as in-country focal points for gender, accountability to

affected people (AAP), community engagement, and age and disability. For some contexts, this information may need to be compiled quickly.

In particular, it is important to ensure a focus on refugees; while these populations should be integrated into national health responses, they are in many settings being excluded and scapegoated, with borders being closed, people seeking asylum refused entry, healthcare access restricted to host communities, and the widespread use of negative political rhetoric (Lau et al., 2020). This leaves refugees in a position of heightened vulnerability and is profoundly counterproductive in COVID-19 response as it creates situations wherein transmission will go undocumented –potentially creating more challenges as the crisis evolves (Truelove et al., 2020). It should also be noted that non-displaced populations affected by humanitarian emergencies are sometimes even more vulnerable and less accessible (IASC, 2020a).

> "Humanitarian organisations – especially national and local actors – have a specific role to play in ensuring that preparedness processes are as inclusive as possible."

As well as considering the potential impacts of the pandemic, **preparedness plans should also take into account existing surge capacities for responding to COVID-19**. This includes the capacities of national and regional health systems and those of national and local civil society organisations (CSO), communities, the diaspora, faith groups and businesses or wealthy communities within each country.

Information on surge capacity should be forecast and made available at the national level using existing tools. These could include the following:

- Adaptt Surge Planning Support Tool is an Excel-based graphical tool intended for policy-makers and senior planners to focus on surge planning information including: (1) the number of beds required; (2) the dates of predicted bed shortages; and (3) the detailed human resources needed.
- The Health Workforce Estimator tool estimates the required number of each type of health worker based on the number of mild, moderate, severe and critical patients presenting at health facilities per day.

Humanitarian actors should focus on where they can provide support to (1) routine health services and (2) relevant actors and communities themselves to adopt epidemiologically sound mitigation strategies, mainly around prevention.

The existing number and distribution of health workforce by cadres in many humanitarian settings is very low, so creative solutions will be needed to maintain routine essential services. These include:

- mobilising unemployed and retired qualified health workers where relevant and appropriate
- advocating to mobilise medically qualified refugees who are usually not allowed to practice
- engaging community health workers networks.

Key resources

- WHO. (2020b) *National capacities review tool for a novelcoronavirus*. Geneva: WHO. (www.who.int/publications-detail/national-capacities-review-tool-for-a-novelcoronavirus).
- WHO. (2020c) 'WHO surge calculators'. [Webpage]. (www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/covid-19-critical-items?mc_cid=b6c6054319&mc_eid=5b4b5dadee).
- ACAPS. (n.d.) '#COVID19: a global joint response'. [Webpage]. (www.acaps.org/projects/covid19).

ACTION 2

Develop and communicate clear scenarios, guidance and protocols

Table 1 outlines two transmission scenarios for COVID-19 as drawn from the WHO (2020d). For both scenarios, the focus of the humanitarian response should not be on decreasing mortality of COVID-19 cases, which will be extremely difficult in most situations, but rather on preventing cases, especially among the most vulnerable groups, and protecting essential routine health services.

To be effective, preparedness plans and related scenarios need to be established and combined with clear strategies and action plans that enable humanitarian responders to deal with each scenario as it emerges (Africa CDC, 2020a). Because the number of affected people is underreported in each country and increases progressively with each scenario, along with the scale of related needs, the demands on response capacities and operational resources will grow. As such, it will be essential to link transmission scenarios to resourcing and financial plans, with explicit and pre-agreed thresholds and triggers at which additional resources will be made available.

Table 1: COVID-19 transmission scenarios

Scenario (as defined by WHO)	Characteristics of the scenario
Clusters of cases	Settings experiencing cases clusters in time, geographic location and/or common exposure
Community transmission	Settings experiencing larger outbreaks of local transmission

Preparing for these scenarios will demand considerable forward planning and stakeholder engagement. Humanitarian actors will need to engage closely with hospitals, health centres, clinics, and community networks at all levels to ensure different plans and interventions are fully understood and owned. And as well as COVID-19 specific preparations, work will also need to be done to ensure the continuity of routine essential services (see Box 1).

Box 2: Preparing for continuity or adaptation of essential routine healthcare services

Evidence from previous epidemics, including the Ebola Outbreak in West Africa (2014) and the Democratic Republic of the Congo (2018–2019), show that indirect health effects can exceed the deaths and morbidity directly attributed to the infectious disease (Lau et al., 2020; Truelove et al., 2020). Actors responding to COVID-19 should prepare for the continuity of essential key health services and plan to undertake prevention programmes, ensuring that staff or patients are not exposed to excessive risk. Key approaches learned from past experience include:

1. conducting a prioritisation exercise to identify services that are essential to maintain
2. delivering services intermittently or via alternative delivery modalities (e.g. via task shifting/sharing where possible and safe, and providing additional supplies of medication for chronic conditions)
3. adapting supply-chain management and providing extended medication supplies for conditions including non-communicable diseases, HIV/AIDS, and tuberculosis, and modern contraceptive methods
4. freeing up healthcare capacity by postponing non-essential services
5. setting up protected areas in healthcare facilities for essential routine services (e.g. deliveries) that have, if possible, a designated entrance not used by COVID-19 patients or health workers (Lau et al., 2020).

Effective preparation will include pre-agreeing and sharing guidance and protocols for key activities, covering:

1. COVID-19-specific response guidelines and protocols for national, local and community workers
2. adaptation guidelines for all other essential health services
3. health information, education and communication (IEC) materials.

This should be undertaken at a sector level to avoid duplication of efforts and to ensure the creation of and adherence to common approaches. International, national and local humanitarian organisations will need to work together to make globally available guidance contextually relevant and appropriate, paying careful attention to social and cultural norms and to local health system capacity.

Key resources

- WHO. (2020d) *Critical preparedness, readiness and response actions for COVID-19*. Geneva: WHO. (www.who.int/publications-detail/critical-preparedness-readiness-and-response-actions-for-covid-19).
- Africa CDC. (2020a) *Recommendations for Stepwise response to COVID-19*. Addis Ababa: Africa CDC. (https://africacdc.org/download/recommendations-for-stepwise-response-to-covid-19).

ACTION 3

Support integrated and coordinated decision-making and oversight

In line with WHO recommendations, governments of affected states will need to establish COVID-19 command and operations centres to coordinate and oversee agreed response activities (IASC, 2012). Because of the diverse settings in which humanitarian actors might be operating, there is a spectrum of ways in which they might be involved in these centres (see Box 2).

In many countries, humanitarian organisations may be able rely on the coordination mechanisms already available and offered by the Global Health Cluster and country-level health clusters.

In the countries where it operates, the United Nations Office for the Coordination of Humanitarian Affairs is supporting UN country teams to work closely with host governments to prepare response plans, develop consistent approaches to information management, decision-making, supply chains and communications issues (OCHA, 2020).

Box 3: Role of humanitarian actors in emergency command and operations centres

Shared: The government is willing and able to lead the response despite challenges, and there is some humanitarian capacity and willingness to work with the government to act as a trusted partner and critical friend in advocacy, delivery and learning (e.g. Afghanistan, Lebanon and Malawi).

Substitute: There is inadequate, unwilling or intransigent government capacity but strong civil society capacity, and the humanitarian sector in-country needs to work as the de facto response lead, with national and local actors playing a lead role (e.g. northern Syria, Yemen and Zimbabwe).

Supportive response: There is limited humanitarian capacity on the ground and so the humanitarian community must backstop and provide technical, financial and other resources through remote management (e.g. the Pacific Islands).

While the specific roles of local, national and international humanitarian actors may vary, the following functions – adapted from the strategy of the Bangladesh National Preparedness and Response Plan for COVID-19 (Government of Bangladesh, 2020) – are considered typical:

- coordinating and planning in liaison with Prime Minister's Office, ministries and international organisations
- overseeing surveillance, laboratory and points of entry
- using current and new structures for case finding, contact tracing and quarantine
- enhancing clinical case management and infection prevention and control at heath-facility and community level
- developing and implementing risk communication and public awareness plans
- undertaking operational research.

It is critical to establish in a timely fashion the necessary command and operations and doing so will **depend on the resources and sustained engagement of international, national and local actors**. During the Ebola Outbreak in Sierra Leone, it took five months to establish command and control operations – due in large part to slow coordination among external donors and other actors (Ross, 2017).

In many settings, humanitarian actors will need to make sure that the different functions of the response work are delivered in meaningful, coherent and inclusive ways for the most vulnerable and at-risk populations. Especially important will be the role of real-time monitoring and learning, to enable ongoing well-informed strategic and operational flexibility in the response (Mercy Corps, IRC and ADAPT, 2016). Experience shows that humanitarian response analysis and assessments have an essential role to play in establishing appropriate and timely feedback that link into decision-making processes at different levels, and allow interventions to be adapted (Obrecht, 2019).

Key resource

- Government of Bangladesh. (2020) *National preparedness and response plan for COVID-19, Bangladesh*. Dhaka: Government of Bangladesh. (www.humanitarianresponse.info/en/operations/bangladesh/document/bangladesh-national-preparedness-and-response-plan-covid-19).

“

Humanitarian actors will need to make sure that the different functions of the response work are delivered in meaningful, coherent and inclusive ways for the most vulnerable and at-risk populations.

”

B. Preparing institutions and facilities

ACTION 4

Prepare across the continuum, from community to health facilities

Humanitarian actors should focus on preparing health services, and interventions to support them, across the continuum from community- to primary- to hospital-level care to maintain community and health system functionality during the COVID-19 Pandemic.

Community level

Humanitarian actors should engage from the very start of the response affected communities and trusted sources, including survivors and community leaders, instead of it being an 'add-on' or afterthought (Chatelet and Sattler, 2019). Lessons from the Ebola Outbreak response show that the predominance of top-down communication in the early stage of the response sidelined community engagement as a critical operational tool (Arevalo, 2019). As a result, Ebola messaging and response strategies often failed to meet the needs of and realities confronting affected populations.

To enable practices to reduce transmission, and to triage at the community level, humanitarian responders need to move beyond a traditional health-facility-focused response. Community-level efforts should account for language, cultural and social factors around risk perception and risk management, and follow good principles followed in other COVID-19 responses (Zhang et al., 2020).

'Community' should be defined broadly and may include the following actors and networks:

- women's groups and their leaders
- faith-based groups and their leaders
- business leaders and wealthy communities
- community representatives (e.g. refugee representatives in camps)
- youth groups and youth mobilisers
- elders (e.g. Shura councils in Afghanistan)
- community health workers and volunteers
- grassroots organisations
- local authorities including police
- survivors of COVID-19 (see Action 10)
- diaspora
- other key community members identified in impact and capacity assessments (Action 1)

Many tools can be employed to communicate risk information to communities. However, lessons from the Ebola response show that the communications strategy for the content and frequency of messages to

communities needs to be carefully considered, otherwise they may have the opposite intended effect. Take, for example, the messaging around bushmeat. Properly cooked bushmeat is not a threat to health, and while zoonotic transmission of Ebola may have been responsible for 'Patient Zero', the subsequent transmission to more than 27,000 people was human to human. Beyond scaremongering and obfuscation, DuBois et al. (2015) found that some early messages in the Ebola response risked 'leading communities to believe that avoiding bush meat was more important than not touching dead bodies'. Overly negative messaging can increase stigma, deter people from reporting symptoms and seeking treatment, and steer people away from health facilities and towards traditional healers or their families (where they may infect vulnerable relatives).

Health-facility level

In low-resource settings, humanitarian actors should ensure that essential non-COVID-19 services can be sustained safely and then assess whether the facility is adapted and resourced for COVID-19 case management, according to the different categories of severity (e.g. critical, severe, mild) (Wu and McGoogan, 2020). In most cases, health facilities will not be able to care for critical cases and may need to be designated only for mild and moderate cases, and possibly for severe cases, if oxygen treatment can be guaranteed.

Efforts by humanitarian actors to prepare health facilities should include the following five steps:

1. **Preparing the clinic**, including:
   - conducting health-facility assessments to measure health facilities' level of readiness and taking action based on the analysis of the assessment
   - establishing a triage protocol
   - assessing bed availability and capacity for both critical care provision, where possible, and essential routine services (see Action 1; WHO, 2020c). At a minimum, oxygen needs to be available for all cases of COVID-19 requiring hospitalisation
   - sharing among health workers and support staff knowledge about COVID-19 guidance and protocols (Action 2)
   - sharing key information to enable communication (e.g. contact details and functions of key health-system actors)
   - ensuring enough consumables, drugs, equipment, IEC supplies, etc., in particular PPE and oxygen sources (Action 6).
2. **Preparing both medical and non-medical health facility staff**, which should include providing rapid training on relevant protocols for infection prevention and control (IPC), personal protective equipment (PPE) and clinical care for COVID-19 (Action 2); and rehearsing safe triage processes (Action 14).

3. **Communicating with patients**, which should include providing signage about preventive measures at health facility entrances and in waiting areas.
4. **Preparing the waiting area(s) and consulting rooms** for both COVID-19 cases and other essential prioritised health services. For example, this should include:
    - having sufficient hand sanitiser or hand-washing stations available in waiting rooms
    - ensuring chairs are 2 metres apart or marking 2-metre intervals on benches to indicate to people how far apart they should sit
    - opening all doors and windows to ensure rooms are well-ventilated
    - ensuring that all patients' beds are placed at least one metre apart regardless of whether they are suspected COVID-19 cases.

    COVID-19 cases will need to be isolated and cared for separately according to their lab status and/or severity. Suspected cases must be identified as early as possible upon a person's arrival at any health facility (see Action 14).
5. **Prepare an isolation room or area** for those patients with suspected COVID-19 who require referral or transport to a facility at the next health-system level (see Action 14).

COVID-19 patient care units. Photo credit: Flickr/ New York National Guard

Key resources

Community level

- UN Women and Translators without Borders. (2020) *COVID-19: how to include marginalized and vulnerable people in risk communication and community engagement*. Risk Communication and Community Engagement Working Group on COVID-19. (https://reliefweb.int/sites/reliefweb.int/files/resources/COVID-19_CommunityEngagement_130320.pdf).
- PAHO/WHO. (2020) COVID-19 guidelines for communicating about coronavirus disease 2019: a guide for leaders. Washington DC: PAHO. (https://www.paho.org/en/documents/covid-19-guidelines-communicating-about-coronavirus-disease-2019-guide-leaders).
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Facility level

- Options Consultancy Services and CERAHGENEVE – Geneva Centre for Education and Research in Humanitarian Action. (2020) COVID-19 health facility assessment for primary health care facilities [version 03 April 2020]. Geneva: CERAHGENEVE. (https://www.cerahgeneve.ch/resources/covid-19-response-tools).
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ACTION 5

Prioritise people, money, essential services, and goods

Together, governments and humanitarian organisations need to conduct a prioritisation exercise that looks across several criteria, including life-saving health interventions, protection of patients and staff, equity and ethical issues. The result of this prioritisation will determine which interventions should continue, be adapted or postponed. This will also dictate how existing resources can be allocated to the COVID-19 response.

Human resources planning

Evidence from the COVID-19 response and from previous epidemics suggests that the virus will negatively impact response staffing due to health workers and key support staff falling ill, suffering from higher mortality rates compared to the general population and having increased caring duties, and due to travel restrictions and quarantine measures, which prevent the deployment of expatriates (DuBois et al., 2015). **Staffing options and needs based on different scenarios should from the outset be written into protocols and shared widely with all actors involved in the response, from the local to international levels**.

Given resources and capacities are extremely constrained, humanitarian actors should not support unrealistic plans to scale up case management. Instead, key actions for humanitarian actors should include:

- working to strengthen frontline- and support-staff capacity and skills, including refresher trainings on core competencies and trainings specific to COVID-19
- helping to equip all cadres of staff with a minimal level of equipment (e.g. PPE); a place from which to work; and a working telephone or mobile phone number
- ensuring that human resources are mobilised to focus on prevention and working with communities (Mor, 2020).

> **"Lessons learned from several previous outbreaks and epidemics underscore the importance of coordinated action on procurement and logistical issues."**

Financial resources planning

Humanitarian actors will also need to prioritise from the start of the response flexible financial resourcing. Based on evidence from previous outbreaks, it is unlikely that all requested funds will be available, and there is potential for funding cuts from Global North countries as they deal with their own COVID-19 responses. Moreover, as the pandemic is global, it is challenging for donors to prioritise their support. Key actions for humanitarian actors should include:

- assessing COVID-19-related funding needs in line with potential scenarios (Action 2)
- assessing the impact of COVID-19 on the existing financial base
- agreeing flexible funding arrangements across donors (including governments), with particular attention on how to:
  - repurpose or redirect existing healthcare investments where essential
  - negotiate blanket waivers, extensions, etc. to reduce administrative workload
  - make funds available to finance large-scale, locally led efforts.

Essential services planning

See Box 1 in Action 2.

Pre-positioning and negotiating supply chains and goods

Lessons learned from several previous outbreaks and epidemics underscore the importance of coordinated action on procurement and logistical issues. The WHO has developed the COVID-19 Essential Supplies Forecasting Tool (ESFT) to help governments, partners and other stakeholders to estimate requirements for essential supplies needed to respond to the current pandemic (WHO, 2020e).

However, the systematic closure of borders and airports to prevent the spread of COVID-19 is preventing or delaying the supply of several essential goods, such as medicines, PPE, oxygen concentrators and mechanical ventilators.

Another significant problem with supply of essential goods is that it is not managed globally, and is experiencing additional pressure given demand around the world; both production and stocks are being managed at national levels, which means that some countries will always be at a disadvantage. And although local production of some basic PPE (such as surgical gowns or face masks) may be possible, local production of cartridges for diagnostic GeneXpert® machines will not be possible due to legal issues. Given the scarcity of essential equipment in many resource-constrained settings, alternative mechanisms will need to be found for the provision of supplies.

Humanitarian actors both at country and at global level should take the following actions to support the procurement and distribution of consumables, medicines and equipment:

- Develop priority resource lists (which can be adapted from existing lists) for both COVID-19 and essential health activities, ensuring that resource planning is coordinated with the overall response
- Assess essential consumables, medicines and equipment, medicine and needs and stocks, and undertake gap analysis, particularly in relation to:
  - ventilators
  - oxygen
  - WASH supplies
  - energy (including the stability and continuity of power supplies)
  - supplies for maintaining or adapting essential health services.
- International humanitarian organisations should pre-position relevant consumables, medicines and equipment by negotiating with relevant actors (e.g. government officials in charge of national medical stores, the United Nations Population Fund for reproductive health kits containing contraception and essential supplies for safe deliveries and relevant businesses for PPE)
- Engage with suppliers and pharmacies (both public and private) to allow dynamic inventory assessment and coordinated redistribution according to need
- Determine logistics contingency plans in the event of future restrictions to people's movements and disruptions to travel and supply chains (e.g. identifying alternative supplies, boosting or creating regional and local production)
- Negotiate and secure movement exemptions for essential goods and responders
- Encourage and capitalise on reverse or frugal innovations, ensuring that some funding is earmarked for them.

Key resources

- Humanitarian Advisory Group. (2020) *In case of emergency: system-wide response in the era of COVID-19*. Melbourne: Humanitarian Advisory Group. (https://humanitarianadvisorygroup.org/wp-content/uploads/2020/03/HAG_COVID19ThinkPiece_March2020_FINAL.pdf).
- IASC. (2020b) *Flexible funding for humanitarian response and COVID-19: interim key messages*. Geneva: IASC. (https://interagencystandingcommittee.org/iasc-task-team-humanitarian-financing/interim-key-messages-flexible-funding-humanitarian-response).
- WHO. (2020e) WHO COVID-19 Essential Supplies Forecasting Tool (ESFT). Geneva: WHO. (www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/covid-19-critical-items?mc_cid=b6c6054319&mc_eid=5b4b5dadee).

ACTION 6

Ensure that PPE for health workers and support staff is available

PPE is the most important tool to prevent the transmission of COVID-19 from patients to health workers and support staff, and vice versa. Hundreds of healthcare workers died during the Ebola Outbreak in West Africa because of lacking and suboptimal use of PPE, and the same is already happening across the developed world amid the COVID-19 Pandemic.

Pre-positioning PPE stock and establishing and communicating protocols for why, when and how to use it are essential in the context of the COVID-19 Pandemic. Also crucial is training healthcare workers and support staff **prior to, or at the very early onset of the outbreak** to use PPE correctly (Lockhart et al., 2020).

The surge capacity of healthcare workers and support staff requiring PPE should be assessed to estimate PPE needs (WHO, 2014). The list of individuals requiring PPE for COVID-19 includes, but is not limited to:

- all suspected or confirmed COVID-19 patients during triage and when undergoing evaluation
- healthcare workers and caregivers who work with suspected cases of COVID-19, staff who screen newcomers at entry points and ambulance drivers
- all support staff who clean rooms or areas used by patients with suspected or confirmed COVID-19
- all laboratory staff who handle patient specimens and body fluids
- safe burial teams who remove bodies of people suspected with COVID-19
- first responders to and visitors of people suspected with COVID-19 (ECDC, 2020; WHO, 2020f).

Shortages of PPE for COVID-19 have been observed all over the world. Where possible, international humanitarian actors should attempt to manage PPE stock globally (Action 5). Regional or local production of PPE should be supported and boosted to reduce risks of shortage of PPE at crucial times, and protocols should promote the rational use of PPE based on available evidence including WHO guidance (WHO, 2020f).

Key resources

- WHO. (2020f) *Rational use of personal protective equipment for coronavirus disease (COVID-19) and considerations during severe shortages*. Geneva: WHO. (www.who.int/publications-detail/rational-use-of-personal-protective-equipment-for-coronavirus-disease-(covid-19)-and-considerations-during-severe-shortages).
- WHO. (2020g) Clinical care for severe acute respiratory infection: toolkit – COVID-19 adaptation. Geneva: WHO: 40–41. (https://apps.who.int/iris/handle/10665/331736).
- Nigeria PHCDA. (2020) *Preparedness and response to coronavirus disease 2019 (COVID-19) at primary healthcare and community level*. Lagos: National Primary Health Care Development Agency, Government of Nigeria: 21–23. (www.humanitarianresponse.info/en/operations/nigeria/document/national-primary-health-care-development-agency-preparedness-and).

Inside the registration room of the Sambhavna Clinic. Photo credit: Biju Nair, The Bhopal Medical Appeal

C. Strengthening detection

ACTION 7

Prioritise syndromic facility-based surveillance

Lessons learned from SARS and Ebola show that when surveillance is instituted promptly, rapidly, and effectively, it enables the timely recognition of disease emergence and is an important factor in breaking chains of transmission. Evidence also shows that ineffective surveillance led to initial delays in detecting and reporting SARS and Ebola, and significantly increased their spread and impacts.

For COVID-19, it is primarily important to know where each setting is in the epidemic curve (the statistical charting of an epidemic's onset and progress), so in resource-constrained settings **syndromic surveillance** within health facilities will likely be sufficient. Syndromic surveillance is the continual and systematic collection and analysis of data related to population and individual health indicators. In settings where there are sufficient resources and capacities to collect, and more importantly, analyse data and to act on its findings, humanitarian actors should rely primarily on information from communities, either by putting in place or building on existing surveillance systems. They will also have to be integrated with routine facility-based systems to inform decision-making (Ramalingam, 2016).

An important part of surveillance is contact tracing – identifying anyone who has come into close contact with a person who has tested positive for the disease. While this can be implemented in different ways in different settings, it is important to note that it is not being fully utilised even in many high-income countries because it is very resource intensive. As noted by the Africa Centres for Disease Control and Prevention: 'given the speed of transmission of COVID-19, the number of contacts requiring follow-up can be expected to increase rapidly if sustained community transmission occurs' (Africa CDC, 2020b). Contact tracing in the way it would need to be implemented in humanitarian settings (e.g. manually compared to digitally in South Korea) is resource intensive and at a certain point may no longer contribute enough to effective epidemic control to justify the resources required.

Attempting to follow up all contacts can jeopardise the quality of contact tracing and divert resources away from other interventions. In many humanitarian settings, it will simply not be possible to use effective approaches. In addition to being calibrated to the level of resources available, any contact tracing efforts would need to be culturally specific and implemented in a way that is acceptable to affected communities (see Action 4).

Key resources

- IFRC. (2017) *Community-based surveillance: guiding principles.* Geneva: IFRC. (https://media.ifrc.org/ifrc/wp-content/uploads/sites/5/2018/03/CommunityBasedSurveillance_Global-LR.pdf).
- WHO Regional Office for Africa. (2014) *Integrated disease surveillance and response in the African Region: a guide for establishing community-based surveillance*. Brazzaville: WHO Regional Office for Africa. (www.afro.who.int/sites/default/files/2017-06/a-guide-for-establishing-community-based-surveillance-102014_0.pdf).
- WHO. (2020g) *Household transmission investigation protocol for 2019-novel coronavirus (2019-nCoV) infection.* Geneva: WHO. (www.who.int/publications-detail/household-transmission-investigation-protocol-for-2019-novel-coronavirus-(2019-ncov)-infection).

ACTION 8

Adapt the testing approach to transmission scenarios and testing capacity

Testing can help determine how widespread infection is, identify risk groups and transmission patterns, anticipate next steps and guide the planning and development of appropriate strategies. Testing approaches should be **context dependent**:

- In contexts with few or no cases, testing should inform containment strategies and, where feasible, facilitate contact tracing. People who have symptoms can be safely and rapidly isolated to prevent further spread.
- In contexts with widespread transmission and in the later phases of the outbreak, polymerase chain reaction (PCR) testing could help identify and stop emerging clusters (e.g. in refugee or internally displaced person camps) and take necessary action.

However, past experience shows that testing is unlikely to be a sustainable and feasible strategy in many humanitarian settings due to limited public health, laboratory and primary health care services (Poole et al., 2020) and due to the lack internationally of available testing supplies. Testing approaches should therefore also be **adapted to testing capacity**. Most laboratories are based in capital cities and will be unable to cope with analysing samples from urban residents, let alone those from the rest of the country. Given the changing research and development landscape for the COVID-19 response, it is to be hoped that new, less resource-intensive tests will eventually be integrated into the humanitarian response.

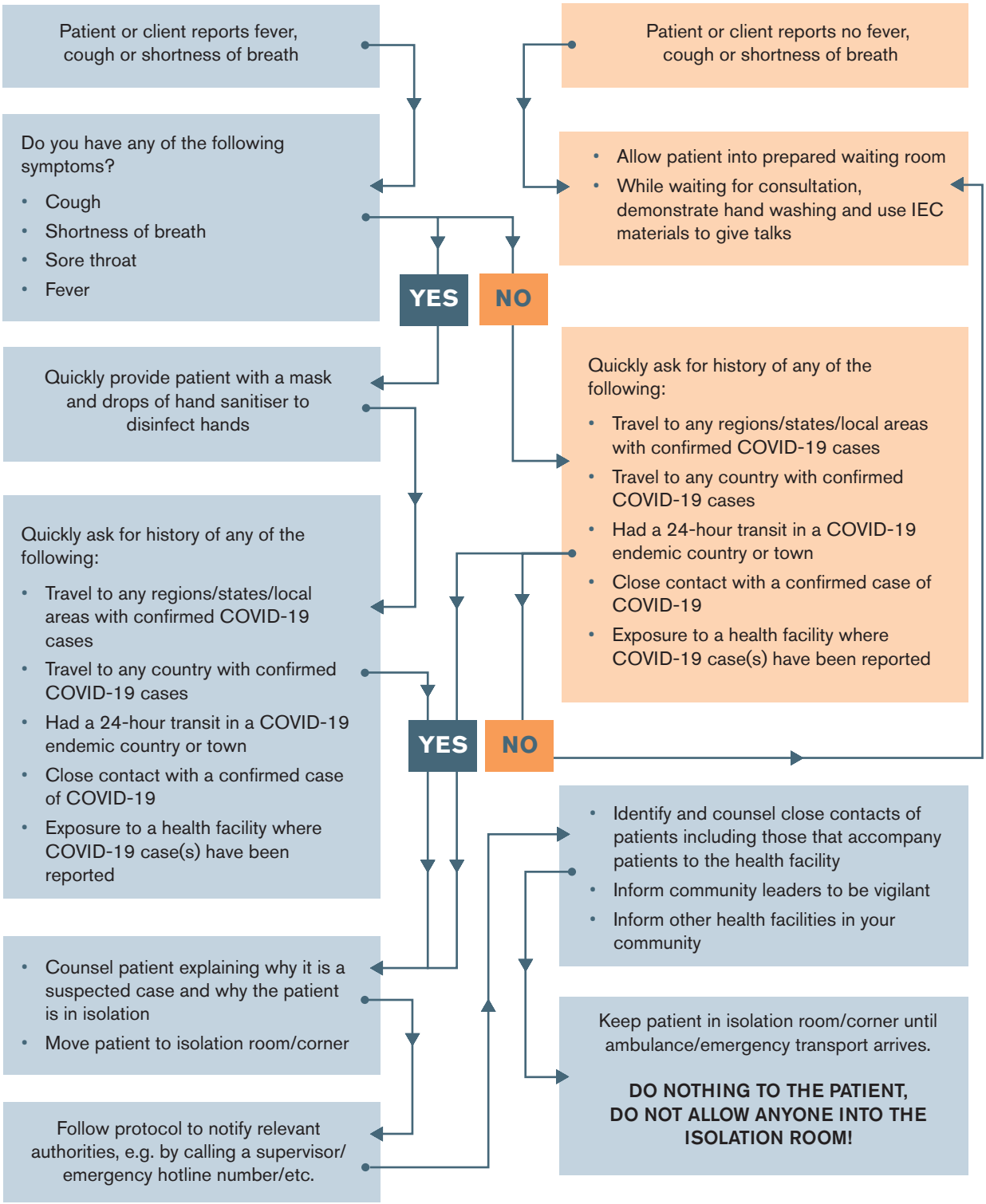
There is no evidence to date for an appropriate or 'good enough' alternative to testing for COVID-19 in low-resource settings. However, a number of workarounds are already being employed, including triage

based on clinical case definition or presumptive diagnosis (Hopman et al., 2020). For example, the Nigeria Centre for Disease Control has developed a flow chart to help health workers assess patients presenting with COVID-19 symptoms when they arrive at the health facility (Figure 1; Nigeria PHCDA, 2020). This is specific to the Nigerian context – and includes reference to isolation rooms, local and national hotlines, ambulance systems, testing facilities and laboratory capacity. However, similar flowcharts can be developed for different settings, based on existing capacity and resource levels.

Key resources

- WHO. (2020h) *Laboratory testing strategy recommendations for COVID-19: interim guidance [21 March]*. Geneva: WHO. (https://apps.who.int/iris/bitstream/handle/10665/331509/WHO-COVID-19-lab_testing-2020.1-eng.pdf).
- Nigeria PHCDA. (2020) *Preparedness and response to coronavirus disease 2019 (COVID-19) at primary healthcare and community level*. Lagos: National Primary Health Care Development Agency, Government of Nigeria: 21–23. (www.humanitarianresponse.info/en/operations/nigeria/document/national-primary-health-care-development-agency-preparedness-and).
- WHO. (2020g) *Household transmission investigation protocol for 2019-novel coronavirus (2019-nCoV) infection*. Geneva: WHO. (www.who.int/publications-detail/household-transmission-investigation-protocol-for-2019-novel-coronavirus-(2019-ncov)-infection).

Figure 1: Flow chart for health worker assessment of patients presenting with COVID-19 symptoms at health facility



Source: Adapted from Nigeria's preparedness and response plan (Nigeria PHCDA, 2020).

D. Investing in prevention

ACTION 9

Targeting should account for and support the most vulnerable groups

A key first step to targeting the response is to identify populations at risk of severe illness from COVID-19 due to underlying conditions. Humanitarian actors in particular have a two-pronged role to play in targeting vulnerable individuals:

- Identifying and mapping populations vulnerable to COVID-19 (e.g. older people, those with comorbidities (other underlying health conditions), refugees or displaced peoples)
- Identifying the most appropriate channels by which to reach these populations (e.g. via institutional memory, existing relationships with specific groups to which target populations belong – see Actions 5 and 7).

Underlying conditions that make people vulnerable to COVID-19 are likely to be the same globally; however, their prevalence within the population will vary according to context. Moreover, some populations in low-resource settings will not have been diagnosed with or treated for underlying conditions. While some settings with younger demographic profiles could potentially see a lower rate of severe COVID-19 cases due to their age, compared with upper-middle and high-income countries with older populations, the poor overall health status of populations in humanitarian settings (because of, e.g., malnutrition, tuberculosis and HIV/AIDS) could cause more severe cases (Truelove et al., 2020).

Accordingly, humanitarian actors should identify and target vulnerable populations as defined by Favas et al. (2020) in Table 2. Targeting approaches should be developed by working closely with health facilities, social services and community leaders.

"Poor overall health status of populations in humanitarian settings (because of, e.g., malnutrition, tuberculosis and HIV/AIDS) could cause more severe cases."

Table 2: Definitions of populations vulnerable to COVID-19 as at 31 March 2020

Category	Inclusion criteria
Age	60 years and above
Non-communicable diseases	Hypertension; diabetes; cardiovascular disease; chronic respiratory diseases (e.g. chronic obstructive pulmonary disease and asthma); chronic kidney disease; cancer (leukaemia, lymphoma or myeloma; or currently or recently undergoing chemotherapy treatment for any cancer type)
HIV/AIDS	Known HIV-positive status
Tuberculosis	Recent diagnosis of tuberculosis disease and/or currently undergoing treatment for tuberculosis
Pregnancy	▪ Pregnant women identified as acutely malnourished ▪ Pregnant women with any of the other conditions listed in this table
Other immune-deficiency conditions	▪ Severe immunodeficiency diseases ▪ Sickle cell disease (excluding sickle cell trait) ▪ On immunosuppressive treatment for any other reason
Other chronic conditions	▪ Hepatitis B infection ▪ Hepatitis C infection

Source: Adapted from Favas et al. (2020).

ACTION 10

Employ containment approaches to reduce transmission

In the absence of any vaccine or proven effective treatment for COVID-19, a key strategy for reducing transmission, mortality and pressure on the health system is to reduce mixing COVID-19 suspected and confirmed cases with non-infected individuals.

Many high-income countries have implemented a combination of self-isolation, quarantine, social distancing (also known as physical distancing) and community containment (e.g. mass 'stay-at-home' strategies) with varying degrees of success in reducing the spread of the virus (Flaxman et al., 2020). However, these measures are unlikely to be feasible in many humanitarian settings (Dahab et al., 2020) and are also unlikely to reach sufficiently high levels of compliance to reduce community transmission, especially in places where it will threaten people's livelihoods.

Given these limitations, humanitarian actors have already started experimenting with a range of context-specific approaches. These are summarised as follows under the headings: social distancing approaches; shielding approaches; and evacuation approaches.

Social distancing

In many settings, social distancing – that is keeping two metres (6 feet) of distance between people – is not possible, given that space is a luxury few can afford (Lau et al., 2020). The Inter-Agency Standing Committee (IASC) guidance for COVID-19 readiness and response operations in humanitarian situations suggests the following actions for implementing social distancing in refugee camps or informal settlements (IASC, 2020a):

- conduct risk assessment to determine the characteristics of the site which may act as amplifiers of transmission
- map areas which are most at risk (e.g. areas where people live in overcrowded conditions or that have a higher proportion of vulnerable populations)
- wherever possible, implement mitigation measures to reduce overcrowding, for example painting crosses demarcating social distancing in queues for water pumps, village wells, shops, and market stalls
- provide additional social and economic assistance on site (e.g. food, cash and other distributions; services for registration or enrolment in assistance programmes; and education services), and switch to remote assistance where possible (e.g. mobile cash) to prevent large gatherings and movements of people.

These actions will be contingent on having enough human and financial resources, and strong multisectoral coordination and governance.

Shielding approaches

In settings where social distancing or self-isolation is not feasible, creative solutions will need to be implemented to protect vulnerable populations (see Table 2, Action 9). Dahab et al. (2020) have recommended taking a '**shielding' approach**', defined as a more targeted approach of specifically preventing infections among groups at high risk of COVID-19 mortality.

Favas et al. (2020) recommend the following actions to implement the shielding approach set out by Dahab et al (2020):

- **Create 'green zones'** – that is, dedicated areas at the household, neighbourhood or camp level to which vulnerable individuals (Action 9) are temporarily relocated and have minimal contact with family members and other camp residents at lower risk of severe disease (Figure 2). Shielding should never be imposed; rather actors should assess its feasibility by consulting communities in each context.
- **Coordinate with relevant sectors** to ensure appropriate living conditions and access to basic services and social care for shielded residents (see Action 13).
- **Create social care committees**, composed of representatives from the families of vulnerable individuals being shielded, to facilitate acceptance of and adherence to the shielding measures.
- **Ensure that shielded vulnerable persons do not leave the defined 'green zone'.** Those shielded at home can be cared for by designated family members, friends, care workers or local groups of volunteers.

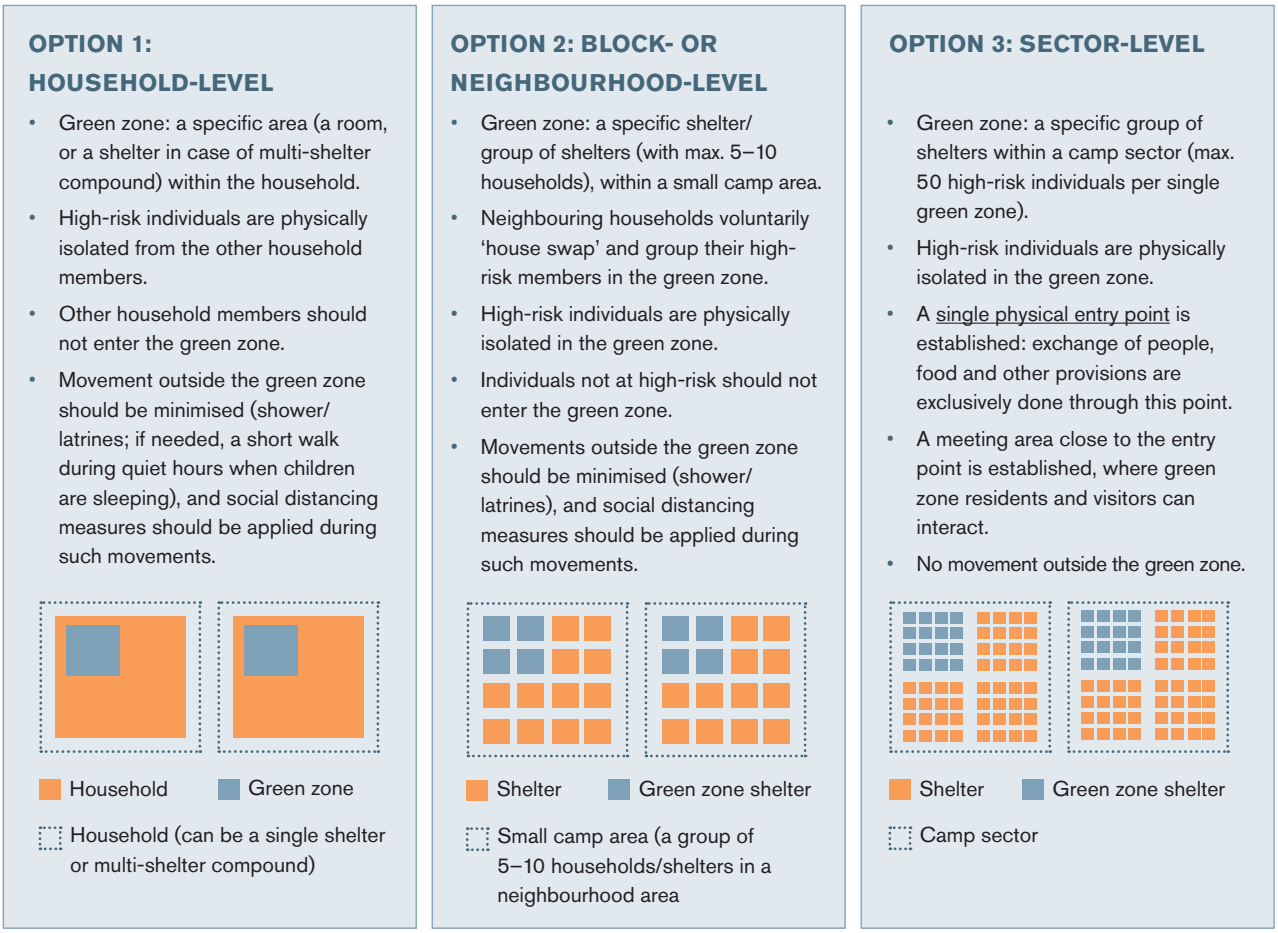
Those shielding at neighbourhood or sector level (Figure 2) should care for each other to minimise contact with people from outside the 'green zone'.

It should be noted that evidence on this approach's effectiveness to date is limited to a study conducted by researchers who modelled the impact of this intervention, along with other containment strategies, on the COVID-19 burden in African countries. They found that:

> **Shielding of high-risk individuals can reduce health service demand and, even more markedly, mortality if it features high uptake and low contact of shielded and unshielded people, with no increase in contact among shielded people. (van Zandvoort et al., 2020).**

The researchers recommended that strategies combining self-isolation, moderate physical distancing and shielding will likely achieve substantial reductions in mortality in African countries. However, this approach is contingent on populations being supported socially and economically.

Figure 2: Housing arrangements for each shielding option



Source: Favas et al. (2020).

Evacuation approaches

In some settings, partial or complete evacuations of refugee camps, detention centres, high-risk informal settlements and provision of more adequate shelter and housing may be the only solution, even if not politically expedient. Humanitarian actors should work with relevant actors to advocate for major changes to the organisation and location of the most vulnerable groups (e.g. evacuating camps and releasing prisoners or rehousing slum residents) while ensuring that their basic needs and dignities continue to be met.

Key resources

- Africa CDC. (2020c) Guidance on community social distancing during COVID-19 outbreak. 17 March 2020. Africa CDC. (https://africacdc.org/download/guidance-on-community-social-distancing-during-covid-19-outbreak).
- Dahab, M. et al. (2020) 'COVID-19 control in low-income settings and displaced populations: what can realistically be done?'. LSHTM, 20 March 2020. (www.lshtm.ac.uk/newsevents/news/2020/covid-19-control-low-income-settings-and-displaced-populations-what-can).
- Favas, C. et al. (2020) *Guidance for the prevention of COVID-19 infection among high-risk individuals in camps and camp-like settings*. London: London School of Hygiene & Tropical Medicine. (www.lshtm.ac.uk/sites/default/files/2020-04/Guidance%20for%20the%20prevention%20of%20COVID-19%20infections%20among%20high-risk%20individuals%20in%20camps%20and%20camp-like%20settings.pdf).
- IASC. (2020a) Interim guidance: scaling-up COVID-19 outbreak readiness and response operations in humanitarian situations including camps and camp-like settings [version 1.1]. Geneva: IASC. (https://interagencystandingcommittee.org/other/interim-guidance-scaling-covid-19-outbreak-readiness-and-response-operations-camps-and-camp).

ACTION 11

Support socially and economically sensitive approaches to quarantine and isolation

When shielding, quarantine, or self-isolation measures are put in place for affected populations, humanitarian actors should work to mitigate other adverse effects. Such containment interventions are likely to have adverse socioeconomic impacts on individuals and their households.

Containment strategies undertaken or supported by humanitarian organisations and their partners needs to be clearly grounded in social and cultural contexts and be sensitive to existing economic inequities and vulnerabilities. Additionally, it will also be important for humanitarian actors to consider the needs of people with disabilities, young children, pregnant and lactating mothers, and those with special dietary needs.

Key resources

- WHO. (2020i) *Considerations for quarantine of individuals in the context of containment for coronavirus disease (COVID-19*). Geneva: WHO. (www.who.int/publications-detail/considerations-for-quarantine-of-individuals-in-the-context-of-containment-for-coronavirus-disease-(COVID-19)).
- WHO. (2020j) *Home care for patients with COVID-19 presenting with mild symptoms and management of their contacts.* Geneva: WHO. (www.who.int/publications-detail/home-care-for-patients-with-suspected-novel-coronavirus-(ncov)-infection-presenting-with-mild-symptoms-and-management-of-contacts).

ACTION 12

Implement WASH interventions for effective infection prevention and control

Better WASH practices can be achieved through behaviour-change interventions, with the main areas of focus for humanitarian actors being **communities and healthcare facilities**. In addition to COVID-19-specific WASH programming, efforts need to ensure **continuity of existing WASH services and infrastructure** (see Box 3).

> **"To improve the community's acceptance of such measures, humanitarian organisations should dedicate resources to WASH communications campaigns."**

Box 4: Critical COVID-19 WASH activities for humanitarian contexts

Think 'outside the box' of traditional top-down solutions to mobilise bottom-up and other creative solutions (e.g. subsidising water and soap through private providers).

- Undertake COVID-19 WASH coordination and planning with WASH partners to maximise WASH service continuity and ensure a clear division of labour to reduce duplication of effort.
- Pre-position essential WASH supplies.
- Provide health workers and all relevant staff including WASH staff (e.g. pump operators, technicians, waste management staff) with handwashing supplies and PPE.
- Identify backup WASH staff to ensure critical job redundancy.
- Distribute WASH non-food items via non-contact methods.
- When resources for WASH interventions are limited, prioritise supplies to 'green zones' shielding vulnerable groups (Action 10).
- Adapt communal WASH facilities with social distancing measures, for example by increasing pumping operation times to reduce queuing or marking social distance intervals at communal water points and toilets.
- Ensure WASH facilities are available in areas dedicated to quarantine or isolation.

Source: UNHCR (2020).

WASH-related IPC in communities

Experience from the Ebola Outbreak shows that certain forms of hand hygiene (e.g. frequent handwashing; avoiding shaking hands with others; and avoiding touching eyes, nose and mouth with unwashed hands) can be readily and easily accepted by different communities.

There are many settings in which access to water and soap is limited, so their frequent use is challenging. In this regard, the evidence suggests three measures: (1) expanding water tank provision; (2) providing more handwashing stations; and (3) distribution of alcohol-based hand rubs, which can be produced locally. As a last resort, chlorine solutions could be used, although measures should be taken to ensure that these are prepared in safe ways to reduce potential toxic risks.

To improve the community's acceptance of such measures, **humanitarian organisations should dedicate resources to WASH communications campaigns** (see Action 4). In the COVID-19 response in Cox's Bazar, Bangladesh, the United Nations High Commissioner for Refugees has started installing portable handwashing facilities at every community centre and has developed a managed roll-out of information in the three languages spoken in the camp in line with WHO public guidance.

Teaching hygiene practices to prevent the spread of COVID-19 in Somalia. Photo credit: Trócaire.

WASH-related IPC in healthcare facilities

The WHO has defined an approach called 'My 5 Moments for Hand Hygiene', which outlines when healthcare workers should clean their hands (WHO, n.d.). The five moments are:

- before touching a patient
- before clean/aseptic procedures
- after body fluid exposure/risk (including after touching PPE, e.g. adjusting a mask)
- after touching a patient
- after touching patient surroundings.

Building on these, there are a number of key recommendations for WASH in healthcare facilities as a whole:

- Ensure that staff and patients have separate toilets, and, where possible, COVID-19 patients should have separate toilets.
- Ensure that all patients and healthcare workers have knowledge of and apply strictly respiratory hygiene.
- Ensure supplies of safe water, soap or alcohol-based hand rub in adequate quantity and sanitation services at all times, ensure handwashing station or alcohol-based hand rub is positioned in each care room.
- Ensure adequate and regular supplies of PPE for staff (medical masks, goggles or face shield, long-sleeve gown, gloves), and ensure staff are trained to properly use PPE.
- Ensure adequate supplies of detergent (such as sodium hypochlorite) and ensure that environmental cleaning and disinfection procedures are followed consistently and correctly.

E. Enhancing case management

ACTION 13

Adapt health facilities and protocols

Whereas Action 4 and Action 5 describe actions for humanitarian actors to take in preparing key staff and health facilities for the COVID-19 response, this Action focuses on how to organise the *delivery* of care for suspected or confirmed COVID-19 cases. Detailed clinical guidance is not summarised in this Action but can be found in the key resources listed at the end of the section.

This section sets out actions for two distinct scenarios that humanitarian actors may face, to enable them to organise the delivery of timely and quality care for suspected and confirmed COVID-19 patients in humanitarian settings.

- Facility scenario A: Individual patients coming to the facility
- Facility scenario B: Simultaneous influx of many patients to the facility

Note that these actions are based on WHO guidance for low- and middle-income countries (WHO, 2020k; Nigeria PHCDA, 2020), and will need to be further tailored to each setting depending on the agreed strategies for containment (Action 11 and Action 12) and testing (Action 8).

Facility scenario A: Individual patients coming to the facility

- Implement the established triage system (Action 4), for example by positioning at least one designated health facility staff member (a point person) at the facility entrance to ensure that patients are screened for symptoms before entering the facility and to enforce social distancing measures. This person should be stationed outdoors if weather and facility layout permits.
- In many humanitarian settings, this point person could be a community volunteer.
  - Ensure that health workers and volunteers put on the appropriate PPE before attending to any patient.
  - Maintain at least one arm's-length distance from patients and ensure that other patients waiting to be assessed maintain ideally at least 2 metres (6 feet) between each other, or at minimum, an arm's-length distance.
- Use an infrared thermometer (where available) to quickly measure the temperature of every patient before allowing them entry to the facility.
- Ask all patients about whether they have or are experiencing respiratory symptoms including cough, shortness of breath and a sore throat, and systemic symptoms such as body aches or chills.
- Triage to identify patients with fever, cough or shortness of breath, and follow instructions set out at the end of this section, under 'Dealing with patients with fever and/or respiratory symptoms'.

Facility scenario B: Simultaneous influx of many patients to the facility (e.g. for antenatal care)

- Implement the established triage system (Action 4), for example by positioning at least one health facility staff member (a point person) at the facility entrance to gather all patients in one waiting area, ensuring a social distance of 2 metres (6 feet) between patients or, if this is not possible, at least one arm's-length distance. This person should be stationed outdoors if weather and facility layout permits.
  - In many humanitarian settings, this point person could be a community volunteer or community health worker linked to the health facility.
  - Ensure that health workers and volunteers put on the appropriate PPE before attending to any patient.
- Quickly measure all patients' temperature using (where available) an infrared thermometer.
- At least one designated health facility staff member (e.g. community volunteer or community health worker) should ask all patients about whether they have or are experiencing respiratory symptoms including cough, shortness of breath and a sore throat, and systemic symptoms such as body aches or chills.
- Separate patients with fever and respiratory symptoms from other patients without symptoms.
- Keep patients with symptoms in a separate waiting room from those without symptoms. Ensure that all patients maintain ideally at least 2 metres (6 feet) away from each other or, if this is not possible, at a minimum, an arm's-length distance.
- Follow instructions set out at the end of this section, under 'Dealing with patients with fever and/or respiratory symptoms'.

Dealing with patients with fever and/or respiratory symptoms

For both scenarios A and B, the subsequent guidance should be followed when dealing with **patients with fever and/or respiratory symptoms**:

- Ask about travel history, close contact with a confirmed case or exposure to a health facility in which COVID-19 has been reported (refer to case definition in agreed protocols).
- Ascertain if patient meets the case definition for suspected case of COVID-19 and follow specified procedures for notifying relevant authorities and stakeholders as outlined in agreed protocols.
- Counsel patient and explain to them why they are a suspected case and why the containment strategy in this setting (e.g. isolation/quarantine/social distancing) is critical; and provide them guidance on how to access critical social and economic assistance if following an isolation or quarantine strategy. If tolerated, ask them to wear a mask (if masks are available).

- In line with agreed protocols, keep suspected cases that qualify for testing (if testing is being done on site) and/or cases that qualify for further treatment in isolation in a room or corner space (if available) within the facility or designated isolated area (e.g. outdoor space, school or other empty building). If the patient needs to be sent off site for testing and/or treatment, they should remain in isolation until an ambulance or other transportation arrives. Do nothing to the patient and do not allow anyone in the isolation room or area to come in close contact.
- Refer to and support the transportation of suspected COVID-19 cases to the nearest testing or treatment centre.
- Immediately after a suspected case leaves the isolation area, clean with disinfectant (e.g. by adding 50 millilitres of bleaching agent to 4 litres of water) surfaces that are within 6 feet of where the patient was kept.
- Items that cannot be disinfected, such as magazines and other paper materials, should be disposed of. This is in addition to the regular (frequent) baseline cleaning and disinfection process that should be occurring for the entire waiting area (see Action 12).
- If a patient tests positive for COVID-19, follow the agreed protocol for contact tracing, if this is a feasible action that can be prioritised in the setting (see Action 7).

Key resources

- WHO. (2020l) *Operational considerations for case management of COVID-19 in health facility and community: interim guidance [19 March 2020]*. Geneva: WHO: 7–8. (https://apps.who.int/iris/bitstream/handle/10665/331492/WHO-2019-nCoV-HCF_operations-2020.1-eng.pdf).
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ACTION 14

Deliver appropriate and relevant critical care measures

Data from high-income countries suggest 5% of symptomatic cases will require ventilation or become critical, 15% of patients with 'severe' diagnoses will need oxygen and 80% of cases will be 'mild', requiring basic care at most (Wu and McGoogan, 2020).

Some experts have called for essential emergency and critical care for those patients who do become critically unwell (Lee et al., 2019; Baker et al., 2020; Ismail et al., 2020). Basic interventions for humanitarian actors to implement would include: (1) delivering oxygen to patients lying on their front ('proning'); (2) suction; (3) chest physiotherapy; and (5) appropriate use of antibiotics for bacterial infections to help improve outcomes.

However, it should be noted that an intensive care unit or critical-care-focused model for many humanitarian settings will be extremely challenging to comprehensively implement at the scale that will be needed, given the limited capacities in humanitarian settings in terms of intensive care unit beds, specialist equipment and trained staff.

Key resources

- WHO. (2020g) *Clinical care for severe acute respiratory infection: toolkit – COVID-19 adaptation*. Geneva: WHO. (https://apps.who.int/iris/handle/10665/331736).
- Lee, J.S., Roberts, S.W., Götsch, K., Moeller, U. and Hawryluck, L. (2019) 'Caring for critically ill patients in humanitarian settings'. *American Journal of Respiratory and Critical Care Medicine* 199(5): 572–580. (https://doi.org/10.1164/rccm.201806-1059CP).
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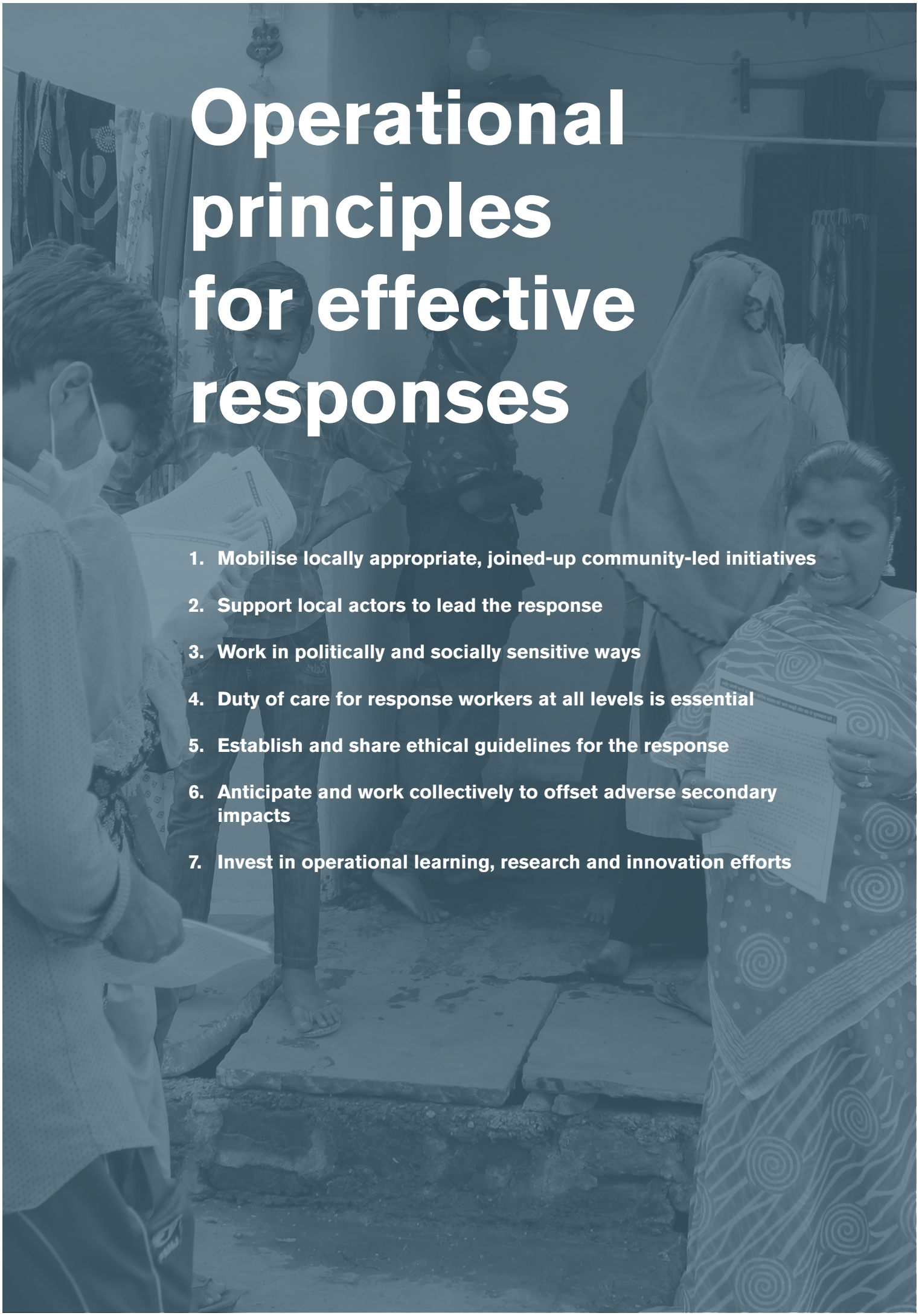

Operational principles for effective responses

1. Mobilise locally appropriate, joined-up community-led initiatives
2. Support local actors to lead the response
3. Work in politically and socially sensitive ways
4. Duty of care for response workers at all levels is essential
5. Establish and share ethical guidelines for the response
6. Anticipate and work collectively to offset adverse secondary impacts
7. Invest in operational learning, research and innovation efforts

Operational principles for effective responses

In addition to humanitarian principles, which need to continue to be the core guiding principles of the COVID-19 response, our analysis and stakeholder consultation suggests seven additional cross-cutting principles that should shape how each of the actions are implemented. These are:

1. Mobilise locally appropriate, joined-up community-led initiatives
2. Support local actors to lead the response
3. Work in politically and socially sensitive ways
4. Duty of care for response workers at all levels is essential
5. Establish and share ethical guidelines for the response
6. Anticipate and work collectively to offset adverse secondary impacts
7. Invest in operational learning, research and innovation efforts

PRINCIPLE 1: MOBILISE LOCALLY APPROPRIATE, JOINED-UP COMMUNITY-LED INITIATIVES

The international humanitarian sector has tended to learn the hard way the lesson about the importance of community engagement – if it has learned it at all. The lessons from the Ebola Outbreak are clear: if international organisations had engaged with communities effectively and from the outset, listening to concerns and considering social and cultural contexts, the response would have been more effective. Evidence shows that communities can understand what is required in epidemic responses and can rapidly learn to change high-risk practices to help to reduce transmission (Laverack and Manoncourt, 2016).

The pressures on international and national capacities mean that **a community-led action, facilitated and enabled by local actors, will be the mainstay of the COVID-19 humanitarian response** –from planning to detection to prevention, and eventually case management (Wellcome, IDS and Anthrologica, 2020). **From the outset, humanitarian actors**

need to combine top-down planning and anticipation with more bottom-up, community-led approaches.

Humanitarians also need to develop and use a **systematic, testable and adaptable approach to support and mobilise communities** from the very beginning. While there are clear and accepted protocols for community involvement in areas such as community management of acute malnutrition and community-led sanitation, there are no such agreed protocols for infectious disease management (Ntumba et al., 2019). The work of the Social Mobilisation Action Consortium, funded by the UK Department for International Development, and the guidance on Community Led Ebola Action is a good starting point (see key resources).

Key resources

- Restless Development. (2014) Community-Led Ebola Action (CLEA): field guide for community mobilisers. London: Restless Development for the Social Mobilisation Action Consortium. (https://restlessdevelopment.org/file/smac-clea-field-manual-pdf).
- Wellcome, IDS and Anthrologica. (2020) *Key considerations: online information, mis- and disinformation in the context of COVID-19*. Social Science in Humanitarian Action Platform (SSHAP). (https://opendocs.ids.ac.uk/opendocs/bitstream/handle/20.500.12413/15178/SSHAP_Brief_Online_Information_COVID-19.pdf?sequence=1&isAllowed=y).

PRINCIPLE 2: SUPPORT LOCAL ACTORS TO LEAD THE RESPONSE

Out of necessity, many COVID-19 strategies and the resulting interventions will have to be staffed, owned and led by actors in and from the national and local level (at least in the short to medium term). This will demand upfront determination of the different roles and functions that will be played respectively by national and local authorities, national and local civil society organisations, international non-governmental organisations, UN agencies and international donors. In those contexts where there is no de facto state actor, this will need to be acknowledged and workarounds developed (ICVA, 2020).

For detection, prevention and case management to be successful, humanitarians will need to **prioritise the harmonising and integrating of efforts between these groups of stakeholders**. This means supporting flexible and anticipatory responses at different levels, simplifying lines of reporting and accountability, and minimising unnecessary bureaucracy (IASC, 2020b). Evidence suggests that for maximal programmatic flexibility, decentralised and highly localised decision-making is key, therefore local and national actors also need to be given the space to take appropriate decisions as situations on the ground change (Campbell and Knox Clarke, 2018).

This poses a challenge to the traditional modus operandi of humanitarian response, whereby relationships between international and national partners function more reactively and in an ad hoc fashion (rather than **being planned and strategic**). For the COVID-19 response to be successful, this needs to change, and quickly. Significant resources must be allocated and channeled to those local organisations that are in the front line of epidemic prevention and response work.

There is a particular need to ensure that local organisations do not become instrumentalised in the COVID-19 responses. Humanitarians might address this in a number of ways, all of which involve **moving from a subcontractor mode of transferring risk to a partnership mode of sharing risks** (Ramalingam et al., 2013). This includes: paying for not only programme activities but also salaries and other institutional functions through reasonable overheads; investing meaningfully in staff capacities, especially for those organisations new to public health work; supporting essential functions such as human resources, financial management, staff medical and psychosocial care; and providing a platform for local actors to have their voices heard at an international level.

Key resources

- A4EP – Alliance for Empowering Partnership. (2020) *Localised response to COVID-19 global pandemic: A4EA position paper*. Dhaka: A4EP. (http://a4ep.net/wp-content/uploads/2020/03/A4EP-COVID_19-position-paper_Final.pdf).
- ICVA – International Council of Voluntary Agencies. (2020) *Reinforce, reinforce, reinforce: localization in the COVID-19 global humanitarian response*. Geneva: ICVA. (www.icvanetwork.org/system/files/versions/ICVA_Localization_COVID19.pdf).
- Ramalingam, B., Gray, B. and Cerruti, G. (2013) *Missed opportunities: the case for strengthening national and local partnership-based humanitarian responses*. London: ActionAid, CAFOD, Christian Aid, Oxfam GB and Tearfund (www.christianaid.org.uk/resources/about-us/missed-opportunities-case-strengthening-national-and-local-partnership-based).

PRINCIPLE 3: WORK IN POLITICALLY AND SOCIALLY SENSITIVE WAYS

Terms such as 'community' and 'local actor' are powerful but also problematic. In the extreme, their unthinking use can lead to strategic and operational oversimplifications and allow humanitarian efforts to ignore political and social realities, differences and inequities.

Humanitarian actors in particular should consider undertaking the following to strengthen the response's political and social sensitivity:

- Strengthen the political economy lens taken in the response by reviewing regularly the overall direction of travel, using context analysis and political economy approaches as a basis for sharing experiences and ideas about political and social realities and reflecting on what they mean for the response as a whole and at different levels.
- Regularly and strategically synthesise learnings from the interventions to get a sense of how things are shaping and being shaped by political realities, focusing in particular on how humanitarian, development and peacebuilding efforts do or do not align.
- Consider focusing on several system-wide political and social themes and issues, which can be used to prioritise collective programme-wide learning and advocacy efforts (suggestions include: political affiliations; prevailing conflicts around resource distribution and allocation; ethnic and religious issues; or history of violent conflict and fragility).
- Review existing monitoring, evaluation and learning tools to ensure they are generating the right kinds of information to support strategic and tactical decision-making for a politically grounded and sensitive response (Booth et al., 2016).

PRINCIPLE 4: DUTY OF CARE FOR RESPONSE WORKERS AT ALL LEVELS IS ESSENTIAL

Across the COVID-19 response, effort needs to be made **to ensure duty of care for responders is a strategic imperative.** Specific suggestions for humanitarians include:

- establishing clear duty-of-care policies and protocols for the interventions and scenarios for how different needs will be met
- encouraging from the outset appropriate budgeting and resourcing for care mainstreaming in projects and programmes
- facilitating reporting of issues and how they are addressed to support better learning.
- actively promoting duty-of-care competences among responding organisations, and facilitating online and social platforms for mutual support
- prioritising within duty-of-care considerations for those at the frontline of the response moral injury (and distress as a result of this), the risk of which is considerable (Parker and Mirzaali, 2020)
- establishing appropriate accountability mechanisms to ensure responding organisations are providing mechanisms to monitor these activities, raise complaints and communicate issues.

Humanitarian actors should consider carefully the financial implications of duty-of-care activities and call for appropriate allocations in budgets and proposals.

Key resource

- ICRC – International Committee of the Red Cross. (2014) 'Rights and responsibilities of health-care personnel'. Geneva: ICRC. (http://elearning.icrc.org/healthcareindanger-2015/en).

PRINCIPLE 5: ESTABLISH AND SHARE ETHICAL GUIDELINES FOR THE RESPONSE

As well as the broader societal ethics that are playing out around COVID-19 – for example in forgoing rights and privileges such as free movement, wider family relations and communal gathering – ethical issues are also arising in the context of the response itself. The humanitarian sector can develop and agree on normative guidance on the ethics related to technical responses, to make sure that difficult decisions are made in the best possible way.

At a national level, this means using existing ethical frameworks to deliver healthcare and research and anticipating the specific ethical challenges that might be faced in different response scenarios (Nuffield Council on Bioethics, 2020). Concurrently, humanitarian actors should develop contextually appropriate ethical guideline packs, based on the response scenarios identified, and create communications learning materials and processes to ensure ethical mechanisms are accessible and understood by all relevant actors and stakeholders.

Beyond the case management and clinical dimensions of response ethics, humanitarians must also ensure that detection, prevention and planning are undertaken in ethically sensitive ways. Of particular concern is the risk of privacy and rights being contravened by detection and containment systems, especially those that involve digital technologies and the use of patient and citizen data. In such cases, a 'do no digital harm' approach must be paramount (MacDonald, 2020).

Key resources

- Nuffield Council on Bioethics. (2020b) 'COVID-19 ethics resources'. [Webpage]. Nuffield Council on Bioethics, last updated 15 April. (www.nuffieldbioethics.org/publications/covid-19/covid-19-ethics-resources).
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PRINCIPLE 6: ANTICIPATE AND WORK COLLECTIVELY TO OFFSET ADVERSE SECONDARY IMPACTS

The COVID-19 Pandemic is a health, social and economic emergency simultaneously.

The evidence on the secondary impacts is clear and covers:

- disruption of livelihoods and markets
- disruption to communities
- disruption to basic services, health, education, social safety nets
- stigmatisation
- psychosocial problems
- increased sexual and gender-based violence
- human rights violations
- weakening trust in governance.

(Rohwerder, 2020)

As a result, the response cannot be thought about simply in public health terms. For the humanitarian sector, this means developing and using a systemic lens to consider both primary and secondary effects of the planned response. This would entail reviewing the agreed portfolio of interventions based on available evidence, asking the following questions of different interventions:

- What is the intervention logic for this activity?
- What evidence do we currently have on the primary and secondary effects of this activity?
- What processes and capacities do we need to deal with these effects?
- How can we draw on all of the capabilities of the humanitarian system and on those of other national and local stakeholders – from government to private sector organisations, civil society to the media?

At a minimum, the other sectors in humanitarian response – WASH, food security and livelihoods – need to be mobilised in *direct support* of both the COVID-19 response strategy and to *offset* the secondary effects (see Table 3).

Table 3: Direct and offsetting interventions for health and other sectors in the humanitarian response to consider in support of the COVID-19 response

Direct support	Offsetting support
▪ How to mainstream COVID-19 prevention into WASH work? ▪ How to ensure food and cash distributions do not lead to mass gatherings? (IASC, 2020c) ▪ How to transform a cash transfer programme when no market is available?	▪ How to ensure continuity of essential health services, e.g. antenatal care and deliveries? ▪ How to maintain essential care for other infectious diseases and chronic conditions? ▪ How to maintain supply chains for food and essential medicines? ▪ How to scale up shock-responsive social safety nets?

Source: Kelly (2020).

PRINCIPLE 7: INVEST IN OPERATIONAL LEARNING, RESEARCH AND INNOVATION EFFORTS

The COVID-19 response is in many ways unprecedented and there is much that will be undertaken for the first time. Moreover, there are also several areas where what should be done is not yet fully understood, or it is understood the resources to make it happen are not yet in place.

In this context, humanitarian organisations must maintain their commitments to learning and accountability. Humanitarians should employ light-touch monitoring, learning and evaluation approaches to support adaptive decision-making during the crisis and to provide critical information for learning about the COVID-19 response to inform effective approaches that could be useful in future responses. This should be guided by the outstanding questions that humanitarians face (see Box 4).

Box 5: Outstanding questions to shape ongoing learning

- How does COVID-19 behave in low-resource and humanitarian settings?
- Which populations at higher risks of severe illness from COVID-19 in humanitarian settings?
- What are the most effective strategies or combination of strategies to reduce transmission in these settings?
- What can be feasibly done when there are limited supplies (e.g. PPE, ventilators, oxygen) and capacity and recommended public health measures and treatments cannot be implemented?
- What is the best way to prioritise and maintain essential routine health services?
- How should trade-offs be made between investment in COVID-19 responses and dealing with other drivers of mortality?
- How should trade-offs be made between containment measures and the secondary impacts of COVID-19 (e.g. socioeconomic) on populations?

There are a number of ways in which humanitarian actors can improve operational learning, research and innovation:

- Invest in ongoing operational monitoring, learning, evaluation, knowledge sharing and good practice development for **improving the response** – e.g. how to undertake effective surveillance and testing without biomedical supplies
- Share available **aggregated and disaggregated data** by age, gender, ethnicity, displacement status and disability status for analysis by research and academic partners.
- Ensure **programmatic adaptations** to deliver on response objectives in extremely constrained situations – e.g. how to undertake shielding in refugee camps.
- Facilitate and support **innovations in delivery and stakeholder engagement** – e.g. how to do effective and evidence-informed community mobilisation.
- Invest in **local and national capacities**, from private sector to universities, to develop key products and services using locally available resources – e.g. PPE, handwashing liquids and gels, and community health worker training.
- Where possible, enable and support **country-level research and learning strategies**, broadening networks, prioritising engagement with relevant universities, business groups and trade associations at national and potentially regional level.

> **"Invest in ongoing operational monitoring, learning, evaluation, knowledge sharing and good practice development for improving the response."**

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Annex 1: List of interviewees

The following people were interviewed as part of the research process for this paper:

Maria Al Abdeh – Women Now for Development
Mohammed Alabbas – HIHFAD
Cecile Aptel – International Federation of the Red Cross and Red Crescent Societies (IFRC)
Laura Del Valle – National Director, World Vision El Salvador
Linda Doull – World Health Organization (WHO)
Richard Garfield – Centers for Disease Control and Prevention (CDC)
Ingrid Gercama – Anthropologica
François Grünewald – Groupe URD
Andrew Kavala – Manepo
Iman Khalil – IMC
Marisa Kristianah – CBM
Josefa Lalabalavu – Plan International Australia
Glenn Laverack – Visiting Professor, Università degli Studi di Trento
Alexander Matheou – British Red Cross
Rob McCouch – World Health Organization (WHO)
Marc Nosbach – Care Mozambique
Aneta Ostaz – United Nations High Commissioner for Refugees (UNHCR)
Nicky Pyper – Bhopal Medical Appeal
Natalie Roberts – Médecins Sans Frontières (MSF)
Shashwat Saraf – Action Against Hunger Nigeria
Sathyu Sarangi – Sambhavna Trust
Xu Shiling – Beijing Normal University
Paul Speigel – Johns Hopkins Bloomberg School of Public Health
Drake Ssenyange – Yemen Multi-sectoral Humanitarian Response Programme
Nigel Timmins – Oxfam
Kate Washington – United Nations High Commissioner for Refugees (UNHCR)
Daniel Youkee – Acting Country Director, King's Sierra Leone Partnership
Teresa Zakaria – World Health Organization (WHO)

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- Ebola Response in Cities: Learning for Future Public Health Crises

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