Implementation guide for
health systems recovery in emergencies

Transforming challenges into opportunities

World Health Organization

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REGIONAL OFFICE FOR THE **Eastern Mediterranean**

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Acknowledgements

Summary

In recent years, the Eastern Mediterranean Region of the World Health Organization (WHO) has faced an unparalleled number of emergencies, resulting from both natural and human-induced hazards such as conflicts, natural disasters and disease outbreaks. These emergencies have a significant impact on health through the injuries and fatalities that are sustained as a result of crisis and through changes to political, environmental and other conditions which may influence determinants of health. Beyond their direct impact on health, emergencies also increase the population's susceptibility to diseases and poor health through their impact on health systems. They destroy or disrupt the system, reducing its ability to respond appropriately and promote, restore or maintain health, which in turn results in an increase in morbidity and mortality.

WHO is mandated to provide evidence-based guidance in public health work. As such, it has a responsibility to provide leadership to emergency-affected countries initiating or undergoing health systems recovery. This guide has been developed to provide a clear action-oriented direction for countries within the Eastern Mediterranean Region and in other WHO regions, as well as for health sector partners, on how to take a structured approach to the recovery and resilience-building processes of national and local health systems in different types of emergencies. The guide unifies the strategic actions needed for health systems recovery and sets a standard for post-emergency health systems recovery which can be adapted to different settings.

Sections 1–5 introduce the regional context, explain the rationale for the guide, outline its aim and objectives, and define its target audience and scope. Section 6 describes the two phases of health systems recovery: early recovery and transition (ERT) and long-term recovery (LTR). This section also explains how to distinguish between the two phases using three criteria: the urgency, sustainability and cost-effectiveness of the activities being carried out.

Section 7 introduces the concept of "building back better", explains its importance for building resilience into health systems, and describes how it can be applied in health systems recovery. Section 8 outlines the principles that should guide health systems recovery.

Section 9 explains how to operationalize health systems recovery. It describes the six steps of the recovery cycle for each phase of recovery: advance recovery preparedness (ARP); recovery assessment; recovery planning; resource mobilization; implementation; and monitoring and evaluation. This section also highlights the importance of ARP and its three key activities: establishing a coordination mechanism; building institutional capacity; and information management and communication. It concludes with a brief description of the roles and responsibilities of actors and stakeholders during health systems recovery.

The annexes present a list of selected tools and sources of information for health systems assessment (Annex 1), the recommended priority actions for operationalizing health systems recovery (Annex 2), the roles and responsibilities of actors and stakeholders during health systems recovery (Annex 3) and a list of indicators for monitoring and evaluating the health systems recovery process (Annex 4).

1. Introduction

Throughout history, humankind has been plagued by countless humanitarian emergencies resulting from both natural and man-made hazards. Today, geopolitical and internal conflicts, natural disasters and disease outbreaks continue to devastate communities and ecosystems, destroy livelihoods and cause death, trauma, deprivation, displacement and the violation of human rights. Humanitarian crises resulting from such emergencies are also evolving; they are affecting more people for extended periods and demanding more resources *(1)*. In 2014, 102 million people were in need of humanitarian assistance *(2)*; by 2019, there were over 141 million people in need, with about half of them being displaced by conflict *(3)*.

In recent years, the Eastern Mediterranean Region of the World Health Organization has faced an unparalleled number of emergencies *(4–7)*. As of May 2020, WHO was responding to 17 graded emergencies in the Region,[1] due to conflicts, outbreaks and natural disasters. This is in addition to the global COVID-19 pandemic which spread rapidly to countries within the Region.

Emergencies affect population health directly through the injuries, fatalities and trauma that are sustained as a result of crisis. In addition, during and after emergencies, changes to political, environmental and other conditions may influence determinants of health and ultimately increase the population's susceptibility to diseases and poor health.

Apart from the direct impact on health, emergencies also disrupt the health system's capacity to deliver health services and address health risks. This is compounded by the sudden and unplanned increase in demand for health services that is often associated with crises. The overburdened or destroyed health system is therefore unable to respond appropriately and its ability to "promote, restore or maintain health" *(8)* is compromised, resulting in an increase in morbidity and mortality. Emergencies also affect surrounding regions and countries, as population displacement leads to an increase in demand for health services and puts pressure on health systems in those areas.

Since the individual and compounded impacts of an emergency on the health system amplify the health effects of that emergency, improving health outcomes imperatively requires the creation of health systems that are resilient and which are able to effectively resist, adapt to and recover from shocks *(9)*. They should also be capable of responding to immediate and long-term needs and providing quality, equitable health care that is evidence-based, acceptable, accessible, affordable and available to all, particularly those affected by emergencies. Ensuring resilient and responsive health systems is vital to achieving the regional *Vision 2023* of "health for all, by all" *(10)* and for advancing progress on the Sustainable Development Goals (SDGs) *(11)*. It will further contribute to WHO's triple billion target of 1 billion more people benefiting from universal health coverage (UHC), 1 billion more people better protected from health emergencies and 1 billion more people enjoying better health and well-being; and ensuring that no one is left behind *(12)*.

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1 Graded emergencies are those that require a WHO operational response. They range from grade 1 (which require WHO support, but a country office response is adequate) to grade 2 (where response is also needed from the regional office) and 3 (where substantial support is also required from WHO headquarters).

2. Rationale

After the acute phase of response to an emergency is over, the health system must be recovered or completely rebuilt. This represents an opportunity to create a more resilient and fit-for-purpose health system *(13–15)* that promotes and safeguards population health and global health security, advances progress towards UHC *(16)*, and plays a central role in the building of resilience into communities.

Creating fit-for-purpose health systems requires an effective, well planned and well implemented recovery strategy. Post-emergency recovery is, however, usually a missed opportunity for building back better because of lack of knowledge and expertise, inadequate planning, low funding and competing sociopolitical interests. Another reason is the humanitarian-development divide that occurs, particularly in protracted or complex crises. In such contexts, the use of different systems and mechanisms by humanitarian and development actors for planning, coordinating, funding, implementing and evaluating activities may lead to disjointed, incoherent action on the health system *(17)*.

The support of WHO is often requested by the health ministries of emergency-affected countries and their partners for health sector recovery. Yet while the Organization has developed frameworks to guide the preparedness and response phases of emergency management, there are no specific guides for health systems recovery. Thus, there is an urgent need for a clear strategy and an action-oriented guide to steer countries, WHO, health sector partners and other actors who work at all levels of the health systems recovery process.

This guide intends to fill that gap by setting a standard for post-crises health system recovery processes which can be adapted to different settings. The guide is shaped by the experiences of countries that have undergone or are undergoing recovery in the Region. It builds on previous efforts including, among others, work on health sector recovery by WHO, the Pan-American Health Organization (PAHO) and the Global Facility for Disaster Reduction and Recovery (GFDRR) *(18)*, as well as the Health Cluster guidance note on health recovery by WHO and the Inter-Agency Standing Committee *(19)*. This guide takes into account, and makes links with, multisectoral government-led recovery planning processes such as those based on the post-disaster needs assessment (PDNA), and recovery and peace-building assessment (RPBA) *(20–23)*. In addition to this, it supports the implementation of the humanitarian-development-peace nexus.

3. Aim and objectives

This guide aims to unify the strategic actions needed for health systems recovery and provide direction for national health systems, WHO and other health sector partners on how to take a structured approach to the recovery and resilience-building processes of national and local health systems in different types of emergencies.

Objectives

The main objective of the guide is to provide action-oriented guidance to stakeholders as they undertake the assessment, planning, implementation, monitoring and evaluation processes that occur as part of health systems recovery in emergency contexts. It therefore:

- introduces the principles, elements and operational considerations of health systems recovery, including the specificities of the two broad categories of emergencies – conflict- and non-conflict-based emergencies;
- stimulates the integration of early recovery in the response phase while setting the

foundation for long-term recovery and development;

- formulates the implementation of the building back better approach in recovery planning, where appropriate;

- provides guidance for good governance, systematic preparation and the mobilization of sustainable resources for health systems recovery;

- provides guidance on the systematic integration of health systems strengthening, health security and the development of the International Health Regulations (IHR) (2005) core capacities, health emergency management and disaster risk reduction in the transition and recovery processes;

- stimulates and facilitates cooperation and collaboration between humanitarian and development actors and other stakeholders;

- enables stakeholders to identify their roles in and contributions to health systems recovery in emergencies.

4. Target audience and use of the guide

The target audience for the guide includes: ministries of health and ministries that support the health sector such as finance, education and security; WHO and other United Nations agencies; intergovernmental and nongovernmental organizations; and donors. Health ministries can use this guide to prepare for, organize, plan and implement recovery activities; WHO can use it to harmonize its internal resources to be able to better support countries; United Nations agencies can use it to facilitate their collaboration on health-related recovery work; and donors can use the guide to estimate the funding required for health systems recovery-related activities, as well as to harmonize their actions to become collectively more effective.

The guide will help all actors and stakeholders to identify their roles in and contributions to the different phases of health systems recovery, strengthen the coordination and collaboration between them, and help to prioritize and implement key actions.

5. Scope of the guide

Conflicts remain the predominant type of emergency in the Eastern Mediterranean Region; nevertheless, the risk of other types of emergencies cannot be underestimated. The risk of infectious and emerging disease outbreaks is high, with population mobility increasing the likelihood of disease spread and risk of pandemicity; for instance, many countries in the Region have experienced rapid spread of COVID-19 in 2020. Regular hosting of international mass gathering events by countries within the Region augments this risk, as well as the susceptibility to stampedes and attacks *(2)*. Several countries are highly prone to natural hazards, and the Region is one of the worst-affected by climate change *(24)*. Chemical, biological, radiological and nuclear threats, while relatively unusual, can also occur, with devastating consequences.

The recovery process for each emergency is different as it is determined by the type of emergency, the capacity and willingness of governments to manage it, as well as the local context and circumstances. In the light of this, it is crucial to define the scope of the guide and outline the type of hazards, scale and geopolitical context for which it provides guidance.

- The guide takes an "all-hazards approach" *(26)* and covers all phases of the recovery process. The general guidance it provides is therefore applicable to any type of natural or man-made emergency, including violent conflict. However, some

parts of the guide are more relevant to certain types of emergencies than others; these are highlighted where necessary or appropriate.

- The guide can be used in both small- and large-scale emergencies, whether or not processes such as the PDNA or RPBA have been triggered or are being implemented.

- The guide is broad and flexible enough to be applied to a wide range of geopolitical settings, both within and outside the Eastern Mediterranean Region.

In spite of this wide scope, each emergency should be treated as unique, and pertinent differences should be taken into account when applying the guide, with particular consideration for the context, length of transition period, willingness and ability of the government to act, and level of peace and security. To further tailor the guide to specific contexts and types of emergencies, additional work such as the development of technical guidelines and standard operating procedures may be needed to amend and adapt the implementation and sequencing of priority activities in the different phases of recovery.

6. Understanding health systems recovery

The United Nations Office for Disaster Risk Reduction (UNDRR) defines recovery from natural disasters as "the restoring or improving of livelihoods and health, as well as economic, physical, social, cultural and environmental assets, systems and activities, of a disaster-affected community or society, aligning with the principles of sustainable development and "build back better", to avoid or reduce future disaster risk" *(27)*. Recovery from conflicts, according to the United Nations Development Programme (UNDP), is defined as the process

of "restoration of the capacity of the government and communities to rebuild and recover from crisis and prevention of relapses. In so doing, recovery seeks not only to catalyze sustainable development activities but also to build upon earlier humanitarian programs to ensure that their inputs become assets for development" *(28)*. In this guide, health systems recovery is defined as the rebuilding, restoration and improvement of the health system's components and core public health functions, in alignment with the principles of building back better and sustainable development.

The ultimate goal of health systems recovery is to design a system that is able to respond to the demands and health needs of the population; perform its functions effectively, efficiently, and sustainably; increase health systems resilience; and mitigate the risk of future health emergencies. This goal is achieved through action on the six health systems building blocks – service delivery, health workforce, health information systems, access to essential medicines, financing and leadership/ governance *(29)*. Action is also required on the four core public health functions – surveillance and monitoring of health determinants, risks, morbidity and mortality; preparedness and public health response to disease outbreaks, natural disasters and other emergencies; health protection including management of environmental, food, toxicological and occupational safety; health promotion and disease prevention through population and personalized interventions, including action to address social determinants and health inequity *(30)*.

Health systems recovery is determined or influenced by the typology of the emergency; therefore, for a full understanding of the process, it is necessary to distinguish between conflict- and non-conflict-related emergencies, as they generally require somewhat different approaches. Natural disasters and epidemics are, for instance, often linked to specific events

and the country may have done a risk profile and developed a contingency plan. It may also be relatively easy to compare baseline and post-crisis situations, quantify the damage and develop a recovery plan that is based on restoring the system to its pre-disaster status while making investments for disaster risk reduction and strengthening preparedness for future hazards. In addition, the duration of recovery in such cases is typically short, because once the initial recovery activities have been carried out, other residual or outstanding activities can be integrated into subsequent normal (sub)national planning mechanisms. Conflicts, on the other hand, are typically protracted, and there may be a multiplicity of political actors with differing degrees of legitimacy. Moreover, since post-conflict peace is characteristically fragile and the risk of relapse is high *(31)*, the recovery process naturally oscillates between progress and regression as the country advances towards stabilization and peace.

In this guide, health systems recovery has been divided into two distinct and identifiable phases: early recovery and transition (ERT); and long-term recovery (LTR). Although differences in the types and evolution of emergencies may increase potential for overlap between the two phases and, indeed, between emergency response and recovery, it is nevertheless important to divide the recovery process into phases to facilitate standardization and harmonization of the process.

Three criteria should be used to determine and assess the phase of recovery: the urgency, the sustainability, and the cost-effectiveness of the activities being carried out. The same set of criteria can also be used to differentiate between response and recovery interventions and activities (see Fig. 1). For instance, response activities tend to be immediately life-saving and therefore prioritize urgency over sustainability or cost-effectiveness; ERT activities, on the other hand, being relatively less urgent, focus on sustainability and cost-effectiveness in the mid-term.

The transition period, which is characterized by an overlap between response and recovery, is combined with early recovery for two reasons. First, there is a lack of consensus on when response ends and recovery begins; and, even where all parties agree that the transition phase has begun, it may take some time before transition mechanisms and structures are formalized. Second, a well structured recovery process demands that planning for recovery is started before the end of the humanitarian
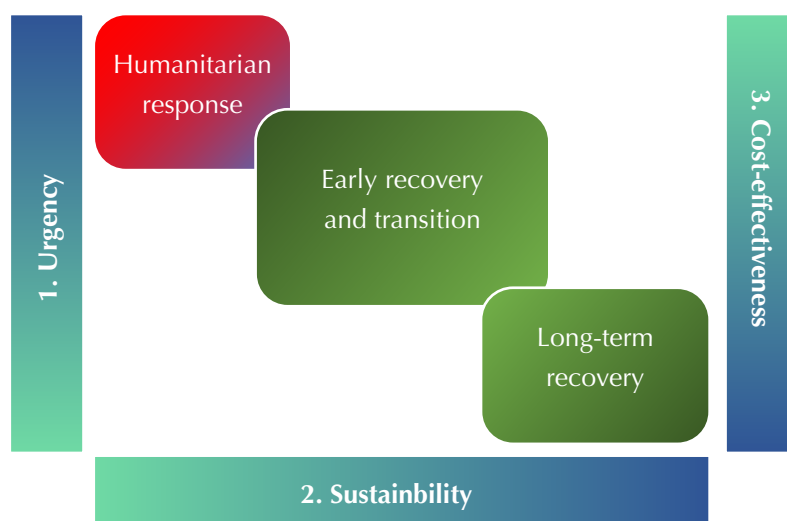
Fig. 1. Criteria to assess the phase of recovery and differentiate between response and recovery interventions

response. The transition phase is an opportune moment for such planning to begin.

Early recovery and transition (ERT)

Once the acute phase of an emergency is over, recovery begins and a shift occurs as response activities and programming are gradually replaced by their recovery equivalents. ERT encompasses the stabilization period, the transition between response and recovery, and early to mid-term recovery.

The goal of this phase of recovery is to support humanitarian response and lay the foundation for long-term health systems recovery. This involves restoring the functionality of the health system, identifying and addressing weaknesses in the system, and progressively expanding the coverage and quality of essential health services, while strengthening preparedness for response to emergencies (Strategic framework for UHC in FCV settings, WHO, unpublished working document, 2019).

During ERT, survival-related activities happen concurrently with work on stabilizing or restoring the functionality of the health system. These activities may have long-term impacts on health systems recovery and resilience. They therefore require a strong nexus between humanitarian and development action, and work that is based on leveraging the comparative advantage of each group of actors and working over multi-year timeframes to achieve collective outcomes. In fragile and conflict affected settings, where explicit links with peace-building need to be made, ERT expands into the humanitarian-development-peace nexus (Strategic framework for UHC in FCV settings, WHO, unpublished working document, 2019).

Depending on the extent of damage, context, level of emergency preparedness and the type of emergency, ERT takes on average 1–3 years for non-conflict related-emergencies and 3–5 years for conflicts; however, in complex or protracted emergencies it may last for the duration of the crisis.

Long-term recovery (LTR)

The second and final phase of recovery occurs over a longer period of time and generally demands long-term investments in the health sector. The goal of this phase is to build the health system back better and smarter, by improving its resilience and sustainability and establishing models of care that consider and are adapted to future health needs. While this may be particularly complex and/ or challenging in conflicts, the situation may provide specific opportunities to contribute to social cohesion, peace-building and reconciliation including, for instance, through conflict sensitive programming or rebuilding the health system in a way that addresses or avoids reinforcing the root causes of the conflict *(32)*.

During LTR, health policies and plans are developed and implemented to address immediate and future needs and challenges, strengthen the health system and its resilience for emergencies, and advance progress towards UHC and the health-related SDGs. Interventions focus on addressing the consequences of the emergency while improving the community's capacity to anticipate and withstand future events, by applying health emergency and disaster risk reduction measures.

LTR eventually feeds into development, which is defined as the continuous, unending and multidimensional process through which to achieve "a higher quality of life for all people" in all areas of life *(33)*. For this reason, it is vital that in both ERT and LTR, the recovery strategy and plan are aligned with the National Strategic Health Development Plan (NSHDP) and/or the United Nations Sustainable Development Cooperation Framework *(34)*.

Fig. 2 gives an overview of the recovery process. It indicates how recovery fits with emergency

preparedness, humanitarian response and development. It also shows the two main phases of recovery: ERT and LTR. The red arrows denote the oscillation between the two phases which may occur, particularly in protracted conflicts, as a result of the complex, dynamic and non-linear nature of the recovery process. Fig. 2 also identifies the steps of the recovery cycle which should be carried in both phases across the public health functions and health system components as the key areas of action in health systems recovery. Finally, it highlights links with the PDNA and RPBA processes.

7. Health systems recovery as an opportunity to build back better

Recovery can be a window of opportunity to rebuild the health system in a way that ensures it is better than the pre-emergency version *(13, 35, 36)*. This is the core of the "build back better" principle *(37)*, an approach to emergency recovery that aims to reduce vulnerability to future disasters and build community resilience by addressing physical, social, environmental, climate and economic vulnerabilities and shocks *(15)*. This approach is not limited to disease outbreaks and natural disasters. Post-conflict health systems recovery may also provide an opportunity to better adapt models of care to future needs, as well as to address distortions that existed in the system before the conflict or which resulted from it.

Taking the building back better approach to health systems recovery ensures that the rebuilt system is stronger, safer, smarter and more resilient. This necessitates the identification and rectification of weaknesses inherent to the previous system. During health systems recovery, health service
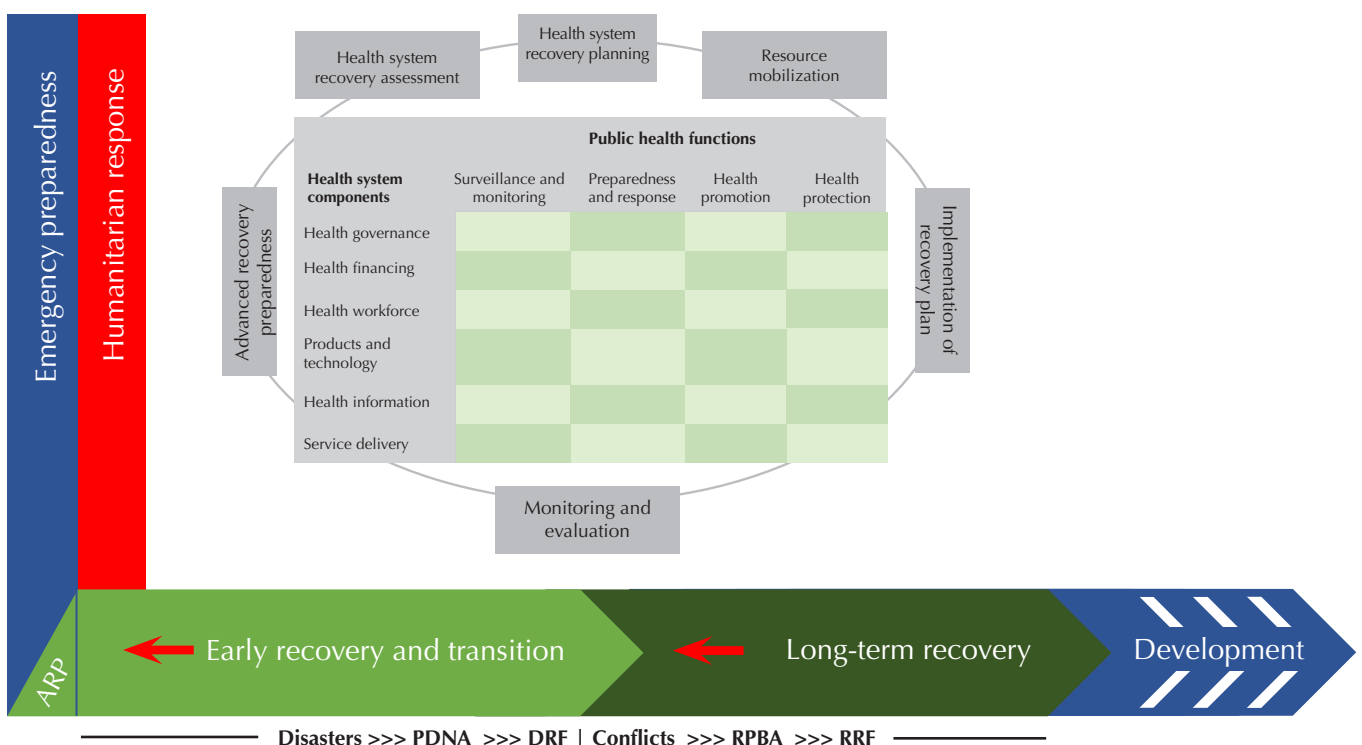
ARP = advance recovery preparedness; DRF = disaster recovery framework; PDNA = post-disaster needs assessment; RPBA = recovery and peace building assessment; RRF = recovery and resilience framework

Fig. 2. Schematic view of the health systems recovery process

provision can be improved, for instance, by addressing previously neglected areas such as mental health and noncommunicable diseases, strengthening linkages between primary and secondary health services, reviewing the distribution of facilities against demographic changes and constructing new facilities in areas with the greatest need *(38, 39)*. The post-emergency period also offers a window of opportunity for health policy reform in areas such as health financing and gender equity *(13, 40–42)*. The resilience of the new health system can be improved by introducing disaster risk reduction measures such as building codes and land-use planning regulations. Damaged facilities can be modernized or rightsized, and assets can be replaced with technologically up-to-date, environmentally sensitive and climate-friendly alternatives (for example, by applying green hospital technologies for renewable energy and water use reduction). Additionally, in post-conflict settings, conflict sensitive programming, cooperation between health professionals across ethnic divides and the increase in state legitimacy that is generated by the provision of public goods, such as health care, may contribute to the sustainability of peace, state-building and conflict prevention efforts *(35, 43)*. The desired result is a health system that is better able to advance UHC by providing quality, accessible, equitable and affordable health services *(44)* to the population.

To ensure that all partners work together and the opportunity to build back better is not missed, recovery should ideally begin with a planning stage and analysis to identify opportunities, vulnerabilities, risks and key health system barriers including bottlenecks to service delivery. The analysis should also include the different options and resources needed to remedy or correct identified issues.

8. Guiding principles for health systems recovery

The following set of principles should, where possible, guide the recovery process throughout needs assessment, planning, implementation, and monitoring and evaluation.

First do no harm. Consider the long-term impact of interventions but prioritize immediate life-saving activities. Ensure they are implemented in a way that is neither detrimental to the population or environment, nor contributes to future vulnerabilities in the health system.

Respect humanitarian principles. Ensure that recovery activities are guided by humanity, neutrality, impartiality and independence *(45, 46)*.

Apply effective development cooperation principles. Ensure that recovery is aligned to national priorities, tailored to the country's specific situation and needs, inclusive and results-focused, and country-led. It should however be noted that this may be difficult to operationalize in contexts where different factions are in conflict. Humanitarian aid should only be used when absolutely necessary.

Integrate recovery approaches from the beginning. Initiate recovery activities at the earliest phases of response operations, laying the ground for long-term recovery and the rebuilding of local capacity where necessary *(47)*.

Ensure context-specificity. Ensure thorough understanding of the context before launching interventions. Each situation is unique, therefore recovery planning and implementation should be tailored and adapted accordingly.

Align health systems recovery with:
- **national recovery plans.** Ensure that health systems recovery is integrated into the overall (sub)national recovery

plan created either by the country or in collaboration with international organizations. Ensure coherence between the country's priorities and those of its partners.

- **other sectors**. Develop linkages with other sectors to promote a Health in All Policies approach *(48)* to facilitate health systems recovery, ensure that other sectors systematically take health into account and improve population health.

- **global and regional initiatives**. Ensure that the recovery process is aligned with initiatives related to health emergencies that can be leveraged for advocacy to increase aid and technical support. These include the: health emergency and disaster risk management framework 2019 *(49)*; Sendai Framework for Disaster Risk Reduction 2015–2030; International Health Regulations (2005); Global Health Security Agenda; humanitarian programme cycle; New Way of Working; Health as a Bridge for Peace; WHO Global Action Plan to Promote the Health of Refugees and Migrants; UHC2030; and the Global Action Plan for Healthy Lives and Well-being For All.

Ensure community participation and engagement. Work with and ensure accountability to the local community. Populations under stress often have good information and insight into their needs, thus collaborating with them may lead to identifying and implementing context-appropriate health system interventions that contribute to social cohesion and result in a more effective and sustainable recovery.

Leave no one behind. Work towards achieving UHC and the SDGs, putting strategies in place to improve quality of care, financial coverage and equitable access to services for the entire population, with special attention for vulnerable groups such as migrants and refugees. Ensure that services are sensitive to and able to address both mainstream and specific needs.

Promote gender equality. Consider how recovery activities may reinforce gender inequalities and act to prevent this. Ensure that interventions are gender-responsive and do not reproduce existing gender biases, by taking gender-specific vulnerabilities and capacities into account during policy-making and programming.

Take a holistic approach to health. Ensure that the recovered health system emphasizes the lifecycle approach *(50)* as well as the wellness approach to health defined in the WHO Constitution *(51)*, which emphasize prevention, screening, early intervention and rehabilitation at every stage of life.

Integrate climate-sensitive thinking into recovery. Ensure that the rebuilt health system is climate resilient, able to adapt to and mitigate future risks, and climate aware, to avoid contributing to climate change and environmental degradation *(52)*.

9. Operationalizing health systems recovery

Health systems recovery can occur independently or within the framework of formal processes, such as PDNAs or RPBAs, where these have been activated. During each phase of recovery, operationalization should follow the same continuous cycle of advance recovery preparedness (ARP), assessment, planning, resource mobilization, implementation, and monitoring and evaluation. Each step of this cycle is described in further detail in the sections below.

It is important to note that the recovery cycle may be broken at any point, particularly in protracted or complex emergencies, or the

situation may deteriorate and revert to one that requires a humanitarian response. In such cases, it is vital, no matter where the cycle is broken, that efforts to re-initiate the recovery process start with ARP and build on lessons learned from the previous recovery attempt.

Steps of the recovery cycle

(1) Advance recovery preparedness (ARP)

The first step in the recovery cycle is ARP, during which prerequisite activities for recovery are carried out. These activities set the scene and help actors and stakeholders to prepare for the task of recovering the health system. They also improve the sustainability of recovery interventions and minimize challenges faced by countries and actors in planning, implementing or monitoring recovery interventions.

The goal is to build capacity for health systems recovery by preparing methods, tools and datasets for assessing damage, loss and recovery needs, and identifying opportunities to build back better. ARP is therefore centred mainly on being ready for assessing the health system and community's capacities and vulnerabilities, establishing priorities, building capacity and creating a coordination platform to guide recovery planning and implementation.

ARP should be carried out before the event whenever possible; however, this is more feasible for natural disasters and other predictable emergencies than for conflicts. It should also be done before any recovery planning in the early and long-term phases in outbreaks, disasters and conflicts, and repeated and revised regularly in line with changes to the emergency situation.

ARP before an emergency should be integrated into emergency preparedness work. In early recovery, it should be carried out either by the coordination mechanism established for emergency response or the health cluster, if activated, and should seek appropriate connections with the health sector development coordination. In LTR, it should be done by the health sector coordination mechanism in place, and should make links with and build on humanitarian programming.

The three main activities of ARP are outlined below.

Establishing a coordination mechanism. Designate a recovery focal point or team in the ministry of health to coordinate all the steps of the recovery cycle, and ensure there is an effective coordination mechanism in place. These mechanisms should be inclusive, and consist of stakeholders and representatives of all disciplines relevant to recovery, such as health systems, health emergencies and engineering. Define each health actor's roles and responsibilities along with clear lines of communication and reporting, ensuring that both humanitarian and development actors are participating or represented in the recovery coordination mechanism. This will help to smooth the transitions between humanitarian response, early recovery and later, long-term recovery. By the same token, needs assessment, goal setting, and the planning, implementation, monitoring and evaluation of interventions should be done collaboratively to maximize synergies and efficiency and improve the sustainability of recovery efforts.

Building institutional capacity. Build the capacity of the recovery focal point and partners to ensure that everyone is prepared for the effective operationalization of health systems recovery at every step of the recovery cycle. This may involve, for instance, providing training on how to assess damage and loss, health needs and the health system, and on identifying data sources and compiling the tools required to establish pre-disaster baselines. Building

local systems and capacity and investing in and reinforcing local systems will ensure that local resources and systems are prioritized and leveraged for recovery. This will reduce the need for parallel systems and external resources, which may fill gaps temporarily but lead to fragmentation in the long term.

Information management and communication. Establish collaboration protocols and agreements between the health systems recovery coordinator and all partners to facilitate the joint collection, analysis and sharing of data. This will reduce duplication of efforts and improve coordination and decision-making, as well as planning, design and implementation of recovery activities. Furthermore, access to correct and up-to-date information will allow for effective monitoring and evaluation of recovery interventions, which should in turn improve accountability to both donors and beneficiaries.

(2) Health system recovery assessment

The next step in the health system recovery cycle is a recovery assessment, which has two components: the damage and loss assessment and health systems assessment. Recovery assessment supports early and long-term recovery, as well as the planning and implementation of recovery interventions, and its results can provide a basis for advocacy and resource mobilization. It can also be used to document the progress of the recovery process, which in turn supports monitoring and evaluation, leads to review and updating of the health systems recovery plan, contributes to the development of fit-for-purpose health system policies and strategies for the long term, and promotes accountability to the population, donors and other stakeholders.

The damage and loss assessment estimates the economic and human development impact of the emergency, as well as the current and future risks and vulnerabilities, using an all-hazards approach (*53, 54*). In disease outbreaks or disasters, this can be based on the methodology described in the PDNA guidance, while in conflicts the methodology described in RBPA guidance can be used (*21–23*). However, in complex emergencies where, for instance, an outbreak occurs in a conflict setting, an adapted RBPA which is informed by the PDNA methodology may be used. It should, however, be noted that in protracted conflicts an estimation of economic losses may not be applicable.

The damage and needs assessment should be followed by a health systems assessment (*22, 55*) which compiles and analyzes information on all health system components and core public health functions. The assessment should proceed as follows and should include:

- setting realistic objectives based on the available resources and a definition of the temporal and geographic scope of the assessment;

- development of an assessment guide and structuring of its planning;

- selection of a team of assessors and analysts, a mix of insiders and outsiders chosen for their expertise, experience and contextual knowledge, and clear distribution of tasks and responsibilities;

- carrying out preliminary work to examine the available material and obtain data and information on the context, previous health system reforms or initiatives and their results;

- identification of the capacities and key bottlenecks of the health system including the private sector and civil society, as well as academic and military sectors. This is, however, a complex endeavour since health systems consist "of all organizations, people and actions whose primary intent is to promote, restore or maintain health" (*56*). For this reason, it is essential that the assessment uses a "systems thinking" lens and approach, taking into account

not only the health system components and their interdependence, and actors and stakeholders in the health system, but also their interactions;

- collection of data from a wide range of information sources and types of data, including both quantitative and qualitative. The community should also be invited to give their input to allow for triangulation and facilitate the cross-verification and validation of the results of the analysis. A selection of tools and sources can be found in Annex 1;

- collation, organization and analysis of the information that has been collected in a transparent manner. This will ensure that important patterns and trends are identified, realistic and feasible recommendations are made, and the limitations of the process and the data are recognized;

- presentation of results in a comprehensible form, and wide dissemination among policy-makers, stakeholders, health sector and other relevant actors. This should be supported by strong advocacy to improve uptake and link the results to decision-making. Considerable thought and effort should be dedicated to selection of these actors, engagement with them, and how the information is presented.

A common issue that is often cited in emergency and post-emergency contexts is a lack of information; however, there is often a wealth of data, even in the most difficult circumstances, although data may be fragmented, incomplete and/or of variable quality. The key to overcoming this challenge is to use all available sources of information, compile the data and try make sense of them, bearing in mind that each type or source of information contributes to the overall analysis either through what they signify or the gaps they reveal. Furthermore, while the use of certain existing tools may be easier, it is important to ensure that the most context-appropriate ones are chosen and applied in a flexible, non-rigid

manner that reflects the complexity of the health system being studied.

Health systems recovery assessments after large-scale natural disasters are usually done in a very short timeframe, with deadlines defined by dates for a donor conference, yet they are frequently used as estimates for health sector recovery requirements and broad investment plans. This often means that there is a need to prioritize informed estimates over in-depth and detailed analyses. More in-depth operational analyses can be done when planning for implementation.

In conflict settings, health systems recovery assessments are more complex and require a good overview of the situation, and a deep understanding of how the crisis has disrupted the health system and how the system has adapted. The analysis should act as a basis for conflict-sensitive programming and make links with peace-building efforts. Since recovery is also longer and more complex in post-conflict settings, the health systems recovery assessment should be an ongoing process that is updated as the context evolves, with ad-hoc in-depth studies to address identified bottlenecks. A good set of tools can be found in Annex 1.

The outcome of the health system recovery assessment should be a report which includes the damage and loss estimates and the needs of the health systems along with an analysis of the sociopolitical context and other cross-cutting areas. It is crucial to undertake the process in a structured and logical manner to ensure that the recovery assessment is well planned, adequately prepared for and implemented.

(3) Health systems recovery planning

Following the assessment and identification of recovery and/or peace-building needs, the next step is to develop the recovery strategy and establish institutional arrangements for

its implementation. This involves creating a documented, structured and operational plan for implementing recovery activities, and taking accompanying measures to ensure that the plan is successful. This part of the recovery process is particularly dependent on satisfying the prerequisites discussed in ARP, as it requires information, coordination, financing and other resources.

The process should be carried out for each health systems building block and public health function in both early recovery and long-term recovery. The result of the planning exercise should be a recovery strategy and an operational plan. In protracted emergencies these should build on the multi-year humanitarian response plan, which often includes objectives for early recovery and/or resilience within the emergency response mandate. It is imperative that the recovery strategy considers national priorities and is aligned with the NSHDP and/or the United Nations Sustainable Development Cooperation Framework (*34*). Where applicable, it should also include a section on how to prepare for and carry out a gradual and progressive transfer of the health systems recovery management to the government in a planned and structured manner that upholds the integrity of the system and prevents disruptions to service delivery.

The outcome of the planning exercise should be a document containing a clear recovery strategy and costed operational plan which considers likely contingencies and proposes scenario-based modifications and/ or adjustments. It should include key progress indicators and an effective monitoring and evaluation tool.

(4) Resource mobilization

The next step in the recovery cycle focuses on the identification and mobilization of financial resources. The emphasis should be on flexible and innovative funding instruments that link humanitarian response and development assistance, support multi-year planning and thereby facilitate the transition between the different phases of recovery. The country should also be supported with mobilizing domestic financing, as this will facilitate the eventual transition to government funding.

In large-scale disasters or post-conflict settings, governments of affected countries often organize donor conferences during which the priorities and investment plans for all sectors are presented. Based on donor pledges, governments use these investment plans to (re-)allocate national recovery funds to different sectors; it is there important to advocate with both the donors and the government, during and after such conferences. Donors should be encouraged to create a pooled, multi-year funding mechanism, such as the Multi-Donor Trust Fund, and governments should be encouraged to prioritize investments on health care.

(5) Implementation of the recovery strategy

Once planning is completed, the next step is realization of the recovery strategy and operational plan. As is the case for the planning step, the process should be carried out for each health systems building block and core public health function in early recovery and long-term recovery. Annex 2 contains a suggested list of priority actions for each phase of recovery. Given that there are no strict boundaries between the different phases of recovery however, some of the activities may be repeated or may even fall under both response and recovery. It is nevertheless important to distinguish between recovery and response activities, because they are often implemented in different ways, based on criteria such as urgency, sustainability, cost effectiveness, and factors such as funding or context. Additionally, since recovery is often non-linear, it may not always be possible to

execute priority activities sequentially. This is particularly true for protracted emergencies which are characterized by recurrent bouts of acute crises.

(6) Monitoring and evaluation

The goal of health systems recovery is a system that can respond to the demands and health needs of the population effectively, efficiently and sustainably. Therefore, during and after the implementation of the recovery plan, it is important to monitor and evaluate the process, in order to learn from both successes and failures.

Recovery monitoring and evaluation is a two-part process. The first part is an assessment of the outcomes of the recovery process. Here, the monitoring and evaluation tool designed during recovery planning and key indicators defined in the recovery strategy are used to quantify and measure the progress achieved. Where possible, these indicators should align with those used to monitor the implementation of the NSHDP and/or United Nations Sustainable Development Cooperation Framework. The results can be used to inform revisions and adaptations to the recovery strategy to make it more effective.

The second part of recovery monitoring and evaluation focuses on the recovery process itself and assesses the extent to which the operationalization of health systems recovery has been successful. Results and lessons learned can be used to improve the implementation of the recovery process. Such assessment can also contribute to the body of knowledge and support the design of innovative and effective health systems recovery interventions. Annex 3 contains suggested indicators for monitoring and evaluation of the health systems recovery process.

Roles and responsibilities of different actors and stakeholders

Every emergency brings together a wide variety of actors who respond to the emergency and provide support in the recovery process. Coordination can be a challenge in these situations, unless the roles and responsibilities of the various actors are clearly identified and defined.

This is particularly important in complex and protracted crises, where the recovery process may alternate between periods of progress and regress, the transition between response and recovery may be long, and humanitarian and development actors may work concurrently. In such contexts, adopting the New Way of Working approach (*17*), which is based on leveraging the comparative advantage of each actor and working over multi-year timeframes to achieve collective outcomes, may help to overcome such challenges.

It is impossible to provide an exhaustive list of all the actions for which each actor must take responsibility in the recovery process; however, this guide includes a brief list of activities to be carried out by countries and their health sector partners, which can be found in Annex 4.

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Annexes

Annex 1. Selected tools and sources of information

Health systems assessment	Country health profiles
	Demographic and Health Surveys *(1)*
	Health system assessment approach *(2)*
	Standardized Monitoring and Assessment of Relief and Transitions (SMART) surveys *(3)*
	Guidance document to assess a healthcare arena under stress *(4)*
	Multi-Cluster/Sector Initial Rapid Assessment (MiRA) *(5)*
	Humanitarian Needs Overview (HNO) *(6)*
	Damage and Loss Assessment (DaLA) *(7,8)*
	Toolkit for assessing health system capacity for crisis management *(9)*
	Hospital safety index *(10)*
	WHO emergency care system assessment *(11)*
	Health Resources Availability Monitoring System (HeRAMS) *(12)*
	Service Availability and Readiness Assessment (SARA) *(13)*
	Early Warning, Alert and Response System (EWARS) *(14)*
	Integrated Disease Surveillance and Response (IDSR) *(15)*
	District Health Information Software 2 (DHIS2) *(16)*
	Universal health coverage priority benefits package (UHC-PBP) *(17)*
	Essential package of health services in humanitarian crises *(18)*
	Strategic Tool for Assessing Risks (STAR) *(19)*
	Vulnerability and Risk Analysis & Monitoring (VRAM) *(20)*
	IHR (2005) capacity assessment *(21)*
	IHR (2005) monitoring and evaluation framework, including joint external evaluation *(21–23)*
	Public health assessment of refugee and migrant needs (*forthcoming from WHO Regional Office for the Eastern Mediterranean*)
	SCORE for health data *(24)*
	Assessment of essential public health functions in countries of the Eastern Mediterranean Region: assessment tool *(25)*
	Conducting a Conflict and Development Analysis tool *(26)*
	Conflict sensitivity tools and guidance *(27)*

Building resilient health facilities	Guidelines for vulnerability reduction in the design of new health facilities *(28)*
	Hospital safety index *(10)*
	Health facility seismic vulnerability evaluation *(29)*
	Operational framework for building climate resilient health systems *(30)*

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Annex 2. Recommended priority actions for operationalization of health systems recovery

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Advance recovery preparedness (ARP)
To be carried out before emergencies, whenever possible, as part of preparedness activities to build capacity for health systems recovery and identify opportunities to build back better

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- Institutionalization of preparedness for health systems recovery within the health emergency programme in the health ministry.

- Creation of coordination mechanism with identified and trained recovery coordinator, which makes links with the multisectoral recovery coordination as usually led by national disaster management agencies.

- Establishment of a roster of experts to support the health ministry with the post-emergency health systems recovery when needed.

- All-hazards risk assessment to identify gaps and opportunities to build back better.

- Development of scenario-based health systems recovery plans for most common and/or likely events.

- Identification of potential resources, including funding and human resources, for short- and longer-term recovery activities.

- Securitization of health data and identification of indicators and data collection templates that will be useful for recovery planning, including reference unit costs for common aspects under the damage and loss assessment.

- Collaboration protocols and agreements to facilitate the joint collection, analysis and sharing of data among actors and stakeholders.

- Preparation of a tool for assessing the progress and effectiveness of the recovery plan with key performance indicators.

Early recovery and transition (ERT)
Strategic objective: To support humanitarian response and lay the foundation for long-term health systems recovery

ARP
Before initiating any recovery attempt

- Activation or establishment of a multisectoral coordination mechanism for health that is government-led where possible, and which includes humanitarian development actors and donors.
- Preliminary scoping of interest and opportunities among partners to anticipate early recovery and transition interventions.
- Assessment of available funds, estimation of financing gap and development of fund mobilization and management strategy.
- Capacity-building for the effective operationalization of health systems recovery.
- Creation of a health information system steering committee that is government-led, where possible, for mutual exchange of information among actors.
- Development or updating of tool for assessing the progress and effectiveness of the recovery plan with key performance indicators.

Health system recovery assessment

- Rapid mapping of health needs and assessment of existing service delivery modalities and platforms.
- Assessment of damage and loss, the health system including essential public health functions and recovery and resilience needs, taking into account multisectoral processes like PDNAs/RPBAs, and related timeframes for joint recovery planning. Identification of capacities and key bottlenecks within the health system, including opportunities for addressing distortions that existed from before the crisis or resulted from it, or adapting models of care to future needs.
- In conflicts, the assessment should include a conflict analysis, which should inform the design and implementation of health sector interventions in such a way as to address the causes, drivers, and triggers of conflict where, and as much as possible.
- For protracted crises, the health systems recovery assessment should include an assessment of the different components of the health system and core public health functions, the population's health status, needs and health care demands, health care networks *(1)*, emergency risk management capacity, community engagement, climate forecasts and health vulnerability to climate change, and the sociopolitical context, particularly the presence of one or multiple governing authorities and their willingness/ability to act. Results should feed into processes such as the multi-year humanitarian response plan, PDNA in disasters or RPBA in conflicts.

Recovery planning and implementation

Leadership and governance

- Development of health system continuity plans to ensure uninterrupted service delivery.

- Development of public awareness communication strategy to facilitate implementation of public health measures at different phases of recovery from outbreaks.

- Development of strategy for short- and long-term health systems recovery based on assessment results and identified opportunities for building back better. The strategy should:

  - define common objectives and allocate tasks and responsibilities among partners, and include a mutual accountability framework with joint monitoring mechanisms, ensuring that in conflicts and emergencies with long-term transitions the nexus approach is followed;

  - complement the larger national health emergency/disaster management programme, and align with national health policies, strategies and plans, National Action Planning for Health Security (NAPHS), and other pertinent guidelines and standards as well as long-term recovery interests;

  - ensure that health programmes are risk-informed for all hazards, including climate-related hazards;

  - include key performance indicators for quantifying and measuring the progress of implementing the recovery strategy.

- Establishment of operational links with health development partners and humanitarian coordination mechanisms.

- Collaboration with the Inter-Agency Standing Committee for integrating resilience and recovery objectives in the humanitarian response plan.

- Collaboration with national authorities supported by World Bank, United Nations agencies and the European Union on PDNAs or RPBAs.

- Capacity-building of national and subnational health authorities to progressively take responsibility for coordination functions.

- Creation and support of subnational early recovery coordination mechanisms to circumvent challenges linked with central structures, and increase community engagement and social cohesion.

- Development of framework for joint activity through memorandums of understanding on the essential package of health services (EPHS), performance-based incentives for health workers, support to pharmaceutical supply chain management where appropriate, joint supervision and training, and health information systems such as Early Warning, Alert and Response System (EWARS).

- Integration of elements of emergency risk management into the recovery framework and plan.

- Capacity-building of district health management functions to support the delivery of EPHS and life-saving functions.

Health information system

- Development of strategy to minimize information fragmentation and promote the aggregation and joint analysis of data across different areas of operations.

- Review and update of data collection modalities and platforms, in disease outbreaks, with adaptations where needed.

- Linking of outbreak surveillance with hospital and laboratory data and mainstream into public health emergency operations centres (PHEOCs).

- Improvement of reporting mechanisms and systems to ensure that there is timely data to inform the operations coordinated by IMS.

- Strengthening of information-sharing mechanisms, to ensure that flow between community, district, regional and central levels is effective.

- Training of health workers on any adaptations to the health information system.

- Assessment of HIS functionality and in cases of severe disruption, restoration or replacement, prioritizing compatibility and inter-operability and accessibility for all partners.

- Agreement on the use of similar sets of geographical/administrative denominators and demographic estimations to harmonize information.

- Agreement on health facility routine health information system including reporting tools, platforms for uploading data, and processes and incentives for reporting.

- Establishment of standardized disease surveillance system, with an EWARS component for diseases that are potentially epidemic, particularly in conflict-affected areas where routine surveillance may become non- or dysfunctional.

- Establishment of system for mapping damage to and functionality of health facilities covering the entire affected area and population; identifying and documenting, where appropriate, which partner(s) support what facilities and through which funding mechanism.

- Strengthening of district-level health information systems to support evidence-based decision-making.

Human resources for health

- Assessment of health workforce capacity and identification of shortages in all areas, to ensure that outbreak response plans can be implemented.

- Creation of surge capacity, including through the activation of the dormant workforce, accelerated training, redeployment or task-shifting.

- Short- and long-term workforce planning that includes an assessment of the current and future needs of the population, identification of the health services required, innovative ways to deliver those services and, consequently, the type of health workers needed and how to deploy them.

- Workforce planning should be closely linked to service delivery priorities, plans and strategies (see the section on service delivery, below).

- Development of strategy to curtail and reverse brain drain.

- Accelerated skill development for existing health workforce on the priority health needs and programmes of the response operations through non-traditional methods such as the production of guidelines, self-learning options or supervision.

- Training of new health workforce as needed, ensuring consistency with national standards to facilitate accreditation and eventual integration into the national health system.

- Addressing of health worker shortages through retraining of cadres developed during the emergency, pre-service training, creation of new cadres, task shifting, and activation of the dormant workforce such as retirees.

- Capacity-building for lifesaving activities with longer term benefits, such as infection prevention and control measures.

- Harmonization of salary scale and incentive packages offered by different organizations with national standards.

- Support for regular payment of staff salaries that have been interrupted by emergency *(2)*.

- Establishment of health workforce information system to support evidence-based planning and forecasting of workforce requirements.

- Addressing of other health workforce challenges such as accommodation, transportation and security.

- Implementation of equal opportunities policies to avoid excluding potential or actual health workers for reasons such as gender or ethnicity.

- Provision of psychosocial support to staff and their family who have been traumatized by emergency.

Health financing

- Estimation of loss caused by outbreak based on formal assessment processes like the PDNA or country-owned tools and methodologies.

- Estimation of financial resources required for the health system to continue to provide outbreak and non-outbreak related care.

- Identification and addressing of challenges facing the three health financing functions of revenue raising, pooling and purchasing.

- Development of plan for securing the required funding, from governments, ministries of finance and external partners where necessary.

- Alignment of donor funding with public financial management systems to improve efficiency, where appropriate.

- Creation of dedicated health systems recovery pooled fund, with appropriate governance mechanisms, where appropriate.

- Advocacy with donors for flexibility of humanitarian and development funding mechanisms to support the humanitarian development nexus, and ensure complementarity between these funding streams.

- Innovative revenue generation; for example, through impact investments, advocacy for creation of hybrid health recovery or transition funds.

- Establishment of joint contracting and management modalities among all partners and stakeholders, including donors and the government. Such mechanisms could build capacity and evolve into national purchasing agencies, and the funds could become the basis of a prepayment arrangement, which expedites the move towards universal health coverage by enhancing the goal of financial protection.

- Definition of what health services to purchase, for whom, from whom, and how to pay.

- Allocation of contracts to implementers, prioritizing the public sector to build capacity into national systems, and where possible limiting contracting out, to prevent undermining long-term recovery.

- Collaboration among stakeholders to develop equitable financing mechanisms, ensuring that reforms are carefully monitored.

- Use of innovative financing instruments to improve access to health services. This should include supply- and demand-side programmes such as performance-based financing and cash vouchers issued to patients to cover charges or other indirect costs such as transportation fees.

- Identification and mobilization of alternative funding so that user fees can be abolished or significantly reduced. User fee practices should, however, only be changed by development partners after successful policy discussion with the government.

- Advocacy with external governments and bodies to take measures towards lifting economic sanctions, where necessary.

- Advocacy with government to prioritize health care in their budget, particularly when resources become more scarce.

Medical products, vaccines and technology

- Evaluation and creation of list of the essential stock required for the outbreak as well as the non- related conditions.

- Review of procurement processes and supply chain management system to ensure rapid deployment of needed products and commodities.

- Use of local manufacturing capacity to produce required medical products and commodities.

- Collaboration at the international level, on the development, manufacture and distribution of vaccines, medicines and other consumables.

- Collaborate at the international level, on the manufacture and distribution of medicinal products, equipment and technology.

- Strengthening of laboratory test capacity including by adapting testing modalities and platforms, ensuring the availability of laboratory equipment, reagents and other consumables and increasing human resources.

- Assessment of damage to the supply chain and mapping of storage facilities at all levels of distribution.

- Adherence of all partners to WHO guidelines on drug selection, quality assurance and shelf life, presentation, packaging and labelling, and information management, to prevent unnecessary storage and disposal costs for countries (see Guidelines for medicine donations *(3))*.

- Re-establishment of medicines procurement and supply chain, using existing systems where possible to avoid creating parallel structures.

- Creation or support of subnational storage and distribution centres aligned with national pharmaceutical policies.

- Use and capacity-building of alternative distribution systems (land, water, air).

- Move from standard international kits towards bulk procurement of medical supplies based on consumption and caseload.

- Agreement on and use of common channel for bulk procurements, where possible, to increase cost savings and efficiency.

- Alignment of purchases with national standard lists for essential medicines.

- Prioritisation of national manufacturers and suppliers provided these comply with international quality standards.

- Use of supplies procured through global health initiatives, such as GAVI and the Global Fund to Fight AIDS, Tuberculosis and Malaria, in target countries.

- Monitoring of transparency in procurement and regulation to prevent corruption and ensure quality-assured, safe and effective products.

Service delivery

- Assessment and addressing of challenges in access to health care services including those caused by the outbreak as well as the related reorganization of service delivery.

- Expansion of health services benefit package to ensure health needs resulting from outbreak are covered.

- Adapt service delivery platforms and modalities as necessary, to ensure the uninterrupted delivery of essential, routine services.

- Rehabilitation of health facilities, prioritizing context-appropriate and sustainable materials.

- Definition of EPHS and establishment of platforms for delivery including levels at which each service package will be delivered, adaption to different operational/security contexts and the capacity of the health system.

- Standardization of treatment protocols in line with burden of disease, ensuring alignment with the national health plan and taking into account specific health needs that have been generated by the emergency.

- Creation of referral systems with strong linkages between the various levels of the health system – primary, secondary and tertiary, and establishment of hospital information management system.

- Implementation of the family practice model as a strategy for service provision, with technical support to ensure high coverage of primary health centre services and utilization of available services.

- Support to programmes run directly by local health authorities to limit establishment of parallel service delivery points unless necessary, ensuring that parallel programmes are temporary and integrated in the existing health network as soon as is feasible *(2)*.

- Introduction of initiatives to ensure quality of care at all levels, such as staff training and the evaluation of the performance in different health facilities.

- Creation or reactivation of community-based systems using community agents, tools and mechanisms for service delivery and data collection, and to facilitate the re-establishment of trust between health workers/services and the population.

- Implementation of policies and plans that ensure barrier-free access to health services, such as disabled accessible health facilities, gender-responsive health programmes, capacity-building for the prevention of gender-based violence and provision of support to victims.

- Review of service provision structure and definition of long-term modalities of service delivery, based on current guidelines and evidence, as well as any changes to the situation.

Monitoring and evaluation

- Review and evaluation of recovery plan to ensure that it is appropriate for the context and situation.

- Interagency evaluation of progress towards achievement of common objectives.

Long-term recovery (LTR)
Strategic objective: To rebuild the health system back better and improve its resilience and sustainability

ARP
Before initiating any recovery attempt

- Reassessment of needs and priorities, availability of funds for LTR and identification of more sustainable resources.
- Capacity-building of government, civil society and the national health system to take on significant roles in the recovery process and accelerate national ownership and self-reliance.
- Preparation of plan for transition towards development.
- Assessment and identification of opportunities for peace- and nation-building.

Health system recovery assessment

- Assessment of preparedness and IHR (2005) core capacities, reviewing and revising the NAPHS, JEE and after-action review.
- Regular revision and updating of the health systems assessment as well as policies and strategies for LTR, where necessary.
- Participation in new RPBA in cases where a change in the course of conflict requires reassessment of the policies and strategies.

Recovery planning and implementation

Leadership and governance

- Implementation of the recovery and resilience plan defined in the ERT phase, ensuring that external funds and assistance as well as all interventions are aligned with the national policies, guidelines, standards and systems.
- Evaluation of level of integration of funds, structures and mechanisms that were used or created in early recovery, into the national system.
- Collaboration with other actors on intersectoral projects that have an impact on social determinants of health or health systems strengthening and resilience.
- Revision and assessment of institutional and government capacity, including all-hazards disaster risk management and IHR (2005) core capacities.
- Transition and handover management of health systems to government in a manner which promotes the integrity of the system.

Health information system
• Revision of indicators defined during early recovery operations. • Conversion of information management tools and systems developed and used in response and early recovery phases, into national integrated surveillance systems with health repositories which include data on noncommunicable diseases, nutrition and mortality data. For instance, the simplified morbidity surveillance and EWARS can be merged and transformed to the DHIS2. • Strengthening health information system to improve the quality of data. • Health worker training on health information system, ensuring information flow between community, district, regional and central levels is effective and efficient • Strengthening of health inequality monitoring mechanisms.
Human resources for health
• Reactivation of normal regulatory mechanisms that may have been paused or adapted to improve surge capacity for the outbreak. • Absorption of workforce created by the outbreak, through the implementation of measures such as redeployment, retraining or the decision to make some dormant again. • Revision of workforce planning carried out in the early recovery and transition phase, updating of national strategy to ensure universal availability, accessibility, acceptability, coverage and quality of the health workforce. • Establishment of registries or information systems to track health workforce stock, education, distribution flow, remuneration and performance. • Development of finance mechanisms for the recruitment, development, training and retention of the health workforce. • Creation of incentives to attract and retain health workers in underserved places such as rural and conflict-affected areas. • Institutional capacity-building to promote effective public policy stewardship, leadership and governance of actions on health workforce. • Establishment of health workforce units with responsibility for development and monitoring of policies and plans, at national and subnational levels. • Strengthening of the governance and administration of deployment, ensuring linkages with training. • Establishment or reactivation of regulatory mechanisms to promote patient safety and adequate oversight of the private sector. • Establishment or reactivation of accreditation mechanisms for health training institutions. • Assessment of health workers' knowledge and skills to facilitate their reintegration into the public health workforce. • Revision of workload and reallocation of tasks to different cadres to address near-term shortages while supporting longer term planning.

Health financing
• Capacity-building of the various areas of the national health financing system. • Revision of health financing system to identify emerging challenges and options for addressing them. • Pooling of donor funds, where possible, prioritizing single, unearmarked funds to support flexibility, predictability and sustainability. • Advocacy for the expansion of fiscal space to increase public domestic funding for health; for example, by boosting efficiency or raising revenue. • Tracking of financial flows, including on- and off-budget, to reduce illicit financial flows and measure financial protection. • Institutionalization of measures to ensure effective use of health resources and minimize potential wastages. • Identification of cost-effective interventions and purchasing of health services defined in early recovery, prioritizing the government as a service provider to build capacity and shifting priority from communicable to non-communicable diseases. • Implementation of financial protection programmes based on prepayment, to ensure access to services without the risk of financial hardship.
Medical products, vaccines and technology
• Provision of technical, financial and administrative support to pharmaceutical sector to strengthen procurement, distribution, management, planning, inspection and regulatory systems and capacities. • Integration of parallel procurement and supply chain systems into national structures.

Service delivery

- Revision and conversion of EPHS to UHC-PBP, ensuring appropriateness for current and future needs and full coverage for the target population.

- Community engagement and solicitation for active participation in the design of service delivery, to ensure accountability and transparency.

- Organization of service delivery to assure continuity of care across the network of services, levels of care and life-cycle. This should include basic environmental health services such as water, sanitation and hygiene (WASH).

- Decentralization and provision of services through the community-based health care model, particularly in areas such as mental health and in settings with low capacity and utilization of public health facilities.

- Strengthening of links and improvement of the functionality of referral systems between primary, secondary and tertiary levels of care.

- Promotion of quality, person-centred care to ensure that services are responsive and acceptable to users.

- Rehabilitation and construction of health facilities and structures using disaster mitigation measures based on context, type of disaster and risk profile (see Operational framework for building climate resilient health systems *(4)*).

- Alignment of health services to population needs, for example by:

  – providing psychosocial and post-trauma counselling and treatment to people suffering from mental, neurological and substance use conditions (see mhGAP Humanitarian Intervention Guide (mhGAP-HIG): clinical manag ement of mental, neurological and substance use conditions in humanitarian emergencies *(5)*);

  – ensuring that facilities are constructed according to population distribution and settlements to facilitate accessibility;

  – providing comprehensive, integrated reproductive health services, including contraceptives, for all persons of reproductive age;

  – providing comprehensive, holistic health care to children and adolescent including psychosocial care for trauma, child development services, preventative and curative care for the most common childhood illnesses (see Child and adolescent health in humanitarian settings operational guide *(6)*);

  – ensuring people with disabilities and older people have access to assistive aids and devices, trauma/injury care, therapy and rehabilitation services;

  – ensuring access to essential therapies, basic care and uninterrupted clinical management for people with noncommunicable diseases (see Tools for implementing WHO's package of essential noncommunicable disease interventions *(7, 8)*).

- Synergize with global health initiatives, such as GAVI, the Stop TB Partnership and the Roll Back Malaria (RBM) Partnership To End Malaria, to maximize impact on target diseases.

<table>
<tr><td>Monitoring and evaluation</td></tr>
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- Joint annual monitoring and evaluation of progress towards recovery objectives.
- Assessment, revision and updating of the effectiveness of the health systems recovery plan.
- Documentation of recovery process including good practices, innovative ideas and lessons learned.

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Annex 3. Monitoring and evaluating the health systems recovery process

	Strategic objective	Indicators
Before emergencies	Operational preparedness for health systems recovery	• Health systems assessment report • A recovery coordination mechanism • Designated and trained recovery focal point • Roster of health systems recovery experts • Health systems recovery strategy with contingency plans for different scenarios
Recovery phase		
Early recovery and transition (ERT)	Supporting the humanitarian response and laying the foundation for long-term health systems recovery	• Activated and well-functioning coordination mechanism • Recovery assessment which identifies weaknesses and opportunities to build back better and estimates the cost • Health systems ERT strategy and plan • Identified sources of funding for ERT strategy and plan • Monitoring and evaluation tools to measure both the progress of the recovery process and its outcomes
Long-term recovery (LTR)	Building the health system back better and improving its resilience and sustainability	• Revised and updated recovery assessment • Revised health systems recovery strategy and plan which is led and financed by the national health system • Integration of parallel systems into the national system • Defined and implemented UHC-PBP which is supported by a social health protection plan • Monitoring and evaluation of both the progress of the recovery process and its outcomes

Annex 4. Roles and responsibilities of actors and stakeholders

	Country/national health system	**WHO and other health sector partners**
Before emergencies	• Establish recovery coordination mechanism • Designate and train recovery focal point or team • Conduct health systems assessment informed by all-hazard risk assessment and other sources of information	• Build institutional capacity for emergency health systems recovery • Provide support with conducting health systems assessment and elaborating scenario-based health systems recovery contingency plans
Recovery phase		
Early recovery and transition (ERT)	• Activate or create coordination mechanism involving heath and other non-health sector partners • Conduct recovery assessment and estimate the recovery costs, requesting support from external partners where necessary • Develop recovery strategy and plan based on results of the recovery assessments • Initiate advocacy activities to mobilise funding for recovery • Implement recovery strategy and plan	• Provide technical support for recovery assessment • Provide technical support for the elaboration of a recovery strategy • Support or lead advocacy for mobilization of recovery funds • Provide support to government and, where necessary, lead and organize the coordinated efforts of health aid agencies • Provide support with service delivery and ensure health care access to the most vulnerable populations • Build government capacity to take on administration of health systems in the long term • Convene different factions in conflict settings, facilitate dialogue and negotiate access to populations in need

| Long-term recovery (LTR) | • Review and revise the recovery strategy and plan

• Continue implementation of recovery strategy and plan

• Transition health systems funding from donor-based to national public-based financing

• Transition health systems management and operations from external to national actors

• Design and implement the UHC-PBP, to ensure that everyone has access to services without the risk of financial hardship

• Develop plan for a social health protection programme | • Provide support for domestic financing strategies and country transitions away from external funding

• Provide support with integrating parallel systems into the national health system and convert basic information management and other systems used in early recovery into comprehensive and sustainable systems

• Provide support with the design and implementation of the UHC-PBP

• Conduct joint annual monitoring and evaluation, with government and all other actors, to evaluate progress towards recovery objectives

• Document the recovery process including good practices, innovative ideas and lessons learned, and disseminate findings |

Glossary

Acute emergency. The occurrence of one or more of the following conditions, due to any reason (natural and/or man-made): a sudden unplanned displacement of a large proportion of the population away from the community of habitual residence and into any settlement; direct exposure of the civilian, non-combatant population to new or exacerbated and sustained episodes of armed conflict; impending or already occurred sudden deterioration of nutritional status; natural or industrial disaster resulting in temporary homelessness, disruption to critical public services, increased risk of injury and/or exposure to adverse weather conditions, famine, drought or environmental degradation for a large proportion of the population; sudden breakdown of critical administrative and management functions within the public and/or private sector resulting in large-scale disruption of public health and related services *(1)*.

Build back better. The use of the recovery, rehabilitation and reconstruction phases after a disaster to increase the resilience of nations and communities through integrating disaster risk reduction measures into the restoration of physical infrastructure and societal systems, and into the revitalization of livelihoods, economies and environmental integrity *(2)*.

Complex emergency. A humanitarian crisis in a country, region or society where there is a total or considerable breakdown of authority resulting from internal or external conflict, and which requires an international response that goes beyond the mandate or capacity of any single agency and/or the ongoing United Nations country programme *(3)*.

Development. The continuous, unending and multidimensional process through which a higher quality of life is achieved for all people in all areas of life, including economically, socially, environmentally and technologically *(4)*.

Graded emergency. An acute public health event or emergency that requires an operational response by WHO. There are three WHO grades for emergencies, signifying the level of operational response by the Organization: Grade 1 (limited response), Grade 2 (moderate response) and Grade 3 (major/maximal response). If a graded emergency persists for more than 6 months, it may transition to a protracted emergency *(5)*.

Post-disaster needs assessment (PDNA). Government-owned and led exercise whose main goal is to assess the full extent of a disaster's impact, define the needs for recovery and, in so doing, serve as the basis for designing a recovery strategy and advocacy for funding *(6)*.

Protracted emergency. An environment in which a significant proportion of the population is acutely vulnerable to death, disease and disruption of livelihood over a prolonged period of time. Governance in these settings is often weak, with limited state capacity to respond to, and mitigate, the threats to the population, or provide adequate levels of protection *(5)*.

Recovery and peace-building assessment (RPBA). A joint initiative of the United Nations, the World Bank and the European Union aimed at identifying and addressing immediate and medium-term recovery and peace-building requirements while laying the foundation for the elaboration of a longer term recovery and peace-building strategy in a country facing conflict or transitioning out of a conflict-related crisis. It serves as a methodology and/or platform for joint analysis and planning, and is designed to maximize the effectiveness of national and international recovery and peace-building efforts *(7)*.

Resilience. The ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions *(8)*.

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This new implementation guide was developed by the Health Systems in Emergencies Lab at the WHO Regional Office for the Eastern Mediterranean. It provides action-oriented guidance on how to undertake health systems recovery from all types of emergencies, using the "build back better" approach. The guide situates health systems recovery within the emergency management cycle, characterizes recovery and response, and details the two phases of health systems recovery – early recovery and transition, and long-term recovery. The steps of the recovery cycle during each phase are outlined, as well as the roles and responsibilities of humanitarian and development actors during the health systems recovery process. By providing direction on health systems recovery from emergencies, the guide aims to facilitate the creation of resilient systems that are able to adequately prepare for, respond to and recover from emergencies; which promote, restore or maintain health; and advance the regional vision of "health for all, by all".