Fostering Resilience through Integrated Health Systems Strengthening
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Foreword

The health and economic effects of the pandemic of coronavirus disease (COVID-19) are being felt globally and demonstrate that, while some countries are facing more devastating effects than others, no single health system was fully prepared to meet this challenge. Many countries are enduring simultaneous shocks and stressors to their health systems, such as climate events, conflicts and other infectious disease outbreaks. The short and long-term consequences of these shocks and stressors underscore the need for building health systems resilience with strong public health foundations to ensure and maintain the delivery of high-quality essential health services. The global community will need to build on this foundation of public health functions, while also drawing on resources from other sectors, to achieve universal health coverage and protect Global Health Security. We cannot choose one without the other.

With a significant proportion of the world caught up in difficult situations, including protracted conflict, displacement, poverty and compromised human rights, the pandemic has also reconfirmed the truth that, in our interconnected world, no one is safe until we are all safe; reminding us that “there is no wealth without health”. An integrated approach to health systems strengthening is imperative to safeguard the economy, shared prosperity and well-being.

Moving forward, the global community needs to take concerted collaborative action at global, regional and national levels. This should begin with and be centred around building resilient health systems based on Primary Health Care that prioritize Essential Public Health Functions. We need to capitalize on the current widespread political impetus and align “building back better” with a focus on establishing equitable and high-quality health systems as central to economic recovery and development at all levels.

The World Health Organization (WHO) and the United States Agency for International Development (USAID) co-hosted a strategic meeting on 14 April 2021 to examine this topic together and identify specific actionable steps to build an integrated approach to health system strengthening that brings together health security, humanitarian, disease-specific and life-course-specific objectives. This integrated approach should include translating lessons learned from public health emergencies into concrete action for health systems recovery and the reduction of siloed investments and programmes. This will create the sustainable impacts and efficient delivery that are the products of resilient health systems capable of withstanding 21st-century public health challenges.

WHO and USAID look forward to collaborating, with other partners, on the shared objectives agreed during this meeting. Our partnership will set an example of a unified and coherent approach to strengthening countries’ health systems. Collaboration and engagement with partners, including the International Association of National Public Health Institutes (IANPHI) and the World Federation of Public Health Associations (WFPHA) enables us to share our experiences and set the
direction for transformative joint work at country level, building on local institutions, capacities and health stewardships including development, humanitarian and disaster risk management institutions and coordination platforms.

We acknowledge and reaffirm the vital importance of the ongoing work between our organizations on health systems resilience and look forward to our integrated planning and country support.

Jeremy Konyndyk
Executive Director
Office of the Administrator
United States Agency for International Development

Zsuzsanna Jakab
Deputy Director-General
World Health Organization
Acknowledgements

The present meeting report was produced by Geraldine McDarby, with inputs from Saqif Mustafa, Zandile Zibwowa, Redda Seifeldin, Yu Zhang, Nana Mensah-Abrampah, Oriane Bodson, and under the overall supervision of Sohel Saikat. Reviews and valuable inputs were provided by Rhea Bright, Elizabeth Lugten, Martin Alilio, Jennifer Jackson and Kelly Saldana from the USAID Office of Health Systems.

The meeting formed a part of a joint activity as part of a USAID funded initiative, “Strengthening health security and health systems linkages to improve quality health services in emergencies”.

Special appreciation goes to Zsuzsanna Jakab and Jeremy Konyndyk for their overall leadership, guidance and support for the work.

Sincere thanks go to the following speakers and presenters at the meeting for their valuable contributions: Greg Collins, Natasha Bilimoria, Suraya Dalil, Bettina Borish, Andrew Clements, Katherine Farnsworth, Jesse Joseph, Humphrey Karamagi, Awad Mataria, Altaf Musani, Natasha Azzopardi Muscat, Kelly Saldana, Gerard Schmets, Duncan Selbie, Neil Squires, Rajesh Sreedharan, Shams Syed, Rhea Bright, Sohel Saikat, Nana Mensah-Abrampah and Zandile Zibwowa.

Sincere thanks also go to all participants from WHO regional offices and headquarters; USAID Washington D.C. headquarters and country missions; our valued partners – International Association for National Public Health Institutes (IANPHI) and the World Federation for Public Health Associations (WFPHA).

Lastly, appreciation goes to colleagues from the WHO headquarters Deputy Director-General’s office, Universal Health Coverage and Life course (UHL) Executive Director’s office and the Coordinated Resource Mobilisation (CRM) department.
## Abbreviations

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<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>COVID-19</td>
<td>coronavirus disease</td>
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<td>EPHF</td>
<td>essential public health functions</td>
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<td>FCV</td>
<td>fragile, conflict-affected and vulnerable</td>
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<td>GHS</td>
<td>Global Health Security</td>
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<td>GPW 13</td>
<td>WHO’s Thirteenth General Programme of Work, 2019–2023</td>
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<td>IANPHI</td>
<td>International Association of National Public Health Institutes</td>
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<td>JEE</td>
<td>Joint External Evaluation</td>
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<td>NAPHS</td>
<td>National Action Plan for Health Security</td>
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<td>NPHI</td>
<td>national public health institute</td>
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<td>PHC</td>
<td>Primary Health Care</td>
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<td>PHE</td>
<td>public health emergency</td>
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<td>UHC</td>
<td>universal health coverage</td>
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<td>USAID</td>
<td>United States Agency for International Development</td>
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<td>WFPHA</td>
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Executive summary
Public health emergencies past and present continually reinforce the need for approaches to health security that are integrated within wider health system strengthening efforts and underpinned by a public health approach. Public health emergencies have limited access to and availability of quality essential health services, impacting health care outcomes and resulting in preventable mortality and morbidity. A siloed approach to health systems strengthening, health security and vertical disease programme planning, budgeting and implementation has contributed to a lack of health systems resilience. Without a resilient health system, countries are unable to scale up emergency control measures quickly while also maintaining essential health services in the face of disruptive events. There is a pressing need to develop a consensus on an integrated approach to health systems strengthening to promote sustainable resilience while maximizing the use of limited resources.

As part of an ongoing collaboration, the USAID Office of Health Systems and the WHO Integrated Health Services Department reviewed health systems and health security assessments and planning documents to identify opportunities to improve health systems strengthening in synergy with efforts to improve health security. To build on this work, a strategic discussion was proposed to draw on the experiences of selected global and national stakeholders and partners.

In this context, a high-level joint meeting was held virtually on 14 April 2021, with wide-ranging representation from WHO including the Deputy Director-General, directors and technical leads from the Universal Health Coverage/Life Course Division, the Health Emergencies Programme and the regional offices for Africa, Europe and the Eastern Mediterranean. From USAID there was high-level representation from the Office of the Administrator and key teams from the Bureau for Global Health, including the Office of Health Systems; Emerging Pandemic Threats Division; the Bureau for Resilience and Food Security; and the Bangladesh mission. The objectives of the meeting were to:

- facilitate strategic discussions on prevailing practices towards health system resilience for health protection and quality health services to determine actionable next steps for global guidance;
- inform policy options for WHO, USAID and partners to maximize joint country support for health system resilience;
- identify immediate priorities for taking forward next steps from the meeting.

Speakers highlighted the multiple challenges facing health systems, including public health emergencies (PHEs) that require the development of resilient health systems. The development of resilience capacities that include absorptive, adaptive and transformative capacities, as well as preventive and responsive capacities, were noted as being key for supporting the maintenance of high-quality, accessible health services. An integrated approach to health systems strengthening
was recognized as a key enabler of resilience and a means of aligning existing structures and programmes in support of resource optimization. There was an acknowledgement of the need to integrate health security into wider efforts to strengthen health systems in order to produce the long-term system strengthening required to meet 21st-century health challenges and support universal health coverage (UHC). The agendas of UHC, Primary Health Care (PHC), Essential Public Health Functions (EPHFs) and Global Health Security (GHS) were identified as complementary rather than competing, but there was a recognition of the need to make them mutually reinforcing. It was also acknowledged that, while it has been clear for some time that UHC and GHS are two sides of the same coin, previous efforts have failed to produce the system strengthening needed and the time has come for concrete, practical action that respects individual country contexts.

The evidence presented highlighted critical gaps in current approaches to health security and health systems planning and assessment, particularly in relation to governance and collaborative mechanisms that support a whole-of-government response and whole-of-society engagement. The lack of clearly defined roles in both approaches is particularly acute at the subnational level, which is critical given its importance in mobilizing emergency response as well as PHC and community engagement. Siloed approaches to financial and workforce planning as well as a failure to address long-standing infrastructural gaps in health information and surveillance systems were identified as perpetuating continued fragmentation. A need was also expressed to systematize learning to inform resilience efforts through the use of appropriate monitoring and evaluation tools and frameworks that measure the added dividends from investments in health systems strengthening.

Panel discussion: “What do we need to do differently for an integrated approach to health systems strengthening for resilience?”

The panel discussion focused thinking and developed consensus in three key areas to support an integrated approach to health systems strengthening for improved resilience: (1) monitoring, planning and health policy; (2) the role of PHC-oriented health systems; and (3) the role of global actors, catalysing agents, public health institutes and contributors to the public health research agenda. Key themes for which there was broad agreement were the need to reduce fragmentation, improve clarity of communication and develop shared policy objectives. Persistent financial barriers were acknowledged in terms of vertical funding streams.

A further consensus emerged between speakers and in the panel discussions on the need for mechanisms to promote intersectoral integration and alignment in planning, budgeting and implementation in order to reduce fragmentation and promote involvement of all relevant actors. The need for action both within the health sector, to better align public health, primary health care and private providers, and across sectors, including animal, veterinary and environmental health
was acknowledged. The importance of subnational capacity was emphasized, as both the final common pathway for GHS and UHC and as the point of interaction with the community and, therefore, the level at which health service integration would be operationalized. There was a strong recognition among speakers, panellists and participants of the key role of communities in the creation of resilient health systems that are person-centred and responsive to population needs and the need to “blur the lines” between health systems and the community in support of true partnership. It was noted that resources have traditionally focused on individual-level health care rather than population-based health care which has weakened public health systems and response capacities. There was broad consensus on the need for a shift in focus from the curative aspects of health care to the optimization of health and well-being, with a focus on equity and the social determinants of health. There was agreement that this can be achieved through the strengthening of the essential public health functions (EPHFs), which invariably support implementation of the International Health Regulations (IHR) (2005), into health systems based on PHC.

There was also recognition that the pandemic has exposed significant inequities within and between countries, with the most vulnerable and marginalized groups being disproportionately affected. Countries with low resources, and in particular those in fragile, conflict-affected and vulnerable (FCV) settings, face the greatest challenges in competing for the limited resources which are required to control the epidemic; they have suffered proportionally higher disruptions to service delivery, and now have lower rates of access to vaccines to end the epidemic. Opportunities were identified in the nexus between development/humanitarian efforts and investment in health systems.

Thematic areas emerging from the review of the evidence were presented for the consideration of panellists and participants. These included:

- ways to strengthen health systems resilience capacities to achieve the goals of equity, quality and resource optimization;

- the need to focus on recovery and transformation and foster everyday resilience beyond emergency preparedness and response, so that countries can respond, adapt and transform under the pressure of shocks and stressors; and

- the need to foster a systematic approach to research and learning for health systems resilience.

From this foundation, three overarching potential action areas were presented (see Fig. 1) and used to inform a list of actionable next steps (Box 1).

This list of actionable next steps consolidates the findings from the evidence, as well as input from expert panellists and participants from USAID, WHO, IANPHI and WFPHA. It represents a clear way forward to foster resilience through integrated health systems strengthening. Political will and technical
commitment will be required to exploit the momentum of this time and incorporate the suggested way forward into recovery and transformation efforts after the current pandemic as the global community attempts to build back better, fairer health systems.

Fig. 1. Overarching areas for potential action to foster an integrated approach to health systems strengthening

**COLLABORATE**
with the International Association of Public Health Institutes, the World Federation of Public Health Associations and other partners to harness the power of national public health institutes in strengthening the Essential Public Health Functions

**PURSUE**
shared priorities to ensure coordination, collaboration and knowledge-sharing on building health system resilience

**ENCOURAGE**
countries and the global community to prioritize integration of health system strengthening and Global Health Security
Box 1. Actionable next steps

**COLLABORATE** with IANPHI, WFPHA and other partners to harness the power of national public health institutes (NPHIs) in strengthening the Essential Public Health Functions (EPHFs):

- strengthen or establish regional hubs or centres of excellence for health systems strengthening;
- enhance academic partnerships between countries through connecting schools of public health;
- support ministries of health to strengthen stewardship of NPHIs for health system strengthening with focus on improving EPHFs;
- create a network of NPHIs supported by IANPHI that also connects with international structures and professional groups to support low-resource NPHIs;
- consider twinning partnerships between NPHIs.

**PURSUE** shared priorities to ensure coordination, collaboration and knowledge-sharing on building health system resilience:

- develop a health systems resilience roadmap for a shared strategic approach between public health, health systems, emergency and humanitarian response and health security stakeholders to strengthen harmonization and alignment within national health strategic plans that are reoriented to a public health approach focusing on protecting and promoting the health and well-being of the population, as opposed to traditional health care;
- support countries in creating an enabling environment for research, innovation and learning and applying lessons learned to policies, planning, implementation and monitoring;
- develop tools and resources to operationalize integrated health systems strengthening to foster everyday health systems resilience;
- ensure that existing monitoring and evaluation frameworks (both current and in development) promote an integrated approach.

**ENCOURAGE** countries and the global community to prioritize integration of health systems strengthening and Global Health Security through the foundation of Primary Health Care (PHC):

- strengthen community engagement and social accountability for health systems resilience;
- advocate for a multidisciplinary PHC workforce to respond more effectively to emergencies while maintaining quality essential health services;
- explore the role of focused attention on quality in PHC to drive resilience;
- support national and subnational authorities in linking health sector and health security planning, costing and implementation (inclusive of public health, animal health, environmental health);
- prioritize the most vulnerable populations to reduce inequities and pay special attention to countries and populations affected by conflict and displacement.
Box 1. Actionable next steps

COLLABORATE with IANPHI, WFPHA and other partners to harness the power of national public health institutes (NPHIs) in strengthening the Essential Public Health Functions (EPHFs):

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• create a network of NPHIs supported by IANPHI that also connects with international structures and professional groups to support low-resource NPHIs;
• consider twinning partnerships between NPHIs.

PURSUE shared priorities to ensure coordination, collaboration and knowledge-sharing on building health system resilience:

• develop a health systems resilience roadmap for a shared strategic approach between public health, health systems, emergency and humanitarian response and health security stakeholders to strengthen harmonization and alignment within national health strategic plans that are reoriented to a public health approach focusing on protecting and promoting the health and well-being of the population, as opposed to traditional health care;
• support countries in creating an enabling environment for research, innovation and learning and applying lessons learned to policies, planning, implementation and monitoring;
• develop tools and resources to operationalize integrated health systems strengthening to foster everyday health systems resilience;
• ensure that existing monitoring and evaluation frameworks (both current and in development) promote an integrated approach.

ENCOURAGE countries and the global community to prioritize integration of health systems strengthening and Global Health Security through the foundation of Primary Health Care (PHC):

• strengthen community engagement and social accountability for health systems resilience;
• advocate for a multidisciplinary PHC workforce to respond more effectively to emergencies while maintaining quality essential health services;
• explore the role of focused attention on quality in PHC to drive resilience;
• support national and subnational authorities in linking health sector and health security planning, costing and implementation (inclusive of public health, animal health, environmental health);
• prioritize the most vulnerable populations to reduce inequities and pay special attention to countries and populations affected by conflict and displacement.

Background
A key measure of resilience within health systems is the capacity to maintain delivery of high-quality essential health services in the context of changing population demand, while responding to adverse events. Recent public health emergencies have brought significant and widespread disruption to essential health services, with reductions in access to and the availability of high-quality health services; the consequences fall disproportionately on vulnerable and marginalized groups including those in fragile, conflict-affected and vulnerable (FCV) settings. A siloed approach between health systems strengthening, health security and vertical disease programme efforts is reflected in COVID-19 preparedness and response plans - a review showed that limited number of countries examined reported incorporating considerations of maintenance of essential health services, and included considerations of quality beyond infection prevention and control (1).

Response to past and ongoing emergencies has highlighted the need for approaches to health security that are integrated within wider health system strengthening efforts and underpinned by a public health approach that incorporates intersectoral coordination. Fragmented approaches to planning and disease-specific and life-course-specific programmes with time-bound funding and without clear integration of their infrastructure into wider national health systems can hinder response and recovery. Ultimately, at country level, the national health system should be the focus of policy, planning and investment to build a firm foundation and maintain service delivery functions. This is critically important, since funding restrictions at all levels will inevitably follow the acute phase of the current pandemic, and health authorities will need to adapt to the growing and diverse health needs of their populations. There is a pressing need to improve global and national understanding of ways to promote and operationalize health systems resilience to support its functionality and simultaneously to respond to disruptive events when they occur. This integrated approach can promote sustainable and everyday resilience and maximize the use of limited resources (2).

As part of an ongoing collaboration, USAID’s Office of Health Systems and WHO’s Integrated Health Services Department has reviewed the current state of health system and health security linkages for public health in selected USAID priority countries. The findings based on health systems and health security assessments and planning highlight opportunities to improve health system strengthening in synergy with efforts towards health system resilience. A strategic discussion was proposed to further build on this work and contemporary evidence, by drawing on the experiences of selected global and national stakeholders and partners.

Objectives of the meeting

The purpose of the meeting was to share and discuss salient findings from this USAID-WHO collaboration and other relevant technical work to build
sustainable health systems resilience at policy, planning and operational levels. The objectives of the meeting were to:

- facilitate strategic discussions on prevailing practices towards health system resilience for health protection and quality health services;

- inform policy options for WHO, USAID and partners to maximize joint country support for health system resilience;

- identify immediate priorities for taking forward next steps from the meeting.
Summary of proceedings
Meeting moderation

Suraya Dalil, Director, Special Programme on Primary Health Care, WHO

Suraya Dalil opened the meeting, introduced all speakers and facilitators and provided summary comments and personal reflections between speakers’ statements.

Welcome and opening remarks

Zsuzsanna Jakab, Deputy Director-General, WHO

The meeting was formally opened by Zsuzsanna Jakab, Deputy Director-General, WHO, who welcomed participants to the meeting, in particular USAID leaders and external partners from IANPHI and WFPHA. After highlighting the meeting’s aim of building on the ongoing partnerships between the United States Government and WHO and its Member States and important partners, aimed at building better, more resilient health systems for the 21st century, she presented the context for the meeting.

Zsuzsanna Jakab outlined that the COVID-19 pandemic and public health emergencies have continued to underscore the need for primary-health-care (PHC)-oriented, resilient health systems with strong foundations that maintain the full range of health services for all in all contexts. Universal health coverage (UHC) and Global Health Security (GHS) were presented as interdependent goals that can be achieved through building capacities in health systems resilience. She highlighted that this will require supportive and agile political leadership at all levels and concerted action in Member States to position health as central to socioeconomic recovery and development, as well as an integrated approach that brings together health systems strengthening, health security, humanitarian and disease-specific and life-course-specific initiatives. She closed by highlighting that this integrated approach is at the core of the WHO’s position on health systems resilience for recovery and transformation during and beyond the pandemic.

“There is no other option for us than to build on this momentum and increase and sustain adequate investments and attention towards health systems resilience to save lives and protect the economy”

Zsuzsanna Jakab, Deputy Director-General, WHO

Jeremy Konyndyk, Executive Director, Office of the Administrator, USAID

Jeremy Konyndyk began by highlighting the value of the ongoing partnership between USAID and WHO and welcomed the return of full and robust engagement in that partnership. He highlighted the critical nature of the work undertaken by USAID in relation to infectious disease risks, health systems and outbreak...
response, the strength and resilience of health systems that has been highlighted by COVID-19. He indicated that the time has come to start applying the emerging lessons to determine how health systems strengthening and resilience map to health security to create mutually reinforcing efforts at all levels from local to national to global. Jeremy Konyndyk commented that COVID-19 has highlighted that the different agendas being pursued by WHO and global partners including UHC, PHC, EPHFs and GHS are not separate and distinct but need to be reinforcing. He noted that USAID’s vision is to support integrated health systems that are resilient enough to respond to stressors using a whole-of-society approach that blurs the lines between health systems and communities. Jeremy Konyndyk highlighted the work of USAID with partners to build resilience capacities. He recognized the important role of the meeting as a “first cut” to identify the lessons of the ongoing pandemic and begin to apply them.

Background and objectives

Sohel Saikat, Lead, Health Services Resilience, WHO

Sohel Saikat began by outlining how the COVID-19 pandemic provides a clear example of the ways in which health security can impact economies. He highlighted that the pandemic has arisen against a background of multiple health system stressors – some routine, some anticipated, some evolving; including FCV-settings, the growing burden of noncommunicable diseases and the challenges associated with ageing populations. He noted that all shifts or changes in context place demands on and impact health services, reminding participants that there is only one health system to respond to all these stressors – one information system, one workforce, one surveillance mechanism, one supply chain. He pointed to the WHO health system building blocks as a starting point for the response.

He indicated that the relationship between health systems strengthening and resilience is a profound one that goes beyond the conceptual. He indicated that while multiple definitions of resilience exist, there are common elements between them: WHO has chosen to focus on the operationalization of resilience capacities, including maintenance of essential health services, and its work with USAID to develop systems that can tackle public health emergencies and other shocks by evolving, adapting, improving and providing all types of service, rather than focusing on the development of a unifying definition. He acknowledged the wealth of experience

“The COVID-19 pandemic has highlighted the critical need for health system strengthening, even in well-resourced settings, to maintain quality health services. An infectious disease threat anywhere can be a threat everywhere”

Jeremy Konyndyk, Senior Advisor to the USAID Administrator for COVID-19, USAID
Fig. 2. Health systems strengthening, universal health coverage and Sustainable Development Goal outcomes
and expertise in the development of health system capacities that the present meeting brings together. He reminded participants that in order to move forward effectively, it should be acknowledged that previous efforts and investments have failed to produce the long-term system strengthening that is needed.

“\textit{In the end, we have only one system to tackle the range of public health threat; one health information system, one healthcare workforce, one surveillance mechanism, one supply chain – ultimately one national health system to be strengthened.}”

\textbf{Sohel Saikat, Lead Health Services Resilience, WHO}

Sohel Saikat indicated the need to recognize that the evolving realities post-COVID-19 will necessitate integration. He highlighted the ongoing collaboration between WHO and USAID as work that has provided a strong organizational emphasis on GHS and UHC as two sides of the same coin, while pointing out that, historically, the focus of investment has been on health care rather than Essential Public Health Functions (EPHFs), with public health services often being overlooked. He commented on the work of technical colleagues across WHO that has focused on how to widen the integrated approach so that funding and technical support has the long-term legacy of building health systems.

Sohel Saikat outlined the opportunity presented by the COVID-19 pandemic for the global health and development community by highlighting the fact that delivery of the United Nations Sustainable Development Goals (SDGs) is very much dependent on the way we protect our populations (see Fig. 2) and ensure our economies are protected. This insight has provided political momentum, heightened by support from national governments, including the United States of America, and beyond in the Group of Seven and Group of Twenty industrialized nations. He outlined how, based on the experiences with recent and ongoing public health emergencies, WHO has adopted a unified position on health systems recovery and transformation, under the guidance of the Deputy Director-General and in conjunction with regional offices and the three levels of WHO and demonstrating how WHO can streamline its operations, become more relevant and bring about a change in its ways of working to support countries.

\textbf{USAID perspective on health systems resilience}

\textbf{Natasha Bilimoria, Deputy Assistant Administrator, Bureau for Global Health, USAID}

Natasha Bilimoria, began by highlighting the present meeting as a turning point for the global community, recognizing the need to address underlying issues to improve health systems and achieve the transition from reaction and preparedness and response to fostering everyday health systems resilience. She commented that it provides an opportunity to bolster
support by leveraging public health institutes and promote the importance of integrating public health functions and health security efforts to achieve the SDGs and UHC. USAID is working with WHO to increase resilience capacities and will continue to build on this foundation.

Natasha Bilimoria presented USAID’s approach to health systems resilience which is to promote health system strengthening in the context of ongoing pressures and the need to build resilience to acute and protracted stressors to support GHS. Health systems strengthening, to improve system performance and efficiency, can also promote resilience. She highlighted that strong health systems are not necessarily resilient: flexibility in terms of resources and policy is needed. She outlined the three core capacities related to health systems resilience that are called on at different levels of stressor: absorptive, adaptive and transformative. If the stressor is mild the system absorbs, if it is moderate, it adapts and if it is severe transformation occurs, whether deliberate or forced.

“This meeting is a milestone for the agencies work with WHO and a turning point for all of us that are focused on this important issue”

Natasha Bilimoria, Deputy Assistant Administrator, Bureau for Global Health, USAID

USAID’s Vision for health system strengthening 2030 (Fig. 3) consists of holistic and integrated approaches to the development of these resilient health systems. The new Vision for 2030 shifts focus from inputs to the outcomes of equity, quality and resource optimization and involves multisectoral approaches with whole-of-society engagement and cross-cutting approaches that include locally driven solutions, social and behaviour change and multisectoral linkages.

Natasha Bilimoria outlined USAID’s work on antimicrobial resistance in Mozambique as an example of this systems practice approach for health systems strengthening, which leads to more sustainable results and builds resilience. This work combined the development of government, institutional and organizational capacity for pharmacological supply and management, a focus on the depth of information available for policy-makers, the refinement of the essentials medicines list with social and behavioural change

"Fig. 3. USAID’s Vision for Health System Strengthening 2030"
supported by a public media campaign. Natasha Bilimoria closed by highlighting that collaboration between health security and health systems actors at global, national and subnational levels is required to build back better by integrating health security and health systems strengthening.

**Current and pre-pandemic approaches to assessment and planning for health security and health systems**

**Katherine Farnsworth, Foreign Service Officer/Team Lead, USAID**

Katharine Farnsworth thanked WHO for the ongoing collaboration and joint work which has given an insight into health systems strengthening and the opportunities available to strengthen linkages between health systems strengthening and health security to create resilient systems that promote improved outcomes and ensure high-quality services in every context.

**Nana Mensah-Abrampah, Technical Officer, Integrated Health Services Department, WHO;**

**Zandile Zibwowa, Technical Officer Integrated Health Services Department, WHO**

The speakers provided an update on the ongoing technical collaboration and present evidence for an integrated approach to health systems strengthening. It covered the current approach to health systems and security monitoring, policy and planning, with an overview of some of the many tools currently in use, and also highlighted the current fragmented approach within health systems and health security assessments in terms of frequency, scope, participation and process. For example, assessment results are generally used in a siloed manner, with health system assessments informing health sector planning and health security assessments informing health security planning. No structured approach has yet become apparent for harmonizing assessments to inform technical, disease and population-based programming or wider health sector planning. The evidence presented from the varied and complementary workstreams, identified in Box 2 below, have been used to ascertain the extent of integration and alignment in assessment, planning and programming to promote integrated health systems strengthening and in identifying needs for integrated health systems strengthening.

One critical area of work presented was a review of selected joint external evaluation (JEE) indicators within national action plans for health security (NAPHS) across 13 countries (Fig. 4). The review demonstrated the weight of focus on leadership and governance, finance and health workforce, but revealed limited consideration of service delivery, access to essential medicines or health information. Further technical evidence was presented in three broad areas: governance and multisectoral coordination, foundational health system inputs and systematic learning to inform resilience. In relation to governance and multisectoral coordination, while there
were some examples of integration, in general a siloed approach to policies, planning and coordination structures was evident in both health systems and health security documents. There was also a lack of comprehensive legislative frameworks and instruments for health protection, with an evident failure to update public health legislation. Gaps in the translation of national policies and strategies from the national to the operational level were also evident.

The evidence synthesis demonstrates clear gaps in foundational health system inputs, including a lack of integrated information systems to support streamlined data-sharing, reporting and surveillance across relevant sectors (human, animal and environmental health); inadequate and unsustainable financial resources to support legislation, policy and implementation, leading to duplication of efforts in budgeting and programming; health workforce issues, including distribution, skills mix, retention and the lack of an integrated approach to health workforce strategies. The EPHF and PHC approaches were highlighted as providing an inclusive and multisectoral approach that not only bridges health security and health systems, but also ties in with other core public health programmes. The last cluster presented, systematic learning, recognizes that a core element of building resilience is using learning to inform transformation and learning going forward. The review identified good examples of learning, but also gaps that remain in systematizing them, and highlighted that post-emergency evaluations do not systematically inform sustainable building of resilience in health systems. Findings also demonstrated that national public health institutes and research and academic institutions are not being appropriately leveraged for evidence generation and capacity development.

The presentation noted the efforts to create an integrated approach to building resilience described in an upcoming
WHO position paper on recovery and transformation, which aims to bring together multiple partners and provides a rationale and set of practical recommendations for building resilience and seeking integration between universal health coverage and health security that can be tailored to different contexts. These include an emphasis on the EPHFs, with a focus on PHC, and the incorporation of health security requirements and inclusive governance to ensure community engagement and whole-of-society involvement.

The presentation ended by highlighting key areas for consideration including the need to strengthen the EPHFs; the development of PHC-based health systems; the need to increase and sustain investment in foundational inputs; investment in whole-of-society governance with meaningful engagement with communities; a special focus on vulnerable and marginalized groups; and the need for strong political commitment.

**Strengthening national health systems in harnessing current pandemic experiences – the role of a public health approach and essential public health functions**

Awad Mataria, Health Systems Director, WHO Regional Office for the Eastern Mediterranean

Awad Mataria began by stating that COVID-19 has had an adverse impact on all three UHC goals – equity and service use, financial protection and quality. The presentation highlighted how this challenges current health systems thinking, which focuses on efficiency and value, a nationalistic and provider-driven approach to health systems, the curative aspects of health care and the health system as a driver for economic
development. Awad Mataria presented highlighted that post-COVID-19 thinking will require a shift from systems that focus on disease to systems that focus on quality of life, incorporating equity and the delivery of common goods for health, such as the essential public health functions. This entails a shift to a global order rather than a national view, with an emphasis on intersectoral collaboration, whole-of-government approach and whole-of-society engagement. He also highlighted the need to invest in the social determinants of health and develop flexible organizational systems with integrated learning systems centred around people and oriented towards population and individual needs.

The current thinking of the Regional Office on health systems strengthening for universal health coverage and health security takes a stepwise approach to health system recovery post-COVID-19. The first step is investment in common goods, such as the essential public health functions, surveillance, regulation, public health and infection prevention and control. This should be followed by building the foundations of the health system, including infrastructure, workforce and supply chains, which are currently presenting significant challenges. Next comes the establishment of and investment in institutions for universal health coverage and health security, as identified by colleagues in health systems and health security. Finally, health systems should be transformed into people-centric, publicly financed systems with financial risk protection and quality assurance.

Stemming from this, the Regional Office is focusing on five priority areas of health system work in the Region:

- building resilient health systems
- reinforcing the public health capacities of ministries of health
- shaping country models of care for advancing the UHC agenda
- enhancing financial protection by strengthening health financing systems and
- ensuring access to essential medicines and technologies, including vaccines.

The presentation highlighted that integrating common goods for health, including four essential public health functions and four enabling functions, within the Regional Office’s EPHFs framework will support integration of resilience in all health system components (see Fig. 5). Developed in collaboration with Public Health England, the revised framework adds the new function of public health services, with governance at the heart of all functions improving alignment with other frameworks, such as service delivery and enables a greater focus on social determinants of health.

Work is continuing to define the functions and capacities of ministries of health and reinforce their public health capacity. This work recognizes the differences across countries and supports a redefinition of the role, assessing structures, exploring collaborative governance structures to support a whole-of-society approach and supporting essential public health functions.
Lightning panel discussion: what do we need to do differently for an integrated approach to health systems strengthening for resilience?

Moderators: Gerard Schmets, Deputy Director, Primary Health Care-Special Programme, WHO; Jesse Joseph, Deputy Director, Office of Health Systems, USAID

Gerard Schmets opened the panel discussion by outlining that from the preceding speakers there was a clear understanding of what to do as well as a recognition of the urgency which underscores the rationale for the current panel discussion. This discussion was highlighted as an opportunity to discuss in practice with colleagues from the two organizations and external partners what they should do differently and how to prepare for PHEs. The panel was organized in three parts: the first relating to policy development, the second on the most cost-effective way to deliver UHC using a PHC approach; and the third on the role of different actors, particularly public health actors, and the importance of the EPHFs.

Monitoring, planning and health policy in the post-pandemic era

Martin Alilio, Senior Health Systems Advisor, Office of Health Systems, USAID

Martin Alilio highlighted the timeliness of the discussion around integration and health system strengthening to improve resilience post-COVID-19. He stated that in relation to monitoring countries need better alignment and integration of various information systems for UHC and GHS, linking information systems from public health institutions, clinical laboratory services and veterinary and environmental services. He commented that foundational gaps are frequently identified, but persist owing to the fragmented approaches taken in planning, budgeting and implementation of programmes, both locally funded and donor-funded. He noted that countries and partners should find ways of making data from institutions outside of ministries of health accessible via a common platform. In some countries, this may need to be coordinated by

the ministries of local government that house the work of both institutions at subnational level. This means supporting data platforms that intercommunicate and mechanisms that promote collaborative use of data and analytics. It will also require harmonized training of staff, including extension workers, and particularly staff working in communities and cross-sectoral areas, who will be a great asset in linking systems. Planning should go back to basics and strengthen subnational health systems.

Martin Allilio noted that most systems are unable to integrate health systems strengthening and global security programmes into a comprehensive national programme of work because of complex decision-making processes and unnecessary control from the national level: this problem should be addressed urgently. He highlighted that managers of district health systems often feel powerless to address weaknesses in coordination because of confusing mechanisms of accountability, with multiple cross-cutting flows of authority within and between national levels; this creates a huge problem at national and subnational levels and limits the functional capacity of districts. He outlined that countries need flexibility and transparent financial systems that allow local funds to be used for cross-cutting health systems strengthening and response, as well as strengthened subnational budget oversight. They further need to create an explicit platform for donor coordination at subnational level, with clear links with governments but also with local partners.

He pointed out that at subnational level, UHC and GHS are seen as the same thing. The lack of clarity about ways of linking these two global initiatives limits efforts to coordinate specific policies and represents a barrier at subnational level. He expressed the need for partners to promote clarity by articulating shared cross-cutting objectives and aligning leadership around them, as well as developing policies for shared infrastructure between the two programmes, will allow countries to function optimally when trying to achieve both GHS and UHC.

“...The systems that were always there, that are weak, dilapidated, fragmented and disrupted, need to continue to provide support, not only for COVID-19 but for the additional health threats that they may face, including infectious disease outbreaks and the increase in noncommunicable diseases.”

Altaf Musani, Director, Health Emergency Interventions, WHO Emergencies Programme

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Altaf Musani noted that the impact of the COVID-19 pandemic on countries with FCV settings and the resultant new vulnerability are two urgent issues influencing what will be required from donors in 2021–2022 in relation to fragile, conflict-affected and vulnerable
settings. He highlighted that changes in emerging threats and risks will increase financing requests; official data on case numbers and transmission of COVID-19 are affected by limitations in testing capacity and thus under-represent the problem; and disrupted systems must nevertheless continue to provide support during and after the pandemic to reduce avoidable mortality from causes unrelated to COVID-19, as demonstrated by the current disruption of routine vaccination programmes, and the emerging inequities in COVID-19 vaccine rollout. New events are bound to occur in 2021, with climate change bringing increased vulnerability.

However, he also commented that opportunities also arise in the nexus between development and humanitarian efforts and investment in health systems. Where there has been investment in enhancing laboratory capacities, scaling up training and increasing bed capacity, as in Yemen, there is a need to codify and quantify the spill over effect on other services, quantify assessment and investment and identify increased vulnerabilities and inequities.

**Rajesh Sreedharan, Team Lead, Country Capacity Assessment and Planning, WHO Health Emergencies Programme**

Rajesh Sreedharan began by highlighting that the work being undertaken under IHR (2005) is related to the concept of collective security based on common responsibilities mutually assumed by countries, and is essentially intended to prevent the global spread of disease and its impact on travel and trade. In response to the experience with COVID-19, the discussion now is more about GHS, linked with individual and community health security. The inequities that exist in all countries have been exacerbated during public health emergencies.

He noted that the work of the Country Capacity Assessment and Planning team of WHO involves the collection of data on the functionality of national health systems as part of IHR (2005) monitoring and evaluation (JEE, State Party self-assessment annual reports); the conduct of exercises and after-action reviews; action at the human-animal interface in countries through bridging workshops and exercises; resource mapping (through tools such as resource mapping and impact analysis on health security investment (REMAP)), which supports Member States in implementing health security plans by identifying available financial and technical resources; support from the disaster risk reduction unit in identifying and prioritizing risks from prevailing hazards; and work by a dedicated team on health systems for health security. He commented that the Country Capacity Assessment and Planning team has been working very closely with the Health Service Resilience cross-cutting team for many years, not only in these assessment tools but also in developing national plans within countries: resilient health systems and an integrated approach to health systems strengthening act as a vital buffer for emergency response and an interface for individuals and communities to access both emergency and routine, individual and population health services. UHC and safe and reliable health services build trust in the national system and enable timely preparedness and response. He noted
that as we move forward, it is essential to ensure that national health systems have the capacity to surge or scale up to meet the defined priority health threats of the country, but also to scale back down and maintain routine health services for their populations. Investment in national health systems is required to ensure the security of populations at risk in all countries, rich, developing or underdeveloped, as well as in conflict-affected settings. The security of populations is at the heart of WHO’s work, irrespective of where they live.

**Primary-health-care-oriented health systems to achieve universal health coverage and health protection**

Andrew Clements, Senior Scientific Advisor, Emerging Threats Division, USAID

Andrew Clements began by pointing out that firstly, whenever external donors are involved, health activities are likely to be organized as vertical programmes, since these are easier to track and measure. Secondly, prevention and detection of and response to zoonotic diseases will never be effective without substantial involvement of sectors outside public health, but cross-sectoral coordination is a weak point of health security and health systems strengthening, and funding for this coordination remains a challenge in many countries. Related to this is the importance of workforce training across many disciplines for both health systems resilience and health security: not only for the public health sector, but also for other sectors such as veterinary medicine and wildlife and environmental sciences, that are needed to successfully implement a multisectoral One Health approach.

Andrew Clements also touched on the lack of focus on prevention of infectious diseases in health systems and health security activities. These activities tend to rely on mobilizing rapid detection, treatment and outbreak response, an approach which is effective against many known diseases but not against emerging zoonotic diseases for which diagnostics, therapeutics or vaccines are not available and data are scarce. Health security activities can help to make the overall health system more resilient by supporting research to develop new tools, strategies and policies specifically to reduce the risk of spill over of zoonotic pathogens from animals to humans.

Lastly, he commented that any future evaluation of the health systems GHS capacities and response to the stressors of the COVID-19 pandemic should consider not only how systems responded, but also how they were used. Health security capacities may have been suboptimal in some countries, affecting their ability to deliver, but there were also numerous examples of countries failing to activate health systems and mobilize resources effectively, for instance by delaying the rollout of control measures and testing and failing to trace contacts, which directly contributed to the overwhelming of health care facilities, laboratories and supply chains, with the loss of many health care staff through illness or death. In addition, many countries made policy decisions that ignored data provided by health systems and health security activities. On a more positive note, he noted that several lower-income countries in south-east Asia that were able to rapidly mobilize testing and as a result did not experience a health system overload.
Natasha Azzopardi Muscat, Director, Division of Country Health Policies and Systems, WHO Regional Office for Europe

Natasha Azzapardi Muscat highlighted that the Regional Office for Europe is working to reposition PHC in the light of lessons for recovery learned from the COVID-19 pandemic. Its strategic vision is derived from the European Programme of Work, 2020–2025, inspired by WHO’s Thirteenth General Programme of Work, 2019–2023 (GPW 13) and its three strategic priorities. Traditionally, PHC has been viewed in terms of the first of the triple billion targets of GPW 13, UHC, but it is also a central element in delivery of the second target, protecting people from health emergencies, and the third, promoting health and well-being – all crucial to the recovery from public health emergencies. She noted that although countries with a strong primary health care system have not necessarily fared better during the pandemic, it made a difference if they involved PHC in their emergency response, for instance by engaging PHC in testing, tracing, building public trust and identifying marginalized individuals. While hospitals, intensive-care units and emergency departments have been involved in COVID-19 response, PHC and mental health tend to be excluded from preparedness activities. The PHC workforce has had to deal with unprecedented demand, and will continue to do so as it supports vaccination uptake and diagnoses and supports patients with post-COVID conditions (“long COVID”). Rethinking the concept of resilience provides an opportunity to renew the commitment to strengthening PHC systems, not only because they are the foundation for achieving UHC, but also as the means to engage with communities.

Global actors, catalysing agents, public health institutes and contributors to the public health research agenda

Duncan Selbie, President, International Association of National Public Health Institutes

Duncan Selbie began by pointing out that IANPHI represents the directors of 110 institutions in 95 countries, with a focus on the EPHFs. While each country has different capabilities, all are striving to achieve as much as they can in their own situation. In public health emergencies, national institutes have contributed to surveillance and laboratory work, emergency preparedness and communication with communities and the public about what is going on. What could be done differently involves funding and investment, not a huge amount, but more than at present, to ensure that national, regional and global levels of health care can work together on common assistance and standards. NPHIs cannot do everything by themselves but are a core part of the next steps, including learning and working between peers and across countries and sectors. He highlighted that here is a need to invest particularly in low-income countries to create capacity and normalize working and learning in other countries. IANPHI was essentially created through innovation out of the United States of America, and is strongly aligned with WHO: The Association is keen to take part in further discussions on the way forward and provide contributions from its own perspective.
Humphrey Karamagi, Senior Technical Officer, WHO Regional Office for Africa

Humphrey Karamagi began by pointing out that the issue of resilience is critical for the Regional Office for Africa, which has been looking for workable solutions for the last 10 years. The lessons the Regional Office has learned from previous pandemics can be summarized in three principles.

1. **Health security and UHC are co-dependent outcomes in any system development initiative.** UHC outcomes are largely a function of the health system: health security outcomes also contribute to the health system, alongside action across multiple other sectors. These outcomes need to be recognized as co-dependent;

2. **It is not a question of “one size fits all”.** There are many kinds of shock events, both acute and chronic, and countries are under constant stress from environmental, economic, political and other stressors. This calls for a broader view of the need for resilience and the need to build systems that can respond to different types of events;

3. **A two-pronged approach to resilience is needed.** Much implementation focuses on building preparedness and response capacities, but it is also important to recognize the nonspecific inherent resilience that a system needs to respond to shock events. Systems need inherent qualities that help them absorb shocks, adopt and transform.

Bettina Borisch, Executive Director, World Federation of Public Health Associations

Bettina Borisch began by highlighting that WFPHA represents 5 million people working in public health across governments, non-governmental organizations and as freelancers, informing a vision from both inside and outside the political, social, community and overall health perspective.

She highlighted that fragmentation is understood by all to be deleterious to resilient health systems. There is a line of demarcation in some countries between public health and the health care system, and in some places between health care and humanitarian work. This is apparent even in high-income countries, where the rollout of COVID-19 vaccination programmes has been hampered by these distinctions. These must be overcome, and this will require work.

She noted that the real “elephant in the room” is money: the way systems are financed inevitably determines access,
Fig. 6. Universal health coverage and global health services system strengthening

Attainment of **GOOD HEALTH AND WELLBEING**
Maximal Health Impact, attained in an equitable, and efficient manner

- Improving targets for **HEALTH-RELATED SDGS**
- Improving targets for **UNIVERSAL HEALTH COVERAGE**
- Improving targets for **HEALTH SECURITY**

Other sector’s actions

Effective **DEMAND**
Better **ACCESS**
Higher **QUALITY**
Robust **RESILIENCE**

Social Context
Economic Context
Political Context
Environmental Context

Beliefs
Practices
Values & Norms
Organizational Culture

HEALTH WORKFORCE

- Health governance processes
- Service delivery processes

HEALTH INFRASTRUCTURE

- Financial management system
- Health information system

HEALTH PRODUCTS INCLUDING VACCINES

Other sector’s actions
quality and security, but also encourages fragmentation. This topic is often avoided because of the number of interest groups involved. What needs to be done differently is to acknowledge the value of the health system by supporting those who run the system in practice – more health workers and better training, and better education across all countries to ensure that one country does not poach resources from others. She highlighted that a shift in attitudes is clearly required: health care cannot be seen as charity – it is a human right, not a commodity. It cannot depend on the goodwill of individuals or opaque market forces. It must be regulated by a democratically legitimated process and pursue agreed priorities. Health advocates must make the case for health against other competing interests.

Question and answer session

Jesse Joseph opened the question-and-answer session, agreeing strongly with the need highlighted by previous speakers to break down the fragmentation between systems, especially in planning at the country level. This is necessary to counter the current multisectoral stress, finance the systems that are needed immediately, move forward sustainably and allocate resources to these critical health system functions in future.

Responding to comments posted by participants in the meeting chat, he cited the need to move from theory to action, be practical, use different entry points and take country differences into account, including the political and economic environments, while working in a phased manner. He highlighted that building trust in the community is essential to make systems more accountable in the democratic approach to health systems advocated by the panel and speakers.

Participants strongly endorsed the key role of communities; the need for a whole-of-society approach was seen as key for all countries, not merely those with a particular income level or level of stability. There was recognition of the need to remedy system fragmentation while re-integrating the public and community using a public health approach, which orients health systems towards health and well-being rather than disease. This concept of “the publics’ health” recognizes that health is an issue for everyone, not just for governments or institutions.

Participants stressed the use of and need for measurement, identifying the Operational framework for PHC (3) and its accompanying monitoring and evaluation framework as a strong and sustainable foundation for integrated planning at national and subnational levels. Other recently developed frameworks and mechanisms were also highlighted as providing opportunities to promote the integrated and health systems strengthening approach such as the Multisectoral preparedness coordination framework of the WHO Health Security Preparedness Department (4) and the WHO Global Strategic Preparedness Networks. Opportunities to collaborate and continue the discussion were also identified, including the updating of the WHO benchmarks for International Health Regulations (IHR) capacities (5), to include
actions and activities which can promote stronger health systems for better health security.

On the issue of training in the context of the health workforce, participants agreed on the need for public health professionals to be politically aware and more capable in dealing with politicians and governments; this current gap in training could potentially be bridged by public health institutes and other global partners. Twinning partnerships between schools of public health and collaboration across national public health institutes was identified as one approach to advance this work.

Summing up, Jesse Joseph and Gerard Schmets thanked the panellists for their insights, derived from different perspectives but reflecting common views, such as the need to devolve capacities, authority, budgets and accountability down through health systems and into wider community systems so the community cannot only take responsibility itself, but also hold leaders accountable. Jesse Joseph recognized the commonly expressed idea of the vital role of the community within health systems and the need to build trust as part of an integrated approach. The need for additional investment was acknowledged, as was the need to plan for the unexpected.

“Health systems and other sectors beyond health must be strengthened with prioritization of investments for a more integrated, multisectoral and whole-of-society approach to planning and capacity-building to meet health emergency threats.”

Stella Chungong
Director, Health Security Preparedness Department, WHO

Key perspectives on an integrated approach

Shams Syed, Head, Quality of Care Unit; Acting Director, Integrated Health Services, WHO

Shams Syed outlined five key points arising from the discussion, beginning with the need for PHC advocates to articulate the three interdependent arms of the PHC approach. The importance accorded to monitoring and evaluation within the meeting presents an opportunity to think through the implications of monitoring and evaluation for the PHC approach at country level, an issue that is consistently emphasized by the regions. The importance of subnational capacity, as the common, final pathway for GHS and UHC and the point of interaction with the community, cannot be overemphasized. It is at this level that integration of services can become a reality.

Shams Syed noted the urgent need for systematic learning, undertaken with humility and recognizing that achieving what is needed will require taking risks. Sharing of knowledge on key questions is required: for instance, determining how the approach to strengthening health systems would be changed by focusing on EPHFs compared with the...
current approach. This knowledge-sharing would reveal the added value and benefit of an operational focus on the EPHFs and show what it would look like in reality. He highlighted the importance of adapting approaches to the wide range of contexts present in fragile, conflict-affected and vulnerable settings, focusing on ways of maintaining health systems strengthening in these settings while focusing on the resilience of services and the required adaptability and flexibility.

Shams Syed’s final point was in reference to quality, noting that the initial data presented in the review of preparedness response plans demonstrated that only one third of countries considered quality in areas other than infection prevention and control; this highlights a disconnect between practice and thinking in quality that requires attention at all levels, with communities again playing a critical role. He highlighted the opportunity to immediately apply Quality improvement approaches to improve the approach to resilience; this suggestion aligns with USAID’s view on the need to focus on the outcomes of equity, quality and resource optimization.

Kelly Saldana, Director, Office of Health Systems, USAID

Kelly Saldana focused on some of the broader elements emerging from the discussions which resonated with the USAID Vision for health system strengthening 2030. She noted that the issue of fragmented approaches may be partly related to difficulties in articulating public health problems for a non-health audience. Countering fragmentation will require careful thought, given the linear nature of problem-solving in biomedical frameworks and the contextual issues influencing public health problems.

She commented that the way in which health actors communicate health concepts may actually contribute to a fragmented view, since these concepts may overlap significantly, but also differ. The significant similarities seen in the presentations and the perspectives described are evidence of an emerging consensus that public health needs to be better integrated into a conceptual understanding of health systems and UHC. The discussion also reflected a consensus on the cross-cutting nature of resilience, the need for a range of approaches to implementation and the critical importance of the subnational level as the point of convergence of all these ideas.

On a practical level, she articulated the need to link information systems and surveillance data with human resource and funding structures in an integrated multistakeholder and multi-perspective approach. She highlighted the importance for all health actors to present a common message on the importance of public health in health systems, given the urgency of the COVID-19 situation.
Actionable next steps

Rhea Bright, Senior Quality Improvement Advisor, USAID

Rhea Bright presented thematic areas emerging from the joint evidence review prepared by USAID and WHO for participant comment. These included:

- strengthening health systems resilience capacities to achieve the outcomes of improved equity, quality and resource optimization;
- focusing on recovery and transformation;
- directing greater attention to building everyday health systems resilience and moving beyond emergency preparedness and response, so that countries can respond and adapt under the pressure of shocks and stressors and transform their health systems; and
- fostering a systematic approach to research and learning for health systems resilience.

Three overarching areas for potential action were presented (see Fig. 7 below), namely: collaborating with IANPHI, WFPHA and other partners to harness the power of NPHIs in strengthening EPHFs; generating and pursuing shared priorities to ensure coordination, collaboration and knowledge-sharing in the building of health systems resilience; and engaging countries and the global community to prioritize integration of health systems strengthening and global health security, specifically on the basis of PHC.

Box 3 below reflects actions, adapted and incorporating participants’ comments and suggestions, that can be undertaken as immediate next steps to improve health system resilience.

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**Fig. 7.** Overarching areas for potential action to foster an integrated approach to health systems strengthening

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<tr>
<th>COLLABORATE</th>
<th>PURSUE</th>
<th>ENCOURAGE</th>
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<tr>
<td>with the International Association of Public Health Institutes, the World Federation of Public Health Associations and other partners to harness the power of national public health institutes in strengthening the Essential Public Health Functions</td>
<td>shared priorities to ensure coordination, collaboration and knowledge-sharing on building health system resilience</td>
<td>countries and the global community to prioritize integration of health system strengthening and Global Health Security</td>
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Box 3. Actionable next steps

**COLLABORATE** with IANPHI, WFPHA and other partners to harness the power of national public health institutes (NPHIs) in strengthening the essential public health functions (EPHFs):

- strengthen or establish regional hubs or centres of excellence for health systems strengthening;
- enhance academic partnerships between countries through connecting schools of public health;
- support ministries of health to strengthen stewardship of NPHIs for health system strengthening with focus on improving EPHFs;
- create a network of NPHIs supported by IANPHI that also connects with international structures and professional groups to support low-resource NPHIs;
- consider twinning partnerships between NPHIs.

**PURSUE** shared priorities to ensure coordination, collaboration and knowledge-sharing on building health system resilience:

- develop a health systems resilience roadmap for a shared strategic approach between public health, health systems, emergency and humanitarian response and health security stakeholders to strengthen harmonization and alignment within national health strategic plans that are reoriented to a public health approach focusing on protecting and promoting the health and well-being of the population, as opposed to traditional health care;
- support countries in creating an enabling environment for research, innovation and learning and applying lessons learned to policies, planning, implementation and monitoring;
- develop tools and resources to operationalize integrated health systems strengthening to foster everyday health systems resilience;
- ensure that existing monitoring and evaluation frameworks (both current and in development) promote an integrated approach.

**ENCOURAGE** countries and the global community to prioritize integration of health systems strengthening and Global Health Security through the foundation of Primary Health Care (PHC):

- strengthen community engagement and social accountability for health systems resilience;
- advocate for a multidisciplinary PHC workforce to respond more effectively to emergencies while maintaining quality essential health services;
- explore the role of focused attention on quality in PHC to drive resilience;
- support national and subnational authorities in linking health sector and health security planning, costing and implementation (inclusive of public health, animal health, environmental health);
- prioritize the most vulnerable populations to reduce inequities and pay special attention to countries and populations affected by conflict and displacement.
Sohel Saikat, Lead, Health Services Resilience, WHO

Sohel Saikat highlighted that the WHO’s position on support for countries for recovery and transformation represents a new way of working and organization that will enable an integrated approach to health systems resilience, building on a PHC approach which incorporates public health functions. The products of the meeting will include the meeting report (i.e., the present document) including the actionable next steps, and a technical brief to inform leadership.

Closing remarks

Zsuzsanna Jakab, Deputy Director-General, WHO, thanked all colleagues for their contributions to the meeting, with special thanks to Duncan Selbie, Bettina Borisch and USAID staff, and commended WHO staff on their hard work in making the meeting a success. She acknowledged the contribution of the meeting to re-establishing the strong partnership between USAID and WHO noting that it will add to the progress made in recent meetings with the new Director of the United States Office of Global Affairs, the Secretary of the Department of Health and Human Services and other United States colleagues. She noted that all participants agreed on the need for an integrated approach that brings together health security, health systems, PHC and the EPHFs and will enable health systems to better adapt to challenges and shocks. The actionable next steps will help to create the political commitment required to introduce the new approach.

Greg Collins, Deputy Assistant Administrator, Bureau for Resilience and Food Security, USAID, commended the organizers of the meeting on an excellent and timely event which reflected the urgent need to build stronger, more resilient health systems to face the shocks and stresses inherent in both the COVID-19 pandemic and the climate change crisis. He acknowledged the cross-cutting nature of resilience as well as the need to create resilience at multiple levels and to involve multiple sectors, as exemplified by the One Health approach.

After the customary exchange of courtesies, Zsuzsanna Jakab declared the meeting closed.

“We simply cannot meet this moment without building stronger, more resilient health systems to deal with these shocks and stresses that go well beyond the capacity of households and communities to manage on their own”

Greg Collins, Deputy Assistant Administrator, Bureau for Resilience and Food Security, USAID
References


Annexes
Annex 1. Concept note and agenda

Background

Past and ongoing public health emergencies such as the 2002 SARS, 2015 MERS, 2014-15 Ebola Virus Disease in West Africa and the ongoing pandemic have highlighted gaps, and fragmentation in efforts to strengthen health systems and public health capacities. These crises have highlighted the need for better integration of health systems strengthening efforts underpinned by a public health approach, both within and outside the health sector. The strain of recent and ongoing public health emergencies placed on already weak and fragmented health systems has compromised access to and availability of high-quality health services, impacting health care outcomes, resulting in preventable mortality and morbidity. The situation can be especially challenging in fragile, conflict-affected and vulnerable (FCV) settings where populations with limited access to health services are disproportionately impacted by public health emergencies.

In a recent WHO survey, approximately 90% of Member State respondents conveyed disruptions to essential health services due to the current pandemic (1). In addition, a WHO review reported that only 47% of countries incorporated considerations for maintaining essential health services into their national preparedness and response plans (2). Further, a look at quality health services – a key determinant of resilient health systems and the interface between communities and the health system – highlighted that there are limited number of countries having broader considerations for the delivery of quality health services beyond infection prevention control (2). This is in the context of a somewhat siloed approach between efforts in health systems strengthening, health security and vertical programmes. There is a pressing need to improve global and national understanding on how to promote health systems resilience to maintain quality, essential health services and respond to disruptive events in tandem. This integrated approach can promote sustainable resilience and maximize the use of limited resources.

As part of ongoing collaboration, USAID’s Office of Health Systems and WHO’s Integrated Health Services Department has reviewed the current state of health system and health security linkages for public health in selected USAID priority countries. The findings based on health systems and health security assessments and planning highlight opportunities to improve health system strengthening in synergy with efforts towards health security. A strategic discussion is proposed to further build on this work, by drawing on the experiences of selected global and national stakeholders and partners.

Objectives of the meeting

The purpose of the meeting is to share and discuss findings for building sustainable health systems for public health at policy, planning and operational levels. The objectives of the meeting are to:
• facilitate strategic discussions on prevailing practices towards health systems resilience for health protection and quality health services to determine actionable next steps for global guidance;

• inform policy options for WHO, USAID and partners to maximize joint country support for health systems resilience;

• identify immediate priorities for taking forward next steps from the meeting.

**Expected outcomes from the meeting**

A concise technical meeting report based on discussions.

Actionable next steps to inform policy, planning and operational guidance on strengthening health systems resilience.

A joint technical brief to inform policymakers at national and subnational levels including national public health authorities and development partners.

**Time and date**

3:00—5:30 pm (CET) / 9:00–11:30 am (EDT) on Wednesday, 14 April 2021.

**Organizations and institutes to participate**

Approximately 50 participants are expected to attend this meeting from the below organizations and offices:

- USAID and the US Government
- Deputy Director-General’s Office, WHO headquarters
- WHO headquarters departments
- WHO regional offices
- International Association of National Public Health Institutes (IANPHI)
- World Federation of Public Health Associations (WFPHA)

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<tr>
<th>Time (CET)</th>
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<th>Facilitator</th>
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<tr>
<td>3.00 – 3.15 pm</td>
<td><strong>Opening remarks</strong></td>
<td>Suraya Dalil (Director of primary health care-Special Programme, WHO)</td>
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<td></td>
<td>Presenters: Zsuzsanna Jakab (Deputy Director-General, WHO);</td>
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<td></td>
<td>and Jeremy Konyndyk (Senior Advisor to the USAID Administrator for COVID-19, USAID)</td>
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<td>3.15 – 3.30 pm</td>
<td><strong>Introductions and meeting objectives</strong></td>
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<td></td>
<td>Presenter: Sohel Saikat (Lead Health Services Resilience, WHO)</td>
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<td>3.30 – 3.40 pm</td>
<td><strong>USAID perspective of Health System Resilience</strong></td>
<td>Presenter: Natasha Bilimoria (Deputy Assistant Administrator, Bureau for Global Health, USAID)</td>
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<td>3.40 – 4.00 pm</td>
<td><strong>Current and pre-pandemic approaches to assessment and planning for health security and health systems</strong></td>
<td>Facilitator: Katherine Farnsworth (Foreign Service Officer/Team Lead, USAID)</td>
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<td>Presenters: WHO Health System Resilience and Quality Teams</td>
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<td>• Key findings from WHO &amp; USAID collaboration on Health Systems Resilience and Quality project</td>
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<td>• Implications for policy and national direction</td>
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<td>4.00 – 4.15 pm</td>
<td><strong>Strengthening national health systems harnessing current pandemic experiences – the role of a public health approach and EPHFs</strong></td>
<td>Presenter: Awad Mataria (Health Systems Director, WHO Regional Office for the Eastern Mediterranean)</td>
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<tr>
<td>4.15 – 5.00 pm</td>
<td><strong>Panel discussion</strong></td>
<td>Facilitators: Gerard Schmets (Deputy Director of Primary Health Care-Special Programme, WHO); and Jesse Joseph (Deputy Director, Office of Health Systems, USAID):</td>
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<td>What do we need to do differently for an integrated approach to health system strengthening for resilience?</td>
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<td>1. In relation to monitoring, planning and health policy in post-pandemic era? Panellists: Martin Alilio (Senior Health Systems Advisor, Office of Health Systems, USAID); and Rajesh Sreedharan (Team Lead, Country Capacity Assessment and Planning, Health Emergencies Programme, WHO)</td>
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<td>2. In support of primary health care-oriented health systems to achieve universal health coverage (UHC) and health protection? Panellists: Andrew Clements (Senior Advisor, Ending Pandemic Threats Division, USAID); and Natasha Azzopardi Muscat (Health Systems Director, WHO Regional Office for Europe)</td>
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<td>3. i) as global actors and catalysing agents; and ii) as Public Health Institutes and contributors to the public health research agenda? Panellists: Duncan Selbie (President, IANPHI); Humphrey Karamagi (Senior Technical Officer, WHO Regional Office for Europe); and Bettina Borisch (Executive Director, WFPHA)</td>
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<td>5.00 – 5.15 pm</td>
<td><strong>Key perspectives on an integrated approach</strong></td>
<td>Facilitators: Kelly Saldana (Director, Office of Health Systems, USAID); and Shams Syed (Unit Head, Quality of Care; Acting Director, Integrated Health Services, WHO)</td>
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<td>5.15 – 5.25 pm</td>
<td><strong>Actionable next steps</strong></td>
<td>Facilitators: Rhea Bright (Senior Quality Improvement Advisor, USAID); and Sohel Saikat (Lead Health Services Resilience, WHO)</td>
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<td>• Key next steps &amp; outputs</td>
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<td>5.25 – 5.30 pm</td>
<td><strong>Closing remarks</strong></td>
<td>Presenters: Zsuzsanna Jakab (Deputy Director-General, WHO); and Greg Collins (Deputy Assistant Administrator, Bureau for Resilience and Food Security, USAID)</td>
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**END OF MEETING**

**References**


### Annex 2. List of participants

<table>
<thead>
<tr>
<th>Participant</th>
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<tr>
<td>Zsuzsanna Jakab</td>
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<td>Jeremy Konyndyk</td>
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<td>Natasha Bilimoria</td>
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<td>Prof. Bettina Borisch</td>
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Annex 3. Technical brief to inform policy: fostering resilience through integrated health system strengthening

Context

Global public health emergencies bring into sharp focus the need for an integrated approach to health system strengthening to achieve universal health coverage and protect global health security. These two complementary agendas call for an integrated approach that brings together individual and population health services, animal and environmental health, and non-traditional health actors such as local authorities and communities responsible for social care in order to build effective health system resilience. Parallel responses to public health emergencies, disease-specific programmes operating in silos, as well as the underutilization of promotive and preventive essential public health functions, have only further exacerbated the impact of shocks and stressors on health systems, livelihoods and well-being. The importance of health system resilience is further demonstrated by rising rates of noncommunicable diseases and antimicrobial resistance, emerging threats related to climate change and conflicts, and disease outbreaks.

The ongoing pandemic has exposed weaknesses in health systems worldwide and has been associated with significant direct costs in terms of both lives and livelihoods lost (1, 2). Disruptions to essential health and social services reflect a lack of health system resilience within even the most well-resourced settings (3). The disruption to health services is unsurprising, given the lack of consideration for the maintenance of essential health services highlighted in a recent review of national response and preparedness plans (4). Both direct and non-direct costs have been concentrated in marginalized and vulnerable groups and fragile, conflict-affected and vulnerable settings, exacerbating existing societal inequities and promoting social unrest (5). There is an urgent need to integrate health security and disease-specific programmes within wider efforts to strengthen health systems, underpinned by a public health approach.

As part of an ongoing collaboration, the Office of Health Systems of the United States Agency for International Development and the Integrated Health Services Department of the World Health Organization (WHO) hosted a joint high-level meeting in April 2021 to discuss opportunities to strengthen health systems in synergy with efforts towards greater health security. Discussions were informed by the available evidence, expert opinion and the experiences of regional and country representatives. The purpose of the meeting was to identify a clear and coordinated way forward, and to determine the immediate priorities for WHO and global partners to foster resilience through integrated health system strengthening.
The evidence

The discussions at the April 2021 meeting revealed a clear consensus on the need to address fragmented approaches to national health sector and health security budgeting, assessment, planning and policy development, as well as implementation. Reviews of the evidence indicated that fragmentation is supported by financial structures that promote vertical, disease-based programming, which perpetuates a lack of alignment and strengthening of the critical health system resilience capacities required for both everyday service delivery and emergency response. Findings also showed that siloed approaches to capacity-building have left critical gaps in health system foundational inputs in respect of an adequately trained workforce; interoperability between health information systems and surveillance systems; and functional procurement, distribution and supply chain management systems for essential medicines and technologies, including vaccines.

The need for mechanisms to support intersectoral integration and alignment to reduce fragmentation and promote involvement of all relevant actors was highlighted as critical. This applies both within the health sector, including public health, primary health care and private providers, and across sectors, including animal, veterinary and environmental health. While experience is still evolving, it appears that the countries that performed well initially are those that engaged the whole of society and enjoyed the trust of the community, as well as having the agility to pull resources in from other sectors. The importance of subnational capacity was emphasized, as both the final common pathway for global health security and universal health coverage and the point of interaction with the community. There was a strong recognition of the key role of communities in the creation of resilient health systems that are people-centred and responsive to population needs.

It is abundantly clear that global health security relies on individual health security, which is embedded within resilient health systems that support population health. It is also clear that population health and well-being are a core driver of economic growth and prosperity. Individual health security requires universal health coverage; there can be no universal health coverage without primary health care, with its reach, unique position to engage communities, and high cost-effectiveness. It has been suggested that countries that integrated primary health care systems into the pandemic response have fared better. There is also a clear need for investment in essential public health functions: population-level services that require State investment and that support health and well-being while creating an infrastructure that supports emergency response. The essential public health function (EPHF) approach brings a holistic public health perspective to health that reorients health systems towards health and well-being while creating an infrastructure that supports emergency response. The essential public health function (EPHF) approach brings a holistic public health perspective to health that reorients health systems towards health and well-being while creating an infrastructure that supports emergency response. The essential public health function (EPHF) approach brings a holistic public health perspective to health that reorients health systems towards health and well-being while creating an infrastructure that supports emergency response.
highest levels.

Fragmented approaches to funding, planning and implementation at global and national levels have led to the erosion of health system capacities and perpetuation of identified critical infrastructural gaps. There is an inarguable need to develop structures that promote alignment across funding, planning, implementation and monitoring and evaluation. There is also a need to develop mechanisms to promote collaboration, both within the health sector and across sectors, that strengthen subnational capacities and enable a whole of government response, with whole of society engagement. This will promote health system resilience by strengthening the fundamental health system capacities that support both health service delivery and emergency preparedness and response, while optimizing the use of limited resources, both human and financial. The need to build back post-pandemic presents a unique opportunity to build back better, stronger health systems that promote equity.

**The way forward**

Strategic and intentional coordination between health systems, health security and public health actors is required at the global, country and subnational levels to allow health systems to effectively absorb, adapt and transform to meet complex 21st-century health challenges. The current reactive approach to emergencies is economically unsustainable and counterproductive. While we all agree on the need for further and progressive investment in health, it is imperative that global and local actors align their efforts to support countries in building health system resilience capacities. Improved performance in this area will enable countries to effectively manage and rapidly overcome shocks and stressors. This entails stopping small events before they become major events and pose a cross-border threat, while ensuring continuity of quality essential health services at the lowest cost. We need to direct our collective attention and resources towards an integrated approach to health system strengthening, both globally and locally – to promote and protect the health and well-being of all communities.

**Recommendations for policy consideration**

- Foster an integrated approach to policy, planning and capacity development for building resilient health systems for public health

This will address the current fragmented and siloed approaches to the building of health systems, based on a one plan, one budget and one accountability framework. Vertical programmes need to be encouraged to align their requirements with those identified under health sector strategic plans and identify how they can contribute to long-term benefits in public health.

- Develop tools and support mechanisms to operationalize integrated health system strengthening to foster everyday health system resilience

Not enough clarity is yet in place on mechanisms to support countries in
building everyday resilience. Countries differ in their access to health care, urban-rural disparities and the regulation of the private health sector. This will entail facilitation of know-how for alignment as well as technical capacities (using the health system resilience toolkit – a repository of technical resources and implementation guide) for making health systems responsive, flexible and adaptive to meet 21st-century public health challenges. There is a need to create an enabling environment for research, innovation and learning and to systematically apply lessons learned to policies, planning, implementation and monitoring.

- Build local stewardship for public health with the essential public health functions (EPHFs)

This could be done by strengthening national public health institutes or similar entities in conjunction with ministries of health. Networks such as the International Association of National Public Health Institutes and the WHO collaborating centres should be expanded and supported in countries with low coverage and better utilized for the EPHFs across all levels of the country. Regional centres of excellence or hubs can be utilized to support less-developed countries and subnational areas in scaling up and pooling their capacities in the areas of, for instance, reference labs, medical products, supply chains and health workforce/secondees, to improve health system resilience for public health.

- Encourage countries and the global community to pursue a programmatic approach and prioritize integration of health system strengthening and global health security on a foundation of primary health care

This will entail global advocacy and political leadership, with catalytic funding and technical assistance for selected countries. It can begin with dedicated funding streams to support operationalization of integrated health system strengthening at country levels. It can harness the ongoing political impetus for health protection created recent and ongoing public health emergencies and campaigns for building back better, fairer and stronger health systems for public health, paying special attention to countries with fragile, conflict-affected and vulnerable contexts.

References


3 Pulse survey on continuity of essential health services during the COVID-19 pandemic: interim report, 27 August


Annex 4. Fostering resilience through integrated health system strengthening: evidence synthesis – a working paper

Background

There has been increased recognition that an integrated approach to health system strengthening – an approach that brings together individual and population health services, animal and environmental health, and non-traditional health actors such as local authorities and communities responsible for social care – is needed for the development of resilient health systems that enable public health protection.\(^\text{i}\) Past and ongoing public health emergencies (PHEs) have further focused global attention on the need for this integrated approach (7). Health system strengthening towards universal health coverage (UHC) and global health security (GHS) are global health goals promoted by the World Health Organization (WHO), Member States and other partners. However, effective operationalization of an integrated approach to health systems strengthening has presented challenges (2-4). For example, traditional efforts to strengthen health systems towards UHC have not adequately prioritized essential public health functions (EPHFs) (5). Increased investment in PHEs and humanitarian responses has also too often been followed by rapid decline in funding and neglect, weakening quality health service delivery and undermining health systems resilience. Investment in health protection and disease and life-course-specific programmes have been too narrowly focused with limited application towards the broader health systems strengthening necessary to promote resilience across the levels of the health system (community, facility, subnational and national) and serve population health needs in all contexts (3-6).

The recent and ongoing public health emergencies and other public health threats have highlighted the inability of health systems, even in well-resourced settings, to maintain quality health service delivery, drawing attention to the need for more resilient health systems (2, 7-10). Monitoring of health service continuity during the current pandemic showed nearly all countries (90%) reported disruptions to essential health services, more so in lower-income than higher-income countries (6). These disruptions

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\(^\text{i}\) In the context of health systems, resilience refers to the ability of all actors and functions affected by health to collectively mitigate, prepare, respond and recover from multi-hazard disruptive events with public health implications, while maintaining the provision of essential functions or services, and using experiences to adapt and transform for improvement. Health systems require absorptive, adaptive and transformative capacities in order to shift resources as necessary.

\(^\text{ii}\) Health protection is a domain of public health practice that involves the protection of individuals, groups and populations through expert advice and effective collaboration to prevent and mitigate the impact of infectious disease, environmental, chemical and radiological threats. It encompasses: communicable disease control, emergency preparedness, resilience and response (EPRR), and environmental public health.
have been even greater in fragile, conflict-affected and vulnerable (FCV) settings where they disproportionately impact marginalized populations and contribute to regression from UHC and the Sustainable Development Goals (9). A blend of supply- and demand-side factors contribute to these disruptions, including financial constraints and restrictions on movement, as well as cancellation of routine services and redeployment of staff to emergency services. Health system strengthening and health security efforts are mutually reinforcing approaches required for the development of resilient health systems and their integration supports multiple agendas including GHS, primary health care (PHC) and EPHFs (Appendix 1) (2, 5, 8, 11). A coherent and integrated approach across global, national and subnational levels is important and urgently needed to promote sustainability, optimize resources and enhance access and equity while improving quality of care and resilience of systems (1, 3, 5, 11, 12).

WHO’s Thirteenth General Programme of Work (GPW 13) includes the ambitious triple billion targets (12-17). Multiple workstreams have been undertaken by WHO to achieve these targets, drawing on perspectives from different partners and national stakeholders to investigate approaches to support resilience through health system strengthening. (3, 4, 16-18), Illustrative examples include an ongoing technical collaboration between WHO’s Integrated Health Services Department and the United States Agency for International Development (USAID) Office of Health Systems; a review of national preparedness and response plans from 106 countries; a consolidation of approaches and way forward for EPHFs; a review of national public health institutes (NPHIs) and their role in health system strengthening and EPHFs in Africa; and an upcoming WHO position paper on building health systems resilience for UHC and health security during and beyond COVID-19.

The aim of this synthesis document is to present a brief, consolidated overview of the global evidence base encompassing WHO’s recent work and collaborations with USAID on health system strengthening.

Evidence synthesis

While current efforts in health system and health security monitoring are not integrated, there is clear evidence of their correlation and a need for alignment. A statistical analysis of the relationship between health security and health systems indicators from 30 countries across the full economic spectrum found that 18 health systems indicators were correlated with health security JEE country averages after controlling for GDP per capita (Appendix 2). These indicators were from a range of health system areas including health service delivery, health facility infrastructure, workforce and medicines and supply chains, as well as

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iii The Triple Billion targets are an ambitious initiative to improve the health of billions of people by 2023 and include 1 billion more people benefiting from universal health coverage, 1 billion more people better protected from health emergencies and 1 billion more people enjoying better health and well-being.
indicators of national infrastructure (16). This analysis provides further evidence that health system strengthening is essential to building both national and global health security and vice versa.

Joint work undertaken by WHO and USAID, examining health security planning and assessment data from selected USAID priority countries demonstrates a recognition of the need for a more integrated approach to promoting health security within health systems strengthening efforts. (For an example of such an approach, see Fig. A4.1). There is wider recognition at a global and national level that these integration efforts remain unstructured and ad hoc, and significant opportunities remain to improve coordinated planning and implementation between health system, public health and health security, as well as humanitarian efforts (4, 17).

**Governance and coordination**

There is a general recognition in the health system and health security literature of the need to strengthen governance, accountability and the capacity for stewardship within ministries of health and among national and local health authorities (1-4, 11, 13, 15). This need was clearly demonstrated in findings from JEE data and national action plans for health security (NAPHS) from selected USAID priority countries (Fig. A4.2) (4). Despite this recognition of the need for improved leadership and governance structures at both national and subnational levels, it is unclear how subsequent planning promotes alignment of health security with the wider health sector and other programmatic planning (3, 4, 13, 15).

Legislative instruments to support aspects of implementation of the International Health Regulations (IHR) (2005) exist within countries. However, these instruments are often not regularly updated and mechanisms to support health system intersectoral and multisectoral engagement, as well as societal engagement in emergency preparedness, response and recovery

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**Fig. A4.1. Example of an integrated approach across public health, health care service delivery and animal health sectors and administrative levels being promoted in Liberia**
activities are lacking, though national health policies often stress the need for such engagement (1, 3, 4, 13, 15, 17). Generally, even where they exist, health system policy, planning and strategy are not designed to address protection from wider public health threats. Previous PHEs have demonstrated that strong subnational structures are better able to deploy strategies to mitigate risk at the operational level for both preparedness and response and health system delivery (4). Despite this, at national and subnational levels, cross-sectoral coordination roles and structures are undeveloped, with the problem being more acute at subnational levels (3, 4, 15). Where plans do exist, training and orientation of relevant frontline actors to support awareness, understanding of roles, responsibilities and implementation strategy are often lacking (4). Current monitoring in health security, health systems and other allied programmes takes a fragmented approach to planning. However, recommendations to address this fragmentation remain siloed (4, 15).

**Foundational health system inputs**

Health security assessments and national health sector policies and plans frequently identify critical foundational gaps in the health system elements necessary to support health protection and promote quality health service delivery (3, 4, 15, 16). For instance, the lack of availability of adequately trained health workforce is commonly cited as a hindrance to both the delivery of quality health services and health protection efforts, as is the need for a coherent approach to recruitment, distribution and retention (1-4). However, a lack of alignment between health workforce and health security strategies is apparent in the failure to identify complementary resource needs; extend planning beyond traditional health care cadres; include a broader curriculum within training approaches; and resource public health, community health, environmental health and animal health capacities. This fragmented approach to capacity development is also apparent within health information systems, where strengthening of health...
information and surveillance systems are frequently not addressed in tandem, nor in relation to strengthening laboratory capacities (1, 3, 4, 15). While a lack of data is frequently identified as a problem, strategies to strengthen mechanisms to ensure the availability, sharing and use of demographic, epidemiological, risk, workforce, financial and logistics data across health and animal sectors, the private sector and with development partners are fragmented or not readily apparent (1, 3, 4, 19, 20). The lack of an integrated approach to capacity-building is also apparent in relation to procurement, distribution and supply chain management systems for essential medicines and technologies including vaccines. For example, though strengthening vaccine coverage is identified as a priority in virtually all national health policies, it is generally addressed in a vertical manner with a failure to integrate across all service delivery levels nationally as well as globally (21). These foundational gaps, though frequently identified, persist due to the fragmented approach to planning, budgeting and programme delivery nationally, at the subnational level and within donor supported programmes. Fragmented approaches create confusion around roles and responsibilities for addressing gaps; and hinder the maximization of available resources to support the delivery of quality health services and preparedness activities (3-5, 17, 21).

There is a clear recognition that investing in UHC and health security programmes leads to stronger and more resilient health systems, but financing is a key gap identified within health security and health system documents. Inadequate health system strengthening funding creates a need for prioritization, with clinical health services prioritized over prevention and public health measures such as preparedness and response, as well as a lack of specific budgets to support the development of IHR capacities (4, 15, 17). The need for a global strategy for local investment in health system strengthening and core preparedness and response capacities was recognized after the outbreak of Ebola virus disease in West Africa in 2014. However, the majority of NAPHS remain partially or completely unfinanced, and coordination between NAPHS and broader health sector planning, including health sector investment plans, remains unclear (4, 18, 22). Generally, health security strengthening efforts, and specifically IHR capacities, are often externally financed, making funding streams unpredictable, preventing sustainable strengthening, and perpetuating vertical financing streams (1, 4, 22). There are significant challenges with mixed model health systems that utilize a variety of financing arrangements and coordinating structures for multiple actors, including engagement with the private for-profit sector. This all lends to a lack of clarity around roles and responsibilities, especially in relation to the strengthening of public health capacities (3-5, 19, 20).

Systematic learning and research to inform health systems resilience

A lack of high-quality, timely health system and surveillance data is widely acknowledged. There is a growing recognition of the need for an inclusive
approach to systematically capture and apply best practices across health system levels following a public health emergency to promote health systems resilience, build back better and enhance the quality of health services delivered (4, 18). This systematic approach to research and learning has the potential to leverage lessons learned in specific contexts, assess their application in other settings and apply them to broader policy development. This requires an intentional focus as well as mechanisms to support the conduct of research and capture front line learning. Particular attention should be focused on the ways in which outcomes emerging from health systems and security monitoring are being used to inform policy, planning and implementation. Technical support, in the form of tools and guidance, funding and stewardship, is required to support country-level operationalization and provide a foundation for the building of health systems resilience. While there is country-level evidence of utilizing learning from past PHEs to inform broader planning efforts and set strategic direction for the health sector, mechanisms to promote wider dissemination of lessons learned within health systems (across facility, district and national levels) and between countries, regions and at the global level remain limited (4).

National public health, research and academic institutes are science- and evidence-based organizations that can offer national coordination and expertise. They can also serve as a focal point for inter-ministerial, intersectoral, interdisciplinary and regional/international collaboration. They can play an active role in health system strengthening and the EPHFs, including health research and training of the health workforce, as well as forming collaborative networks e.g., WHO collaborating centres (23); and working with umbrella bodies like the International Association of National Public Health Institutes (IANPHI). In the African context, national public health institutes and the academic sector represent an opportunity for systematic learning to inform and build health system resilience, but they still suffer from chronic underinvestment. Recent evidence suggests that 15 African countries may not yet have a readily discernible national public health institute, and out of 800 WHO collaborating centres globally, only 35 are in Africa with 14 in South Africa (23).

Essential public health functions, primary health care and complementary approaches

The ongoing global pandemic has revealed the limited attention paid to investment in health system strengthening and public health capacities, while also highlighting the complementarity and interdependency of different aspects of the public health approach. Resilience relies upon not only a strong health system and traditional health protection functions, but also on work to address the performance of health care in terms of access, quality and outcomes, engagement of communities and tackling of inequalities. Up until now, UHC efforts have tended to focus on health care, rather than deliberately integrating health care with public health activities including prevention and promotion. A lack of focus on this integration is detrimental to health security and health system strengthening (1, 2). Where the
EPHF approach is utilized, emergency preparedness and response is usually included in the package of services, as are priority infectious diseases (2). While this represents a practical example of ways in which a focus on EPHFs within health system strengthening can help to strengthen the health systems-health security nexus, it remains limited in scope. Evidence of integration between EPHFs and vertical disease programmes targeting priority diseases is lacking, and alignment of priorities from risk-mapping with service delivery is not always clear (1, 3, 4, 8, 11, 15).

Critical gaps in relation to animal, veterinary and environmental health capacities necessary for IHR implementation are also apparent (3, 4, 15). Despite their close interlinkages and overlapping risk profiles, animal health, veterinary services, environmental health and their integration with public health remain poorly resourced, with a general failure to recognize their importance for health system resilience. Poor resourcing remains a challenge in countries with the intention to adopt a One Health approach (4, 15). Many national policies promote the development of primary health care, which conceptually incorporates a focus on EPHFs, but often fail to embed preparedness and response efforts within health system strengthening (3, 4, 8, 14, 15).

A way forward

COVID-19 has exposed the weaknesses in health systems worldwide, reiterating the need for resilient health systems developed through an integrated approach to health system strengthening that builds adaptive and transformative capacities (22). Strengthening resilience capacities requires a health systems approach that incorporates EPHFs to strengthen health security capacities and recognizes that the provision of quality health services is essential to health protection efforts (1, 9, 10). There remains an opportunity to be more intentional about integrating health system strengthening and health security efforts to improve coordination and increase resilience capacities at country level, which will accelerate achievement of UHC and protect GHS (5, 11). The evidence is clear that a key enabler of this integration will be improved governance underpinned by a comprehensive legislative framework. This will ensure that subsequent policy and planning mechanisms promote an integrated and collaborative approach with national and subnational stakeholders, engage the whole of society and are able to mobilize whole-of-government resources across ministries and all relevant sectors. However, in many countries, these efforts will have to be supported by mobilization of both domestic and international resources in support of integrated health systems capacity-building. Key focus areas for this task should include an appropriately trained multidisciplinary and intersectoral workforce; robust supply chains that take infrastructural heterogeneity across countries and public and private sectors into consideration; and the integration of surveillance capacities into strengthened health information systems.

It is important to acknowledge that, while much is known, much remains unknown about the critical absorptive, adaptive and transformative capacities that render
one system resilient and another not. This highlights the importance of strengthening mechanisms to systematize and share learning. Available evidence points to the strong influence of global actors on national health sector policy and planning (3, 13, 15). This influence represents an opportunity for WHO and global partners to work more closely with national authorities to promote this integrated approach to health system strengthening. This will facilitate alignment across programmes of work and streamline support. It is however, important to acknowledge that operationalization will ultimately rest with countries. Further technical support and stewardship will be required across system levels, and this is where global actors can play an important supportive function. Clarity of purpose and role and effective coordination between global partners, national and subnational actors will be key to systematically institutionalizing health systems resilience at country and local levels to enable effective responses to 21st-century health challenges.

Critical areas for consideration

Several key areas can be considered by the global community to take forward the work of fostering resilience through integrating health system strengthening within countries. Action in these areas will help to address the gaps identified and implement the recommendations developed from the aforementioned workstreams on integrated approaches to health systems strengthening. More detailed actionable next steps identified through the evidence synthesis can be found in Appendix 3.

• Develop a technical package with tools and guidance to operationalize resilience and provide a foundation for the building of primary-health-care-oriented health systems resilience in countries.

• Set an example of an integrated approach to health systems strengthening at national and subnational levels in selected countries.

• Encourage championing for health systems resilience through an integrated health systems strengthening approach, led by national level authorities and partners across sectors.

• Strengthen stewardship of national public health institutes for health systems strengthening, with a focus on improving EPHFs.

• Strengthen regional hubs or centres of excellence for health systems strengthening or establish them through WHO collaborating centres.

• Increase global advocacy for linking health systems, public health and development sectors.

References


16 Health Services Resilience Team, World Health Organization. Taking forward an integrated approach to health systems and health security – linking health system and health security (JEE) data on emergency preparedness: statistical relationship from an interim review [internal technical analysis, 2020].


Appendix 1. Areas of commonality across health system, essential public health functions and health security capacities

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Leadership and governance</td>
<td>Advancing public health research</td>
<td>PHC-oriented research</td>
<td>IHR strategic coordination</td>
<td>HR coordination, communication and advocacy</td>
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<td></td>
<td>Assessing effective health governance, regulation and public health legislation</td>
<td>Political commitment and leadership</td>
<td>IHR legislation and financing</td>
<td>Linking public health and security authorities</td>
</tr>
<tr>
<td>Health systems financing</td>
<td>Public health systems planning, financing and management</td>
<td>Governance and policy frameworks</td>
<td>Human resources</td>
<td>National legislation, policy and financing</td>
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<td></td>
<td>Assurance of necessary public health workforce</td>
<td>Engagement with private sector providers</td>
<td>Surveillance</td>
<td>Human resources</td>
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<tr>
<td>Health workforce</td>
<td>Surveillance and monitoring of health conditions and risks</td>
<td>Adequate funding and equitable allocation of resources</td>
<td>Laboratory</td>
<td>Reporting</td>
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<td></td>
<td>Preparations and response to health emergencies</td>
<td>PHEM awareness</td>
<td>Emergency preparedness for response</td>
<td>Surveillance</td>
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<tr>
<td>Health information system</td>
<td>Health protection (environmental, occupational, waste, food safety, chemical, radiation)</td>
<td>Monitoring and evaluation</td>
<td>Emergency preparedness for response</td>
<td>National laboratory system</td>
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<td></td>
<td>Social mobilization and participation</td>
<td>Digital technologies</td>
<td>Zoonotic events and the human animal interface</td>
<td>Biosecurity and biosecurity</td>
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<td></td>
<td>Health promotion and health equity</td>
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<td>Chemical events</td>
<td>Emergency preparedness for response</td>
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<td>Health services delivery</td>
<td>Quality assurance for personal and population-based health services</td>
<td>Engagement of community and other stakeholders to jointly define problems and solutions and prioritize actions</td>
<td>Radiation emergencies</td>
<td>Emergency response operations</td>
</tr>
<tr>
<td></td>
<td>Access to essential medicines and other health technologies</td>
<td>Models of care that prioritize primary care and public health functions</td>
<td>Points of entry</td>
<td>Zoonotic disease</td>
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<tr>
<td></td>
<td>Management and promotion of interventions on the social determinants of health</td>
<td>Ensuring the delivery of high-quality and safe health care services</td>
<td>Food safety</td>
<td>Chemical events</td>
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<tr>
<td></td>
<td>Physical infrastructure and appropriate medicines, products and technologies</td>
<td>Purchasing and payment systems</td>
<td>Risk communication</td>
<td>Radiation emergencies</td>
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<td></td>
<td>Access to essential medical products and technologies</td>
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<td>Adverse events</td>
<td>Points of entry</td>
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EPHF: essential public health function; IHR: International Health Regulations; JEE: joint external evaluation; M&E: monitoring and evaluation; PHC: primary health care.
### Appendix 2. Domains and indicators

<table>
<thead>
<tr>
<th>DOMAINS</th>
<th>INDICATORS</th>
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<tbody>
<tr>
<td>Health system</td>
<td>Health service Delivery</td>
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<tr>
<td></td>
<td>Under-five mortality rate (per 1000 live births) **</td>
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<td></td>
<td>Maternal mortality ratio (per 100 000 live births) **</td>
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<tr>
<td></td>
<td>Percentage of births with skilled birth attendant **</td>
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<td></td>
<td>Children with diarrhoea receiving appropriate treatment *</td>
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<td></td>
<td>BCG coverage (%) **</td>
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<td></td>
<td>Diphtheria tetanus toxoid and pertussis (DTP3) Immunization coverage among 1-year-olds (%) **</td>
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<td></td>
<td>Dropout rate between 1st and 3rd DTP vaccination **</td>
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<tr>
<td></td>
<td>Demand for family planning satisfied with modern methods *</td>
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<tr>
<td>Health facility infrastructure</td>
<td>Hospital beds (per 1000 people) **</td>
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<tr>
<td></td>
<td>Density of provincial hospitals (per 100 000 population) *</td>
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<tr>
<td>Health workforce</td>
<td>Density of physicians (per 1000 population) *</td>
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<tr>
<td></td>
<td>Density of nursing and midwifery personnel (per 1000 population) **</td>
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<tr>
<td>Medicines and supply chain</td>
<td>Medication coverage related to noncommunicable diseases (%) *</td>
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<tr>
<td>National infrastructure</td>
<td>Cellular phone subscribers (per 100 population) *</td>
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<td></td>
<td>Access to electricity (% of population) **</td>
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<td></td>
<td>Improved sanitation facilities (% of population with access) **</td>
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<td></td>
<td>Improved water source (% of population with access) **</td>
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</table>

* Significant at 0.05 level; ** significant at 0.01 level; source: WHO. Taking forward an integrated approach to health systems and health security: Linking health system and health security (JEE) data on emergency preparedness-statistical relationship from an interim review. Internal report of Health Service Resilience Team, World Health Organization, Geneva; 2020.
Appendix 3. Snapshot of technical “actionable next steps” identified

- Integrated approach to planning, including for recovery and transformation.

- Invest in institutional mechanisms for whole-of-society of engagement.

- Advocate and support national authorities to develop/update legislation that integrates health security considerations with broader health sector policy.

- Sustain investments towards health system strengthening even if the benefits are not immediately demonstrable/measurable in comparison to vertical/disease-specific programmes.

- Promote and drive stewardship of the learning agenda to better support national authorities.

- Invest in the research and learning agenda to enhance the evidence and knowledge-base of how countries are applying lessons learned and best practices from past PHEs to policy and planning.

- Leverage current response to strengthen preparedness and health systems by supporting and promoting an inclusive approach to evaluations and adoption of recommendations for improvement.

- Promote the Informed and systematic use of health security and system information to identify gaps/needs for strengthening/financing; effectiveness of interventions.

- Finance and resource mapping (wider/intersectoral).

- Mobilize domestic government resources to support health systems capacity-building for emergency management.

- Increased capacity in public health workforce beyond health protection; critical mass; skills to suit current challenges.

- Ensure adequate and sustainable numbers, competency levels and distribution of a committed, multidisciplinary primary health care workforce that includes facility-, outreach- and community-based health workers and support them in preparing and responding more effectively to emergencies while maintaining essential health services.

- Improve the interoperability of information systems across various public health systems functions, to ensure a coordinated and aligned approach to systems and security integration.

- Invest in and mainstream essential public health functions.
• Build strong primary health care foundation for resilient health systems for universal health coverage, Sustainable Development Goals and health security.

• Sustain strong political commitment to and leadership of health systems strengthening with primary health care at heart of efforts to attain universal health coverage, health security and Sustainable Development Goals including defining package of EPHFs.

• Promote enabling environments for research, innovation and learning.

• Increase investment in critical gaps in EPHFs and animal/veterinary and environmental health, particularly those necessary for the implementation of IHR using an all-hazards risk management approach.