IMPACT ON THE GROUND:
WHO’s action in countries, territories and areas
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CONTENTS

1 Introduction
2 Afghanistan
5 Albania
8 Argentina
11 Azerbaijan
14 Bangladesh
17 Belize
20 Bolivia (Plurinational State of)
23 Bulgaria
26 Cabo Verde
29 Cambodia
32 Cameroon
34 Chad
36 Comoros
38 Costa Rica
43 Côte d’Ivoire
45 Egypt
48 Eritrea
50 Micronesia (Federrated States of)
53 Gambia
57 Georgia
60 Ghana
65 Guinea
67 Guinea-Bissau
70 Hungary
73 Indonesia
81 Iran (Islamic Republic of)
84 Jordan
87 Kazakhstan
90 Kyrgyzstan
93 Lao People’s Democratic Republic
96 Malawi
99 Malaysia
101 Maldives
103 Mali
105 Republic of Moldova
107 Mongolia
109 Montenegro
111 Morocco
113 Nepal
122 Niger
125 Nigeria
128 North Macedonia
131 Oman
134 Pakistan
137 Philippines
142 Rwanda
144 São Tomé and Príncipe
147 Saudi Arabia
149 Senegal
151 Serbia
153 Seychelles
156 Somalia
159 South Africa
161 South Sudan
163 Sri Lanka
166 Sudan
168 Suriname
171 Syrian Arab Republic
174 Tajikistan
177 Thailand
182 Timor-Leste
185 Togo
188 Tunisia
191 Turkey
194 Ukraine
197 Uruguay
200 Uzbekistan
203 Viet Nam
206 occupied Palestinian territory, including east Jerusalem
209 Yemen
## 1.1 Improved access to quality essential health services

<table>
<thead>
<tr>
<th>Code</th>
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## 1.2 Reduced number of people suffering financial hardship

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## 1.3 Improved access to essential medicines, vaccines, diagnostics and devices for primary health care

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## 2.1 Countries prepared for health emergencies

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## 2.2 Epidemics and pandemics prevented

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## 2.3 Health emergencies rapidly detected and responded to

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## 3.1 Determinants of health addressed

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## 3.2 Risk factors reduced through multisectoral action

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## 4.1 Strengthened country capacity in data and innovation

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<td>São Tomé and Principe</td>
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## 4.2 Strengthened leadership, governance and advocacy for health

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INTRODUCTION

WHO’s Thirteenth General Programme of Work 2019-2023 (GPW13) puts countries unequivocally at the focus of its work to drive impact at the country level. To measure its contribution to this process, WHO developed Results Framework that tracks the joint efforts to meet the triple billion target and supports governments in achieving health-related Sustainable Development Goals.

Country case studies are one of three integral components of WHO Results Framework. Together with Impact Measurement and Output Scorecards, they paint qualitative picture of WHO’s work at the country level and give narrative texture to 2020 WHO Midterm Results Report.

As a mainstay of GPW13 reporting, this publication presents a collection of more than 80 country case studies on WHO’s role and its adaptability to drive public health impact in different country contexts. Case studies come directly from the field and highlight WHO’s key achievements and impact realized during 2019-2020. Covering a wide spectrum of technical areas of the Organization’s work in countries, territories and areas, these stories connect outputs, outcomes and impact of WHO’s work. They illustrate a snapshot of the Organization’s range of efforts to deliver on the promise of the triple billion target to ensure healthy lives and well-being for all.

Going forward, qualitative case studies offer examples of and experiences in how to strengthen collaboration and synergies with development and humanitarian national and international partners in health and how WHO can build and facilitate these alliances. Additionally, the stories elaborate on promising practices and best examples in support of governments and stakeholders to improve peoples’ health.
Responding to COVID-19 and Building Health System Resilience

Afghanistan confirmed its first case of COVID-19 in late February 2020. The country’s porous borders with early COVID-19 hotspots, particularly Iran, coupled with decades-long protracted conflict, high poverty rates, and a challenged health system contributed to quickly escalating COVID-19 transmission across the country.

WHO’s support to the Ministry of Public Health’s (MoPH) COVID-19 response commenced even before the first case was detected, to help Afghanistan get ahead of the COVID-19 curve and protect gains made in health. Building on successful practices during previous health emergencies and other countries’ experiences, WHO started assisting the MoPH in January 2020. This support included the provision of technical guidance for pandemic preparedness, facilitation in the development of the National Emergency Response Plan for COVID-19, recommendations for implementing effective risk communications and community engagement and outreach to donors for aligning funds for the response.

Enhancing COVID-19 testing capacity across the country has been a core element of WHO’s assistance. When the outbreak first began,
there was no COVID-19 testing facility in Afghanistan. In coordination with the MoPH, WHO has since supported the establishment and expansion of 22 public testing laboratories. These can collectively perform 7,100 tests per round and up to 21,300 tests per 24 hours, if needed. More than 250 laboratory staff have been trained on PCR testing as part of the efforts to enhance testing capacity. Plans are in place to continue this rapid laboratory expansion and ensure that by June 2021 each province has at least one COVID-19 testing facility with appropriately trained staff.

To meet the demand for, and maintain a steady availability of, essential laboratory and medical supplies and equipment, the country team has been working closely with WHO's regional office and headquarter. This helped ensure timely assistance even during instances of global shortages of PPE and testing kits, such as experienced in the early stages of the pandemic. WHO is working with UN agencies, funds and programmes to ensure that the ongoing procurement efforts are well-coordinated at the country level. A procurement tracking system established and maintained by WHO prevents duplication of procurement and distribution efforts and enhances transparency and accountability in resource alignment. In turn, this helps legitimise the UN's efforts to contain and respond to the pandemic.

Building health workers’ capacity to respond to COVID-19 and protect themselves and patients is at the heart of WHO’s response. To date, almost 4,000 health workers have been trained on infection prevention and control and 2,400 have received training on ICU and case management of COVID-19 patients. The improved capacities of the health workers and the supplies and equipment provided to hospitals and isolation centres are contributing to ensuring the provision of appropriate clinical care for patients and a safe environment at health facilities for all.

These investments will have long-term payoffs by playing a crucial role in improving and strengthening the quality, availability, and access to essential health services beyond the COVID-19 pandemic.

WHO's support for enhancing disease surveillance included provision of global guidelines on surveillance, case definitions, contact tracing and the development of a locally adapted training curriculum for the RRTs. In addition, financial and technical support has been provided to improve the electronic data management and reporting of COVID-19 cases including a mobile SMS system used for relaying results to people tested for COVID-19.

With extensive population movements between Afghanistan, Iran, and Pakistan, WHO has supported in limiting cross-border transmission of the virus by strengthening screening at points of entry (PoE) including airports, ground crossings, and provincial checkpoints. More than 320 PoE staff have been trained on screening and provision of health messages. To date, WHO, in collaboration with the MoPH and the International Organisation for Migration (IOM), has screened 6.9 million people at various PoEs.

Technical guidance and support were provided to urgently resume and strengthen critical services linked to reproductive, maternal, new-born and child health care, infectious diseases, routine
immunisation, primary health care and trauma care. In collaboration with the Health Cluster, WHO also helped ensure the continued provision of essential medicines and medical supplies, as well as training and capacity building of health care personnel to deliver high-quality health services even during the ongoing pandemic.

As the preparation for vaccine rollout signals new hope in the fight against COVID-19, WHO will continue its efforts to strengthen essential health services to build a resilience health system that is capable of coping with future emergencies.
Lessons learned from earthquake recovery contribute to the COVID-19 response in Albania

A number of policy reforms were initiated in Albania in recent years to ensure adequate resources for health, including efforts to reduce private out of pocket spending for health care and to increase public spending on health; further consolidated efforts are under way to further improve sustainable health financing. Before the COVID-19 pandemic, Albania embarked on a process of transforming its health system through increasing integration of social governance and services, improving policy-making systems and structures, regionalizing specialized health services, expanding the use of digital health tools, and improving screening and early detection (especially for non-communicable diseases, which are a substantial burden in the population). These planned reforms, among many others, aim to improve universal health coverage; however, some have been delayed over prioritizing COVID-19 response efforts during 2020.

Albania was impacted by the COVID-19 pandemic while gradually recovering from another crisis. On November 26, 2019, some three months
before its first COVID-19 case, Albania was hit by a severe earthquake, triggering substantial human suffering, and resulting in an estimated cost burden of 1.9 million euros to the health sector (including costs to infrastructure and services).\(^1\) Fifty-one individuals died, 943 were injured, and approximately 13,000 were displaced. Thirty-six health facilities were damaged, and four health facilities were destroyed, prompting the need to evacuate many patients. Some health services and facilities (e.g., blood banks) were left temporarily dysfunctional, compromising the health system's response capacity. The Albanian Ministry of Health and Social Protection (MoHSP) coordinated and worked with international partners to quickly establish temporary health centres and redeploy healthcare professionals to treat those injured and displaced. Recovery and reconstruction began soon in December 2019, with some facilities regaining function in mid-December.

The earthquake was graded as a health emergency under the WHO's Emergency Response Framework, and an emergency team was established both at the country and regional level to support Albania’s immediate response, and post-disaster needs assessment. The WHO Country Office (WCO) in Albania worked closely with the MoHSP to mobilize a strategic and immediate response to the earthquake. This included:

- identifying and coordinating key actors (knowing which entity does what, where and when)
- conducting a needs assessment for field hospitals to ensure continuity of health services
- supporting risk communication to the public
- mobilizing essential resources and procuring supplies
- gearing up early warning and surveillance systems (for displaced populations)
- monitoring water quality and hygiene conditions

The earthquake also led to the revision and redevelopment of Albania’s emergency preparedness and readiness plans. Many of these initiatives, spearheaded both by the MoHSP and WCO, facilitated the establishment of robust coordination mechanisms, which had a positive impact on the COVID-19 response and mitigation later. These efforts included conducting the Albanian Post Earthquake Need Assessment and the Albanian Strategic Risk Assessment, developing the Emergency Operation Plan for the National Centre of Medical Emergency, piloting the First Pandemic Influenza A Cases and Contact Investigation protocol, and supporting the Institute of Public Health and their laboratory quality management system.

Aside from improving emergency preparedness, the earthquake experience was also reflected in broader health system reform efforts and integrated into existing plans for the provision of health services. Lessons learned were factored into developing the Primary Healthcare Development Plan and the new National Health Strategy 2021-2030, with notable additions to ensure continuity of essential health services while responding to emergencies.

\(^1\) https://albania.un.org/sites/default/files/2020-07/albania%20post-disaster%20recovery_volume%20b%20_COMP_0.pdf, accessed on 25 April 2021
When the first cases of COVID-19 were registered in March 2020, Albania responded quickly with public health safety measures and strategies, including lockdowns, curfews, closures of certain services and workplaces, suspensions of public transport, and police and army checkpoints at points of entry. Designated COVID-19 treatment units were established, and non-essential health services were reduced to reprioritize resources. The WCO supported overall response coordination by providing updated technical guidance and international evidence as well as facilitating a coordinated MoHSP and broader government response through strategic alignment of UN agencies and stakeholders (especially in procurement, surveillance, and strategies to prevent the spread of COVID-19). WHO directly supported capacity building in laboratories and health services, healthcare and public health workers’ training, risk communication training for journalists, and supplied personal protective equipment, testing equipment, and other medical supplies. Overall, these efforts enhanced the national pandemic response, leading to lower initial infection rates and the ability to start a gradual easing of restrictive measures by the end of April 2020.

Albania also enrolled 65 patients into WHO’s International Solidarity Trial, which pools 12 000 patients from more than 500 hospitals worldwide to investigate the effects of various drug combinations on mortality, initiation of ventilation and length of hospital stay among COVID-19 patients. This is the first time that Albania has been involved in a large international trial. Albania is also an active member of the International Steering Group, where it interprets intermediate outcomes of the trial and offers recommendations on new research directions.

With effective responses to two health emergencies occurring only a few months apart, Albania demonstrated that a timely integration of lessons learnt from one crisis could improve response measures to a consecutive crisis. Specifically, it achieved this through proactively adapting broader health system structures and plans based on reflections gained from an ongoing emergency. With new COVID-19 cases declining continuously since the end of February 2021 and with the COVID-19 vaccination campaign expanding, Albania seems on a positive trajectory to address the health challenges of the COVID-19 pandemic and strengthen its response capacity to manage future health emergencies.
Supporting Argentina’s regional leadership in telehealth: TELESALUD & TELECOVID

Information systems and digital technology have been essential to the continuation of work, education, and healthcare throughout 2020. While Argentina had a good foundation for telehealth services from years of public investment in telehealth since 2007, PAHO/WHO Argentina supported several noteworthy developments in telehealth during the ongoing COVID-19 pandemic.

Developing & integrating TELECOVID
In the wake of the COVID-19 pandemic, which has been extremely taxing on health systems across the world, PAHO mobilized existing resources and leveraged Argentina’s robust telehealth infrastructure. With PAHO’s close working relationship with the Ministry of Health built from the long history of collaboration (including the development of the Federal Network of Telehealth and Distance Communication), PAHO swiftly stepped in, to support the launch of TELECOVID. PAHO contracted and worked with the developer, systems engineer, and consultants to develop and integrate the new TELECOVID program into the TELESALUD platform.

TELECOVID has allowed suspected or confirmed COVID-19 patients to easily arrange clinical care through the centralized platform that refers the patient to the appropriate health facility and book teleconsultations for monitoring and care. In particular, it has provided crucial primary healthcare services to vulnerable populations so as to ‘leave no one behind’ (such as populations 65 years of age or older, chronically ill or immunosuppressed). In 2020, there were 120,000 consultations facilitated on TELESALUD (a sixfold increase from 2019) and 80,000 of those were conducted since the beginning of the pandemic; 54% were accessed by women, 76% were for children under 1 year of age, and 5.7% for individuals over 60 years of age, and 70% by people living with chronic noncommunicable diseases (NCD), who are particularly vulnerable to adverse COVID-19 outcomes.

Expansion of TELESALUD
The Federal Telehealth Network experienced an immense expansion in 2020, from 320 to 810 institutions. The primary healthcare facilities registered increased from 40 to 399. This expansion was particularly important as it provided increased healthcare access for rural and some of the most vulnerable populations, with 30% of the facilities located in rural areas. However, this also meant an added layer of complexity, pertaining to an increase in the variation in maturity and capacity for telehealth across the provinces. How could the national government effectively and efficiently support the wide range of facilities across these provinces? A thorough evaluation to assess the existing strengths and gaps was needed to inform the decision-making processes. The PAHO Assessment Tool filled this need.

PAHO Assessment Tool for Institutional Maturity for Telehealth
PAHO/WHO played a key role in the adaptation and administration of the assessment tool for gauging the institutional maturity for telehealth in Argentina. During the COVID-19 pandemic, PAHO partnered with the Inter-American Development Bank (IDB), to develop a survey-based evaluation tool to determine the preparedness levels of numerous aspects of the capacity to execute a telehealth program in the Region. Although Argentina's telehealth network was among the most advanced in the Region, the Ministry of Health wanted to pinpoint gaps and understand the differing institutional capacities and maturity of each province. Therefore, PAHO/WHO Argentina supported the adaptation of the tool to the Argentinian context through workshops, reworking the terminology and questions to be contextually relevant, and with technical experts to analyse the data collected from 547 different public health institutions from 23 provinces and Buenos Aires. The resulting report detailed the implementation status of TELESALUD and TELECOVID and the maturity for telehealth levels of each province. These results enabled an efficient allocation of resources, as the Federal Government supported provinces with lower maturity ratings in the areas specified in the report. For example, one province lacked the necessary equipment, so computers were supplied to increase capacity.

PAHO/WHO Argentina's efforts to help strengthen telehealth services illustrate the exemplary use of technology and innovative tools to protect the population from epidemics and to strengthen the country’s capacity in data and information systems. The effective mobilization of digital platforms
and existing telehealth regulations, expertise, processes, and infrastructure has bridged the gap between healthcare professionals and clients caused by COVID-19-related physical distancing and lockdown measures. In fact, not only have PAHO/WHO Argentina’s efforts improved access to quality and essential primary healthcare services in Argentina, their expertise and leadership in telehealth extends beyond national borders. PAHO/WHO Argentina is facilitating South-South cooperation in the Region, working with PAHO/WHO Country Offices in the Americas for telehealth preparedness and implementation.
WHO Country Office in Azerbaijan supports the country in its COVID-19 response

The first COVID-19 case was confirmed in Azerbaijan in February 2020. In April 2020 there were only 6 COVID-19 designated hospitals in the country, all of which were lacking special protocols to deal with the pandemic. There was an urgent need to adapt to the new reality, to improve their readiness to admit COVID-19 patients.

WHO Country Office in Azerbaijan (WCO) took immediate action and in March 2020 called a response mission of international WHO experts for technical assistance to coordinate with the Ministry of Health (MOH) and the Administration of the Regional Medical Divisions (TABIB) in Azerbaijan to develop a 3–6 months national preparedness and response plan for COVID-19. An Operational Headquarters under the Cabinet of Ministers was created (on 27 February 2020) in Azerbaijan to coordinate efforts. WHO team of experts provided guidance on a full range of measures including: surveillance and laboratory testing, risk communication, infection prevention and control, patient care, access to essential medicines and minimization of the pandemic’s impact on the country’s health care system, including consideration of physical

1.1 Improved access to quality essential health services

REACT-C19 doctors together with local doctors in the ‘red zone’ of a temporary medical facility established for COVID-19 patients at the Yeni Klinika in Baku. Photo credit: WHO Azerbaijan
distancing measures. Together with MOH and TABIB, WHO assessed and identified topics for providing training for health professionals in areas like case management and intensive care of severe acute respiratory illness, infection and control, and triage.

In April 2020, WCO initiated The REACT-C19 project, an initiative to share expertise between doctors, to use innovative solutions and digital platforms, and to reshape the hospital response to COVID-19. The project was developed in partnership with the Heydar Aliyev Foundation, the Ministry of Health, the State Agency on Mandatory Health Insurance, and the Administration of the Regional Medical Divisions, with funding from the WHO COVID-19 fund reserves, the United States Agency for International Development and the British Embassy in Baku. Thus, highly qualified Azerbaijani doctors working in Turkey participated in a recruitment process and 19 of them were selected and received hands-on practical training In Izmir, Turkey, on infection prevention and control, triage, case management and intensive care of severe acute respiratory illness. The 19 physicians (specialists in infectious diseases, internal medicine, pulmonology, anesthesiology and reanimation) returned to Azerbaijan to help the hospitals in their home country to scale up essential hospital capacity and implement essential COVID-19 protocols. The team of doctors supported the hospital management of 12 COVID-19 response hospitals throughout the country, helped in the process of setting up triage systems, infection control committees, and trained healthcare workers in using essential WHO guidelines and tools concerning case management and intensive care. The doctors used the WHO Rapid Hospital Readiness Checklist, a tool that allows hospitals to see how well they are performing against a set of 11 components.

During the final phase of the project, WCO created a digital platform for healthcare workers, so they can have easy access to materials, interact with experts, access online meetings, statistics, and other supportive activities helpful in addressing COVID-19.

WCO started implementing the EU-funded Solidarity for Health Initiative, providing technical assistance to the government in procuring and delivering key equipment and medical devices, also supporting the national coordination of the COVID-19 response and risk communication to the population. Furthermore, WCO trained healthcare workers in areas like infection control and case management, to tackle COVID-19.

With the escalation of the conflict in Nagorno-Karabakh and surrounding regions on 27 September 2020, the health system was stretched even more significantly in Azerbaijan and the provision of essential health services was seriously impacted. WHO carried out a five-day Health Needs Assessment mission in five conflict-affected regions, in December 2020. The mission representatives identified mental health and psycho-social support needs as major gaps, while the COVID-19 pandemic was a major concern due to an exponential increase in the caseload during that period.

1 E.g.: establishing an incident management system, setting up an operational body for COVID-19, and strengthening infection prevention and control, including by setting up triage systems.
2 The Solidarity for Health initiative (2020-2022) supports the Eastern partner countries - Armenia, Azerbaijan, Belarus, Georgia, Republic of Moldova, and Ukraine - in their fight against the virus. The project is part of a common European response to the outbreak of COVID-19 and is implemented by WHO.
To respond adequately to the assessment’s findings, WHO developed an intervention strategy to address imminent essential primary health care services and mental health and psycho-social support for a period of six months. In this respect, medical mobile teams provide those services at fixed Primary Health Care centers in 25 different locations, in remote areas, where there is limited access to health care. The service ranges from antenatal care to the treatment of chronic illnesses. Furthermore, WHO strengthens mental health and psychosocial support service by training social workers and health workers in psychological first aid. Hospitals are supported with infection, prevention and control measures to reduce the facilities becoming COVID-19 transmission hubs.

**Highlights**

- WHO delivered laboratory testing kits and 2.5 million masks to healthcare institutions, other state agencies and NGOs working with vulnerable population groups (e.g. Social Services Agency, Medical Department of the Ministry of Justice, The Administration of the Regional Medical Divisions, Clean World Public Union and others);
- Risk Communication and community engagement have been essential parts of the COVID-19 response. WCO developed two communication campaigns for the general public regarding safety measures addressing COVID-19: the Safe Hands Campaign and the Staying home healthy campaign; the story book My hero: How kids can fight COVID-19 was translated, published and distributed to children living in the frontline areas of the conflict, in Nagorno-Karabakh and surrounding regions.
Cox’s Bazar, Bangladesh: How WHO set up 14 SARI isolation and treatment centres to respond to COVID-19 in world’s largest refugee camp

Preparedness planning for potential outbreak scenarios of COVID-19 in the Rohingya refugee camps, in Cox’s Bazar, Bangladesh (the largest refugee camp in the world) commenced in early February 2020. WHO rapidly engaged partners in preparations for specialized COVID-19 Isolation and Treatment centres and targeted clinical treatment practices to mount an effective response while leveraging local capacity.

By March 2020, WHO developed a concept of operations to establish dedicated Severe Acute Respiratory Infection (SARI) Isolation and Treatment Centres (ITCs) within and around the camps in Ukhiya and Teknaf. WHO worked closely with technical experts (e.g., in engineering, disaster preparedness, public health, infectious diseases, etc.) from the health sector and various NGOs and UN agencies throughout the phases of site selection, land allocation, design, construction and implementation of SARI ITCs.

In response to COVID-19 pandemic, in 2020 WHO initiated and coordinated the establishment of 14 Severe Acute Respiratory Infection (SARI) Isolation and Treatment Centres (ITCs) in Cox’s Bazar with a capacity of nearly 1200 beds. Photo credit: WHO Bangladesh/Tatiana Almeida
In WHO-led coordination meetings, which serve as a platform where partners confer on the required response, needs such as in bed capacity, medical oxygen, and security of the would-be SARI facilities (among many others) were identified. To efficiently address these demands and the eventual health capacity needs predicted by early research studies, WHO and its partners designed SARI ITCs to use locally available materials (e.g., bamboo and clay bricks) while ensuring adequate ventilation, security, water supply and water storage, wastewater management and drainage, sanitation and hygiene, dead body management, waste management and cyclone resistance.

Different partners expressed interest in operating SARI facilities, and in record time, 14 SARI ITCs were established across the camps and nearby host community, with the first SARI ITCs being ready to provide specialist clinical management of COVID-19 patients to host community and refugees ready in May 2020, just in time to provide quality care for the first Rohingya COVID-19 patient. Additional facilities were added, reaching a total bed capacity of 1200 beds by November 2020.

In addition to establishing the SARI ITC network, WHO also developed standard operating procedures and quality assurance tools for SARI facilities and holds regular trainings for infection prevention and control (IPC), clinical case management, case alert and surveillance, laboratory, operational leadership, risk communication, and many others. WHO also rolled out trainings in the form of “Training of Trainers”, ensuring that each organization operating one of the facilities had at least two trainers for improved and continued capacity building among the rest of the team in the facilities. Before receiving patients at each SARI ITC, WHO facilitated “dry runs” with different cadres of staff, from doctors to cleaners and waste handlers, on how their typical day with COVID-19 patients would look, with strong emphasis on adherence to IPC measures at all times.

To ensure acceptability and use of SARI facilities, WHO encouraged engagement with the communities. This involved encouraging facilities to invite community and religious leaders of refugees and host communities to visit the SARI ITCs to better understand the layout and operations and interact with the management and staff working at the facilities.

To date, WHO conducts regular supervision visits and reinforces capacity building through coaching and individual case reviews (offered by a case management team) to the ICU and SARI ITC staff.

WHO continues to coordinate weekly online forums, each with a multidisciplinary panel of health care providers (experienced in managing patients with COVID-19 and other viral infections) and infectious disease experts. These forums serve as a foundation for optimized clinical care to ensure patients’ best chance for survival in Cox’s Bazar and to foster peer to peer support and knowledge exchange. The forums also promote awareness and implementation of national protocols and WHO guidance on clinical case management of COVID-19 in the SARI ITCs.

Early modelling projections had suggested that infection rates could be alarming in the Rohingya Camps, with up to 90% of the population at risk of becoming infected within the first three months of the
virus entering the camps. It was projected that the daily numbers of patients requiring hospitalization could quickly reach the thousands, with over 2000 deaths projected within 12 months, even under the best-case scenarios. This would have hugely overwhelmed the existing health services’ capacity and compromised important health outcomes achieved since the onset of the humanitarian response in these camps three years ago. However, by promoting coordinated health action and best practices in Cox’s Bazar, WHO and its partners have been instrumental in preventing excess morbidity and mortality due to an infection with COVID-19. As of Mid-March, some 430 cases and just ten deaths among Rohingya refugees have been reported from the 34 camps. No increase in all-cause mortality has been observed, and the cumulative share of positive tests in the district is 21%, suggesting robust and sufficient COVID-19 testing capacity in the district.

A year without precedent globally, 2020 has brought short and long-term social and economic disruptions whilst COVID-19 infections and deaths soared worldwide. The rapid spread and impact of the pandemic have propelled the WHO Emergency Sub-Office in Cox’s Bazar to promptly implement decisive preparedness measures to slow the spread of the virus and mitigate its impact on mortality and morbidity, hospitalizations, and demand for health care goods and services. By doing so, WHO has helped to protect vulnerable groups, minimize economic and social disturbance for healthcare and when the time comes - and it will come - to enable a quick return to normal conditions.
Laboratory capacity strengthening for Health Emergencies in Belize during and beyond the COVID-19 pandemic

In 2016, laboratory testing capacity for detection of priority diseases and pandemic preparedness in Belize was identified as one of the main Ministry of Health and Wellbeing (MoHW) gaps to comply with International Health Regulations. With Pan American Health Organization (PAHO)/WHO support, a Joint External Evaluation recommended the need to enhance national laboratory capacity to support surveillance and improve accurate and rapid diagnosis at central, regional and district levels; to increase lab medical equipment and training of human resources, as well as to improve MoHW capacity to initiate effective response action to prevent epidemics. Between 2017 and 2019, PAHO/WHO conducted follow-up missions to develop standard operating procedures to strengthen the National Lab capacity, to evaluate the country public laboratories capacity to respond to emerging and re-emerging infectious diseases and to define public laboratories’ roles and responsibilities as part of the national laboratory network preparedness for an epidemic outbreak.

1.3 Improved access to essential medicines, vaccines, diagnostics and devices for primary health care
Although preparedness actions contributed to organize the country’s response to the COVID-19 outbreak, Belize had no laboratory capacity to test for COVID-19 in either the public or private sectors. Therefore, aligning with the nine pillars of WHO COVID-19 Country Preparedness and Response Plan, PAHO/WHO supported building the diagnostic capacity and securing supplies and equipment needed to first initiate, then expand testing in-country and to prevent the pandemic spread, as follows:

- **Training & capacity building:** Two officers of the Central Medical Laboratory (CML) received training by PAHO/WHO virologists to utilize Reverse Transcriptase-Polymerase Chain Reaction (RT-PCR) at the Institute of Epidemiological Diagnosis and Reference in Mexico. Training was subsequently replicated in Belize among CML and the Belize Agricultural Health Authority (BAHA) technicians while initiating active surveillance for the detection of SARS-CoV-2. Since public laboratories had already developed capacity to test for Influenza it was easily adjusted to accommodate for SARS-CoV-2.

- **Procurement:** In partnership with the European Union, PAHO/WHO supported the procurement of probes and primers for the molecular testing as well as COVID-19 Rapid Antigen test kits and devices to support the decentralization of COVID-19 testing. PAHO/WHO procurement and distribution channels became the primary means through which test kits and consumables were replenished in the country due to the global interruptions in supply chain that greatly affected small economy states such as Belize. By January 2021, over 50,000 PCR and rapid antigen test kits and 250,000 lab supplies have been procured by PAHO/WHO contributing to the conduct of 62,960 tests. Additional 94,975 rapid antigen tests and several readers have been recently donated as well to further support the decentralized testing strategy.

- **Expanded and decentralized testing:** As the number of suspected cases began to increase exceeding the testing capacity of the only equipped laboratory in the country, the MoHW requested that PAHO/WHO review the laboratory network and propose guidelines for the release from isolation and quarantine and for decentralized testing. As a result, the implementation of rapid antigen testing was integrated into primary care and became an option to facilitate testing access, reduce the significant lag in processing the samples and alleviate the burden of testing on the CML.

In the short term, in a country with an estimated population of 400,000 people, PAHO/WHO interventions have contributed enormously to increase in the number of persons tested and significantly reduced the waiting time for laboratory results. Consequently, the population and health care personnel could take prompt action in regard to quarantine and/or isolation which strengthened the prevention and control measures for COVID-19 at the community level. The expanded rapid testing strategy raised public awareness of the importance of testing and of taking personal preventive measures to avoid being infected; and built-up the population’s confidence in the health system as actions were perceived as timely and responsive.

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In addition, health personnel were increasingly made aware of the importance of safety measures inside and outside the labs. At central level, PAHO/WHO support helped raise awareness among MoHW officials to prioritize long-term procurement forecasting and planning to be able to improve supply chain management practices in the country. Lastly, PAHO/WHO interventions helped to strengthen the partnership with the MoHW, positioning the PAHO/WHO Country Office as the key stakeholder providing technical guidance and cooperation, particularly during epidemic outbreaks. Since February 2020, PAHO/WHO has led the coordinated country response to the COVID-19 pandemic and participates in the multi-sectoral National COVID-19 Task Force, and in the Medical and Communications Sub-Committees. The other key stakeholders are the MoHW, the Ministries of Foreign Affairs and of Human Development, and UN System partners.

In the near future, PAHO/WHO interventions are expected to contribute to private sector engagement to provide rapid testing at the main private facilities in Belize City. The private sector involvement will decrease the burdensome workload of the public laboratory in Belize City, thus improving the efficiency of the CML.

In the long-term, PAHO/WHO interventions are expected to strengthen the national medical laboratory platform for infectious diseases testing, which should enhance the resilience of the health system and lead to a better response to emerging and re-emerging pandemics.
SUS: Bolivia’s Universal Health Access and Coverage, a Reference for the World

Every year, 6% of households across Bolivia face catastrophic health expenditures and subsequent impoverishment. In the absence of effective protection mechanisms, underserved groups—particularly indigenous communities and informal labourers—are most vulnerable to high out-of-pocket health expenses. With the largest informal sector in the world, a significant proportion of Bolivia’s workforce lack health insurance coverage. Catastrophic out-of-pocket health spending limits access to health services and derails efforts towards universal health coverage. To address these health inequities and financial barriers, the Bolivian government introduced ambitious health reforms in 2019 through the Single Health System model.

Bolivia is one of few countries globally to implement a universal health coverage model—centering the right to healthcare. The Bolivian government aimed at providing universal and free coverage to 50% of the population—a two-fold increase from previous coverage rates—protecting an estimated five million underserved, uninsured Bolivians. WHO/PAHO’s Country Office in Bolivia (WCO) spearheaded the
formulation of Bolivia’s Universal Health Care Policy, facilitating discussions among social organizations representing underserved communities, medical representatives, and various government agencies—to ensure buy-in from multiple stakeholders. From January to March 2019, WCO worked closely with the Ministry of Health (MoH) to develop an implementation plan and build a core working group. WHO/PAHO’s regional team facilitated technical and knowledge sessions to build MoH’s understanding around crucial aspects and implications of the universal healthcare policy, including governance financing, management of health services, and integrated health service networks.

WCO’s efforts towards advancing Bolivia’s Single Health System (SUS) model drove significant outcomes.

- **Increased health expenditure:** As a result of WCO-led deep-dive knowledge sessions on health financing with the MoH, an additional fund of USD 200 million was earmarked for financing the new health policy in the first year of implementation—improving health equipment, supplies, and hiring additional Human Resources. In the last decade (2010-2019), Bolivia tripled public spending on health, escalating public expenditure in primary health care to 37%, and outdoing other countries in the region that average less than 15%. Bolivia is now one of three Latin American countries that have advanced recently close to reaching the goal of allocating 6% of GDP towards public health expenditure. By liaising with multiple stakeholders, WCO ensured that implementing SUS became a key priority for not just the MoH, but also vested donors and other development agencies in the country. WCO’s advocacy efforts channeled resources from Korean Cooperation, World Bank, Inter-American Development Bank (IDB) and Spanish Agency for International Development Cooperation AECID towards advancing SUS. For example, a World Bank project of USD 250 million—originally earmarked to build 10 secondary hospitals—was partially redirected towards strengthening primary health care services to meet a SUS-triggered increase in demand for services across eight integrated health services delivery networks (RISS) in La Paz and El Alto.

- **Strengthened primary healthcare services:** Increased health expenditure enabled improvements in health infrastructure, equipment and equitable distribution of human resources—particularly in primary health centres. WCO conducted an analysis of health worker shortfall, identifying gaps in the availability of physician specialists across the country. WCO subsequently used these findings—estimated at a shortage of around 3,000 healthcare specialists—to advocate for funding towards training additional health specialists. Bolivia’s MoH drafted a Family, Community and Intercultural Health policy (SAFCI) that drew from WHO/PAHO’s strategy around primary health care: meeting the majority of people’s health needs through services provided directly in the community where they live. Around 2,500 teams of health workers were assigned to 70% of local municipalities—strengthening first-level, primary healthcare services and prioritizing preventive community health. Bolivia is now one of three countries in the region with over 30% of the health workforce engaged in first-level, community health.

- **Reduced out-of-pocket expenditure:** Improved services at the primary health level, resulted in prevention and early diagnosis of the main types of chronic non-communicable diseases,
and consequently reduced household expenditure on health. The contribution of out-of-pocket expenditure towards tertiary-level hospital budgets dropped dramatically from 65% in 2018 to 19% in 2020.

Bolivia’s health reforms, by way of the Single Health System (SUS) model, thus increased public health expenditure, strengthened primary health services and reduced out-of-pocket expenses for vulnerable communities.

COVID-19 highlighted the necessity and significance of Bolivia’s health model. Despite limitations created by the pandemic and wide-spread social unrest on account of contested presidential election results—public health facilities across Bolivia offered uninterrupted essential health services. Under SUS, funds for Bolivia’s COVID-19 response were available and enabled prompt acquisition of drugs and medical supplies—particularly at the primary healthcare level—in all 339 municipalities of the country. SUS strengthened first-level care with an emphasis on epidemiological surveillance, neighborhood clinics, and healthcare services for underserved communities. In some municipalities, SUS supported existing health programs (for example: SAFCI and MISALUD), in charge of essential health services. SUS abolished prior affiliation at different levels of healthcare facilities and all Bolivians were guaranteed access to COVID-19 treatment available. Free-of-charge services (even partially) mitigated the enormous economic impact of the pandemic on marginalized and vulnerable groups. Had SUS not been launched a year before the pandemic, Bolivia’s response to COVID-19 would have been less prepared. Bolivia’s healthcare model thus holds the promise of a health system strengthened to withstand the impact of future health emergencies.
WHO is providing wide-ranging support to combat violence against women in Bulgaria

Bulgaria is stepping up efforts to end violence against women, but significant gaps remain. The incidence and severity of violence against women in Bulgaria remain higher than the average of all countries in the European Union (EU). Since 2019 at least two women each month have died from domestic violence, and there has been an increase in violence against women and children since the beginning of the Coronavirus disease (COVID-19) pandemic. Despite the scale of the problem, an estimated 70 to 80% of cases of violence against women still go unreported. Policy dialogue concerning violence against women in Bulgaria has had a long and controversial history. Some of the important challenges faced include the slow pace of policy and legal reforms, the non-availability and non-accessibility of support services for victims of domestic violence, and poor coordination of efforts.

One of the ways WHO is supporting Bulgaria to overcome these challenges is by setting into motion key amendments to reform the national legislation concerning violence against women and bring it in line with international standards. Since 2015 WHO has supported the enactment of laws to criminalize all forms of domestic violence. In January 2021, WHO supported Bulgaria’s Ministry of Justice to prepare a draft law amending the Protection against Domestic Violence Act (PADVA), with the participation of the office of the Ombudsman, Civil Society Organizations, and NGO partners. With the entry into force of the new law, a National Commission for Prevention of Domestic Violence will be established as a coordination body for all interventions to prevent and combat violence against women. The Commission will be headed by a deputy prime minister, deputy ministers from seven ministries and heads of three agencies and have representation from key stakeholder groups.

WHO is also providing support to ongoing reforms to simplify and accelerate the procedures for victims of domestic violence and sexual violence to access free legal aid and immediate protection. Key amendments underway include protection for children who have suffered or witnessed domestic violence, the establishment of a National Referral Coordination Mechanism (NRCM) to help and support victims of violence, an extension of up to three to six months in the deadline for applying for protection from domestic violence, an obligation of medical practitioners to report domestic violence cases, and an expansion in the eligibility and category of women who can seek protection from domestic violence.

Asides from the legal reforms, WHO is also providing support to ensure the availability and accessibility of support services for victims of domestic violence. WHO and some NGO partners are currently running a joint advocacy and awareness-raising campaign to promote the importance of maintaining services for women and child victims of violence especially during the COVID-19 pandemic. Furthermore, WHO has published guidance for policymakers and national health systems on actions that can be taken to address violence against women, and developed an information sheet together with the United Nations Entity for Gender Equality and the Empowerment of Women (UN Women) on the collection of data on violence against women and girls during COVID-19 pandemic.

WHO has also been involved in improving the practical skills of professionals in institutions (healthcare, law enforcement, and welfare institutions) for working with victims of violence against women through serious, systematic, and targeted training. This support includes the development of training materials and training methodology to establish a permanent capacity-building program for practitioners to identify and report domestic violence cases, and to provide mandatory therapy for perpetrators of domestic violence.

These efforts have yielded some important achievements. Two more support centers for victims of domestic violence have been established in response to a WHO-supported recommendation from the office of the Ombudsman in 2019. WHO is providing support to establish more support centers in all 28 regions of Bulgaria to meet the minimum standards of the Council of Europe.3 Victims of domestic

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3 Council of Europe, Combating violence against women: minimum standards for support services, p. 38.
violence will benefit from accommodation in the support centers, and from specialized services such as a 24-hour free telephone line for consultations. WHO is also currently reviewing the estimates of violence against women in Bulgaria. This estimate meets a crucial need to address the lack of a systematic and integrated database of domestic violence cases in Bulgaria. The WHO-supported reforms also envision that the national commission will establish and maintain a central register and database of domestic violence cases and a register of all licensed social service providers that have victim protection activities.

WHO’s ability to continually provide dependable guidance to policymakers, and to support various stakeholders (e.g., Ministries of Justice, Office of the Ombudsman, NGO partners, Civil Society Organizations, and Members of Parliament) for high-level policy dialogue, has been important to the ongoing work and progress in ending violence against women in Bulgaria.
CABO VERDE

Improving laboratory capacity for the diagnosis of SARS-CoV-2 virus in Cabo Verde

The COVID-19 pandemic has required rapid new efforts to manage the disease globally. Within a few months, Cabo Verde has significantly strengthened local capacity to quickly and effectively diagnose COVID-19 through an accessible and effective laboratory system.

At the start of the pandemic and relying on WHO’s technical guidance, the country’s leadership recognized the importance of detecting SARS-CoV-2 through polymerase chain reaction (PCR) method. As Cabo Verde is an archipelago, the government opted for the development and strengthening of decentralized testing and rapid investment in human resources and equipment to improve the capacity of local laboratories for diagnosing COVID-19.

These efforts leverage on the country’s response to previous epidemics. Cabo Verde experienced the first dengue epidemic during the last quarter of 2009. With the support of WHO, it obtained equipment for reverse transcription polymerase chain reaction (RT-PCR). During the Zika epidemic in 2016, with support from WHO and its collaborating

centre, the Pasteur Institute in Dakar (IPD), the Ministry of Health (MoH) set up a virology laboratory. In this context, eight laboratory technicians were recruited and trained, and four of these were specifically trained for the virology laboratory to perform RT-PCR tests for the diagnosis of Zika.

As the threat of rapid spread of COVID-19 was looming in March 2020, the country with the support of WHO, acted quickly to develop laboratory capabilities for diagnosing SARS-CoV-2 through RT-PCR tests in Cabo Verde. WHO supported the training of a technician in the diagnosis of SARS-CoV-2 in partnership with the IPD and with financial support from the West African Health Organization.

At the same time, WHO financed the purchase of PCR equipment to reinforce the capacity of the laboratory in Santiago Island and to open a laboratory in St. Vicente island, the second most populated island. Additionally, WHO assisted the government in securing funds to cover five months of the technicians’ remuneration to ensure uninterrupted provision of testing services in Santiago and St. Vicente islands. IPD and the WHO Regional Office for Africa also provided the required technical assistance.

Based on the needs assessment and in consultation with the government, WHO acquired and delivered to the virology laboratories in Santiago, St. Vicente, and in Sal island 2000 units of rapid antigen tests, consumables for the automatic extractor, Viral Transport Medium, and reagents. With the reinforcement of the laboratory capacity, up to 800 samples per day can be processed by the three laboratories by January 2021. The virology laboratories were integrated into the COVID-19 platform for laboratory professionals in the WHO African and Eastern Mediterranean regions. Furthermore, Cabo Verde put in place an external quality assurance programme to monitor the country’s capacity to correctly test for SARS-CoV-2.

Maintaining high quality of tests was a priority for Cabo Verde. Responding to the request of the government, WHO contracted an international consultant to provide technical assistance to elaborate a manual for the transportation of biological samples from Cabo Verde. In partnership with the MoH, WHO organized a three-days biosafety training for technicians on COVID-19 management. Under WHO’s guidance, national health professionals were trained on triple packaging for transporting samples, on emergency procedures for containing spills in laboratories, on elaborating procedures to align the interpretation of results with reference laboratories responding to the pandemic, and on supporting the validation of results of positive cases with follow-up (2nd and 3rd samples from the same patient). Finally, WHO consultant provided support regarding COVID-19 laboratory protocols and the comparison of testing results among the different diagnostic kits available in the country.

The office of UNICEF in Cabo Verde also contributed to SARS-CoV-2 testing capacity with the procurement of Gene-Xpert cartridges tests for SARS-CoV-2. In addition, The Global Fund also provided financial support, to purchase PCR tests and to contribute to overall efforts on laboratory strengthening.
The process of increasing local diagnostic capacity has not been without challenges. As many flights to Cabo Verde were cancelled and due to bureaucratic obstacles, there were delays in the procurement of Gene-Xpert as well as in receiving equipment, consumables and tests. There was also a lack of sentinel sites for influenza surveillance. Ongoing challenges include ensuring sufficient and qualified human resources and capacity for integration into the network of genome sequencing laboratories for COVID-19 and emerging pathogens, which are vital for the diagnosis and understanding of the spread and control of the pandemic.

In spite of an extremely challenging year, Cabo Verde has increased and fortified its local capacity for successfully diagnosing SARS-CoV-2 by PCR in a very short period of time thus reinforcing its health emergency preparedness and response. Currently, thanks to the country’s actions, 5 of the 9 islands of the archipelago have access to quick, PCR tests. The remaining 4 islands are getting the benefit of a quick referral system where samples are analysed in the closest available laboratory, covering by this way the needs of the entire country.
Strong partnership response to measles and COVID-19

New developments bring new challenges
Cambodia was among the seven countries in the Western Pacific Region that achieved measles elimination in 2015. The efforts took more than a decade of devoted action, while their impact went beyond health care into social and economic improvements of peoples’ lives. Yet, it was these same social and economic developments that brought also new challenges to the country, including reoccurring outbreaks of measles.

As the economy grows people tend to move more frequently within the country and internationally: working parents often leave children in the care of grandparents; garment factory and construction workers relocate to find employment; seasonal farmers migrate in line with seasons.

Moreover, there are some groups of people who rarely have a permanent residence, such as those living in floating villages or homeless people in urban areas. This makes it difficult to provide adequate immunization services and has resulted in several outbreaks of measles since 2016, reaching a total of 684 laboratory confirmed cases in 2019. The emergence of COVID-19 pandemic amplified existing challenges, but also introduced new ones in dealing with communicable diseases.

Ministry of Health and WHO take action
To address the twofold challenges of measles and COVID-19, WHO engaged in numerous activities in line with national priorities and global developments.

First, to learn about reasons behind reoccurring outbreaks of measles, the Ministry of Health reviewed its National Immunization Programme (NIP). WHO contributed to various stages of this process. The review focused on international borders and urban areas, which have high levels of human migration and the highest number of reported measles cases. WHO experts joined teams in visiting districts and health centres in order to understand the situation. Moreover, WHO supported national health bodies in data management and analysis; resource mobilization for provision of services; and preparation of isolation wards/referral facility for patients. Upon completing the review, WHO was the major partner in implementing recommendations such as fixed-site, outreach, and high-risk community vaccination services as well as active case search, surveillance, and reporting.

Second, WHO assisted in developing strategic guidance on the continuation of immunization during the COVID-19 pandemic and a risk management plan covering potential developments. Finally, service delivery sites were equipped with supplies that protect health workers, enable safe waste disposal, and inform the public on COVID-19 preventive measures.
Achieving in the present and planning for the future

The review of the NIP produced more than 25 recommendations. In the medium term, they build a foundation for integrating the immunization programme into the 2021-2025 National Health Strategic Plan. In the short term, the review highlighted the importance of flexible immunization services – for example, immunization provision after parents come home from work or on weekends and holidays. Moreover, the role of village chiefs was emphasized in identifying new settlements; registering children for immunization; and sharing knowledge in communities. Finally, recommendations were made as to financial, organizational, and information management. As a result, Cambodia interrupted the large-scale transmission of measles and reduced the number of confirmed cases to 371 by October 2020. The reported cases of measles have fallen to the lowest levels in four years and the downward trend continues.

While the outbreak of measles has been suppressed, Cambodia has continued to report imported and sporadic clusters of COVID-19 cases. WHO support was pivotal in maintaining primary health care services,

A child receives vaccine at the health center. Photo credit: WHO Cambodia
drafting guidelines for immunization during COVID-19, and providing protective equipment. In addition, WHO supported communication campaigns informing parents and caregivers that vaccination sites are open, and health workers were well informed on preventive measures. In this way potential fears were addressed and primary health care services maintained, while the number of confirmed COVID-19 cases was kept below 400 by December 2020.

The combined challenges of measles and COVID-19 outbreaks amplify the importance of cooperation and joint action. The Cambodian government and WHO will continue to move forward, contributing to the goals of the GPW 13 and aiming to achieve the SDGs by jointly addressing challenges and promoting health, rather than merely fighting disease.
Caring for people’s hearts and minds

Half a year into the outbreak of COVID-19, Cameroon decided to take stock and learn if its response to the pandemic supported people’s psychological wellbeing. As the virus spread, it consumed increasingly more of the country’s resources, thus reorganizing social, economic and cultural activities in a new, emergency setting. And prolonged periods of uncertainty tend to take their toll on people’s lives. Committed to integrated health care, Cameroon initiated an assessment of psychological care during the COVID-19 response. The assessment suggested several areas of improvement and Cameroon and WHO teamed up to address them.

New strategy paves the way for integrated care. In the first step and with WHO support, Cameroon developed the National Mental Health Strategy that set the framework for improvements in psychological care. In the second step, the strategy informed creation of other documents, like guidelines for mental health of children and adolescents, simplified guide on mental health care and mental illness care algorithms. All these documents offered handy and reliable support to health workers when deciding on best interventions. And since April 2020, data on these and other psychological interventions have been continuously...
collected by a data management tool. They are now one click away, making it easier for the Ministry of Health to coordinate resources and care for everyone in need.

Caring for those who care
From the onset of the pandemic, demands on health workers have been growing: from containing the virus, over maintaining lifesaving health services, to ensuring mental resilience along the way. With this in mind, WHO supported the stronger involvement of mental health professionals at all levels of health care. The National Public Health Emergency Operation Centre was a first institution to form a psychological care team. A recruitment of 27 psychologists and 36 nurses followed across the country. WHO organized trainings for the newly employed staff as well as for more than 1 500 further psychological care specialists. Focused on mental health and psychosocial support during the pandemic, the trainings were soon after extended to include health workers of other specializations, together with 300 social workers, 120 investigators and 30 journalists.

Spread the word
Equipping journalists with psychological care skills proved especially helpful, as they moved ahead to create and translate mental health communication to simple and compelling posters, picture boxes and leaflets. As the message spread, it reached and informed more people about mental health support, including those living in remote areas. But Cameroon and WHO did not stop there. They partnered with the Red Cross to launch a toll free helpline for psychological care, and supported a local NGO to provide psychosocial support to victims of physical violence perpetrated by armed groups in the southwest part of Cameroon.

As the virus evolves and the world sustains in a bid to ensure equitable access to immunization, the end of the pandemic remains unpredictable. Whenever the time comes, Cameroon’s investment in psychological care have already impacted people’s lives and its effects will go a long way.
Chad starts influenza surveillance and reporting to FluNet with the support of the PIP Partnership Contribution

Following a 2017 Joint External Evaluation (JEE), to identify capacity strengthening needs, Chad is now implementing influenza sentinel surveillance and sharing findings with FluNet, with the support of the PIP Partnership Contribution.

In 2017, a Joint External Evaluation (JEE) in the context of the International Health Regulations (IHR) (2005) was conducted in Chad to identify capacity strengthening needs. The JEE found that Chad had limited capacities in the following indicators: (i) laboratory testing for the detection of priority diseases; (ii) specimen referral and transportation systems; and (iii) syndromic surveillance systems. The evaluation also revealed no capacity in laboratory quality management systems (LQMS).

Surveillance and laboratory testing are critical for the early detection of epidemic and pandemic prone diseases. Regardless of the disease, surveillance activities involve the same functions and the same actors within the healthcare system.
Following the JEE, Chad embarked on the implementation of influenza sentinel surveillance with the support of the PIP Partnership Contribution. Key activities included:

- **February 2018**: Finalization of the National Protocol for Sentinel Surveillance for Influenza.
- **March 2018**: Selection of 2 sentinel sites including the Mother-and-Child Hospital and the National Reference General Hospital.
- **September 2018**: Design and adaptation of surveillance job aids.
- **October 2018**: Training of personnel involved in surveillance at both sentinel sites.
- **November 2018**: Participation of focal points at the regional coordination meeting in the Republic of Congo.
- **January 2019**: Receipt of consumables and laboratory equipment, training of national reference laboratory technicians in Ndjamena on the diagnosis and molecular characterization of influenza viruses and training of 2 laboratory technicians in the safe shipment of infectious materials.
- **February 2019**: Official ceremony to launch the influenza sentinel surveillance system by national authorities.
- **March 2019**: Receipt of computer hardware and equipment.

In March 2019, for the first time, Chad began reporting influenza virological data to WHO's FluNet. This successful outcome was due to a combination of political commitment at the highest level, strong support from WHO and collaborative efforts from all involved. The capacity to detect influenza, to monitor its trends and country participation in global surveillance activities are critical functions for emergency response and are helping to strengthen Chad’s preparedness for a future influenza pandemic.
How WHO restored healthcare services and safeguarded against diseases in the aftermath of Cyclone Kenneth in Comoros

When Cyclone Kenneth made landfall on 24 April 2019, it hit three of the four main islands in the Union of Comoros, affecting more than 43% of the country’s total population of over 850,000. An unprecedented cyclone in scope and scale, the devastation it caused led to six people’s death, injuries to 182 people, and the displacement of 11,969 individuals. The disaster triggered an international response that saw an immediate launching of emergency relief efforts that focused on rescue operations, food, safe drinking water, and emergency shelters.

Within days of Cyclone Kenneth’s landfall, WHO deployed a response team from the Organization’s three levels to support Government’s response. In close coordination with representatives from the Government of Comoros and humanitarian partners, WHO’s team conducted a country-wide rapid disease risk assessment, which informed the development of a costed Strategic Health Response Plan.

One of the top priorities from the assessment was to restore and ensure access to essential health services. WHO supported in many ways to achieve this objective. First, WHO trained twelve local evaluators and jointly conducted an in-depth assessment of damage and disruption to healthcare facilities that helped identifying areas of priority investments in restoring healthcare services.

Guided by the assessment’s findings, WHO operationally supported the government in comprehensive structural renovation of two damaged healthcare facilities and delivered emergency kits to the Ministry of Health and Hospital El Marouf. Supplies provided by WHO included Interagency Emergency Health Kits (IEHK) basic units, IEHK supplementary modules-medicines, IEHK supplementary modules-equipment, and IEHK supplementary modules-renewables. The IEHK units helped fill the immediate medical needs of the Comoros population affected by cyclone Kenneth, who faced limited access to routine health care services. Furthermore, to help restore healthcare services WHO provided a financial contribution of US$ 50,000 and supported the government in accessing US$ 242,500 from the United Nations Central Emergency Response Fund.

To minimize the risks caused by damaged sanitation facilities and health infrastructures, WHO worked with government representatives and partners to set up an early warning and surveillance system to prevent, detect and respond rapidly to infectious disease threats. In addition, WHO scaled up the capacity to collect, manage, analyse, interpret, and report surveillance information. Daily situation reporting that WHO produced allowed the Government and partners to promptly identify and address
emerging health threats, immediate and long-term actions, and influence health resources allocation to address the consequences of the cyclone.

These interventions by WHO and other relevant stakeholders minimized infectious diseases’ threats in the aftermath of cyclone Kenneth. The number of infectious diseases like cholera and diarrhoea cases were in the low hundreds with no reported deaths. As the Union of Comoros continues the path to restoring its healthcare system and re-establishing water and household sanitation, one measure put in place by the WHO — surveillance against disease outbreaks — will equip the country with the knowledge and experience that can help forestall the worst impacts of future storms.

WHO provides urgent care after the cyclone. Photo credit: WHO Comoros
Supporting Indigenous communities during the COVID-19 pandemic

Costa Rica has seen significant progress and achievements in human development and social security through decades of strong public investment in health systems as well as education, housing, employment, and environment. Today, life expectancy in Costa Rica is among the highest in the Americas region and Costa Ricans have “near universal access” to comprehensive healthcare services. Despite these exemplary policy and health achievements, health inequities persist for several groups, including indigenous populations. Indigenous peoples comprise 2.4% of the population and are disproportionately affected by poverty and marginalization. Around the world, COVID-19 brought preexisting health inequities and the unequal distribution of resources and power to the forefront. Therefore, Indigenous peoples bore an unequal burden of vulnerability and were more likely to be exposed to and contract the virus. In this context, PAHO/WHO Country Office (PAHO/WCO) Costa Rica took the leadership role to address the urgent need to support Indigenous communities against COVID-19.

The government of Costa Rica initiated the request for support from the United Nations system. In collaboration with the UN Resident Coordinator Office, the PAHO/WHO Country Office, was tasked with developing and supporting the implementation of part of the national plan to address COVID-19 in Indigenous Territories. In addition to the technical support, PAHO/WCO led the collaboration and coordination efforts with stakeholders at all levels, which was crucial for community engagement and advocacy.

Starting early on in the process, PAHO/WCO engaged the Ministry of Health, the Costa Rican Social Security Fund as well as the National Emergency Commission and the Emergency Committees in the Indigenous Territories. This ensured that the response was coordinated at the national, regional, and local levels. Local governments were also key collaborators in the process. Connecting with municipalities was crucial, as they helped to connect with local institutions and community leaders, and to facilitate public dialogues. Through close ties with these networks, PAHO/WCO increased the efficiency and effectiveness of the distribution of personal protective equipment and disinfecting supplies; PAHO/WCO targeted its resource contributions in areas with outbreaks. Ties with the localities made the distribution much more efficient and responsive to reach the families that were most affected.

Most importantly, the PAHO/WCO went through a long and thorough process to identify and hire local indigenous health care professionals to act as health promoters. They would develop and implement

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the response plans for their own communities, whereas PAHO/WCO’s role would be more so to provide managerial support and technical guidance. In recognizing the diversity of indigenous populations, knowledges, and cultures, PAHO/WCO and staff members approached each community with an open and flexible agenda, which was only shaped into a strategy and working plan after hearing their particular

Don Samuel López, Mayor Bribri and great connoisseur of his culture in the community of Watsi, Talamanca. Photo credit: WHO Costa Rica
needs and experiences. As a result, no two interventions were alike and the communities were put at the centre of the implementation of the Project. Accordingly, the five response plans (for a total of nine Indigenous Territories) comprised different priorities and opportunities identified through the needs assessment conducted by members of the local communities themselves, in collaboration with local and national institutions. The true impact of PAHO/WCO’s engagement can only be fully captured through the foundation of trust that has been established with communities. This trust has sustained positive working relationships well into 2021, beyond the immediacy of the pandemic and into the recovery stage.

While differences and diversity in culture and languages can often get defined as ‘barriers’ to care, PAHO/WCO approached Indigenous cultures as an essential element of sustainable development and recognized traditional practices and knowledge as a ‘global good.’ PAHO/WHO has supported the Government of Costa Rica in the preservation and development of health in indigenous populations, rooted in community perspectives and ancestral knowledge. This approach enabled the effective mobilization of these resources to improve public health during the pandemic: for many Indigenous communities, family is not limited to the immediate family—it extends to the entire community. This meant that communication campaigns were focused on coping as a community and emphasized realistic ways to encourage the community to adopt COVID-safe practices in interactions.

PAHO/WCO Costa Rica’s efforts on this project is a unique and important illustration of a response to the COVID-19 pandemic that incorporates the much-needed emphasis on equity and prioritization of Indigenous cultures and knowledges.

This Project was an adaptation of the work the PAHO/WCO had planned for the 2020-2021 biennium to address health inequities and target the social determinants of access to health services for Indigenous peoples in Costa Rica. It was aligned with the broader PAHO’s Strategy and Plan of Action on Ethnicity and Health 2019-2025.
Costa Rica leverages influenza advances to combat COVID-19

Long-term targeted support from the Pandemic Influenza Preparedness Partnership Contribution (PIP PC) has strengthened Costa Rica’s capacities for surveillance of influenza and other respiratory viruses, helping to establish a robust platform for the country’s frontline response to the COVID-19 pandemic.

Costa Rica has a long history of influenza surveillance guided by a multi-sectoral technical group comprising the Ministry of Health, the National Influenza Centre INCIENSA and the Costa Rican Social Security (CCSS), which provides health care services through centers and hospitals accessible to all residents. Over the past months these technical experts have worked with PAHO regional and country teams to adapt the country’s influenza surveillance systems and protocols to support the COVID-19 response in several key areas, including virologic surveillance and data analysis.

Before the onset of COVID-19, Costa Rica had 18 sentinel sites to actively monitor severe acute respiratory infections (SARI) and influenza like illness (ILI); and all samples from patients at these sites were tested at INCIENSA.

Testing respiratory samples at INCIENSA. Photo credit: INCIENSA.
were processed by INCIENSA. When COVID-19 hit, the national laboratory testing network was expanded to incorporate others CCSS laboratories in the detection of respiratory pathogens. Both influenza and COVID-19 testing were decentralized to take advantage of these CCSS laboratories. The move significantly increased testing capacities, enabling influenza and COVID-19 screening in multiple at-risk locations in the country. This not only generated more surveillance data, but also facilitated the monitoring of epidemiologic trends and assessments of disease severity.

Since the second quarter of 2020, Costa Rica has also been using the expanded regional surveillance platform, PAHO Flu, to report and analyse clinical, epidemiological and laboratory data for influenza and COVID-19. These data are then fed into the global platforms FluNet and FluID, where they are used in critical data analyses. In this way, PAHO Flu has been supporting Costa Rica and other PIP PC countries to identify, investigate and monitor the virological and epidemiological trends of respiratory viruses in the country.

As a PIP PC priority country, Costa Rica is poised to maintain the capacities built so far. Plans are underway to update the National Protocol for the Surveillance of Influenza to incorporate COVID-19 guidelines. Further, with the decentralization of influenza detection, INCIENSA plans to establish an External Quality Assessment Program that will evaluate the laboratory network’s performance. Finally, INCIENSA programs to implement viral culture of influenza viruses in a Biosafety Level 3 laboratory (BSL-3), and plans to evaluate the possibility of strengthening sequencing capacities for influenza, both of which will ensure more efficient detection and characterization of future influenza viruses with pandemic potential.
WHO Online learning is transforming health professionals’ education and training in Côte d’Ivoire

Côte d’Ivoire is scaling up online learning to transform health professionals’ education and training as a component of its COVID-19 response. Although online learning is not a new approach in the country, several challenges limited its widespread adoption within the health sector. Before the COVID-19 pandemic, only 28 of the country’s 113 districts could conduct health worker training using online platforms. In the wake of COVID-19 related travel restrictions, social distancing, and tightened budget, it was essential to swiftly scale up online learning to rapidly educate and build health workers’ capacity to maintain essential health services while handling the new health threat from COVID-19.

To achieve the scale-up, WHO facilitated the formation and provided technical leadership to a Technical Working Group (TWG) comprising the Directorate of Training and Research, the National Institute of Public Health, the Institute of Public Hygiene, the Pasteur Institute of Côte d’Ivoire, the Treichville University Hospital, and other relevant stakeholders to design and structure a costed national health strategy to strengthen health workers’ education and other capacities using digital means.

Launching of the first training on IDSR (Integrated Disease Surveillance and Response) via the eLearning platform on November 11, 2020, by WHO for district and regional health workers. Photo credit: WHO Côte d’Ivoire.
WHO’s technical leadership extended downstream to include support for faculty members and educators in health education institutions.

To back the national strategy implementation, WHO then undertook an extensive resource mobilisation that involved the government, international partners, and relevant stakeholders. With joint funding from the Government of Côte d’Ivoire and the United States Agency for International Development (USAID), WHO provided high-end equipment, including laptops and desktops, inverters, stabilisers, internet connection equipment, cameras, television sets, internet servers and various multimedia accessories across all 113 districts in the country.

Taking lessons from the WHO Academy,1 WHO suggests a combination of technologies, including open-source software, SMS and an offline virtual learning environment pre-loaded onto a USB flash drive to overcome connectivity barriers for health workers in remote areas with little or no access to the internet. In the future, Toll-free numbers could also be integrated into the platforms from which health workers could conduct surveillance activities and receive immediate advice on the testing and management of COVID-19.

The project has proved successful, with close to 10 000 health workers across all 113 districts trained within a short period of six weeks for a quick COVID-19 pandemic response in the country. Health workers were not only better prepared to confront the pandemic, but the digital approach also enhanced social distancing requirements to prevent the spread of COVID-19 and is now reframing how Côte d’Ivoire is using online learning to complement traditional face-to-face health worker education. The extensive online network of public community-based dispensaries, several university hospitals and medical schools makes Côte d’Ivoire the first country in the West African sub-region to have a national multimedia online network, covering the entire country.

Essential to this success was WHO effective collaboration and planning to procure online learning infrastructure across all districts in the country and technical leadership to train health managers and faculty staff on online learning methods and application.

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Egypt adopts a uniform Service Benefit Package, SBP, according to International standards: a move towards a digitalized UHC

Four years since the adoption of the landmark Egyptian Universal Health Insurance (UHI) law, work on improving access to health services goes ahead continuously in Egypt, while the major overhaul brought the separation of financing from the provision of health services. This was reflected in the establishment of three new health bodies: Universal Health Insurance Authority that procures health services; General Authority of Healthcare that provides services; and General Authority for Healthcare Accreditation and Regulation, which oversees accreditation and regulation. Realizing UHC is a national priority and a main target of Sustainable Development Goal 3, “Good Health and Well-being”.

WHO supports the implementation the UHC in Egypt and achieving health security to enable access for health for all by all. To do so, WHO depends on fundamental elements of health systems including health information systems.
Challenges in Egypt’s health sector
While major leaps have been made in Egypt’s health sector especially by the Law, it is yet fragmented in different categories of health service providers, diverse operating procedures and imbalances in staffing and a lack of shared clinical standards. Which can make it challenging to define a set of services, also known as Services Benefits Package (SBP), that can be financed and provided universally to every Egyptian. This has implications on the degree of cost efficiency of quality health services.

WHO’s role
Thus, in a bid to provide a common structure and terminology for the description of health interventions and specify indicators for monitoring implementation of UHC which is in line with GPW 13, WHO has been working to support national authorities to adopt a Service Based (SBP) according to International Classifications of Health Interventions (ICHI), a common tool for reporting and analyzing health interventions, to incorporate them into national classifications. The move came after ICHI was designated by MoHP as a coding system.

Why is ICHI important?
ICHI belongs to the family of WHO international classifications of coding which allow exchange of data. ICHI is a basic requirement of information systems of health care delivery in general and universal health insurance in particular. It works as a basis for patient management, clinical audit, performance monitoring, costing, pricing, claim management, and research and studies which are all integral components needed for UHI and UHC. Organizing an SBP could bring consistency and structure to health services and standardizing of the system’s inputs in line with international standards which in turn makes them more accessible and of better quality.

What has been done?
WHO three levels worked with Egyptian clinical consultants. WHO supported the process working initially on the already existing Standard Procedures/Services package from MOHP by conducting a wide range of orientations, capacity building workshops. WHO ensured full engagement and coordination of key relevant stakeholders including members of the UHI Service Package Committee, Senior Ministry policy makers at Ministry of Health and Population (MOHP), consultants and Professors of different medical specialties and physicians from the ministry who have experience in coding and medical terminology.

The activity started in 2019 with intense review and adjustment of terminology, language refinement, amendment and coding that continued over 2 years to be more in line with ICHI that culminated with summing up and dissemination workshop with all interested parties that included representative of University Hospitals and private sector beside Ministry of Health and Population.

What were the outcomes?
As a result, lists of essential clinical developed interventions in all specialties is ready to be transformed to the electronic medical records at the health facilities in the areas of billing, clinical management, and claims management, that are crucial components for information exchange of various insurance
processes among providers and insurance entities, in a total of 1712 hours; clinical experts (1493 hours) and workshops (108 hours), meetings with UHIA (39 hours) and lists revision (72 hours). Gender balance was taken into consideration throughout the whole process.

Additionally, country capacity in data, digitalization and innovation is being strengthened at this stage at the central level through enabling implementation health information system with international standards, developing a new explicit SBP for the new UHI and medical records for both outpatients, inpatients, and ancillary services in PHCs and secondary and tertiary hospitals as well as providing Arabic translation for financial services.

The outcome of all this work is a refined Services Basic Package, which is uniform and up to date with the international standard. The refined SBP improves the quality of medical records of patients in primary, secondary and tertiary health care. And improved electronic medical records help health workers to care for more people and to so in a way that is attuned to individual needs.

What’s next?
MOHP/WHO will scale up the articulation of, and ICHI usage by health care providers through capacity building measures and monitoring the utilization and impact of ICHI use on health outcome. It will support the health sector to continuously update the Egyptian version of UHI SP using prescription and utilization data, with a requirement for constant review and refinement as new evidence, new technologies, and even new preferences emerge.

In this context, WHO will continue its support of the country’s strategic direction for digital transformation to build “digital Egypt”, which will increase the quality of performance in health services and support the decision-making process towards achieving UHC.
WHO is strengthening Maternity Waiting Homes to reduce maternal mortality in Eritrea

Since its independence in 1991, Eritrea has made remarkable progress in maternal health improvement, reducing its maternal mortality ratio from 1,590 deaths per 100,000 live births in 1993 to 804 deaths per 100,000 live births by 2015. However, an unfinished maternal and child health agenda has left the country with substantial inequalities in maternal health services, which kept the maternal mortality ratio high. Skilled birth attendance remained low in hard to reach rural areas where available health facilities often cannot deliver essential maternal services.

Since 2007, in collaboration with the Ministry of Health and other stakeholders, WHO have supported the roll-out of Maternal Waiting Homes (MWH) as a vital element of a low-cost strategy to bridge the obstetric gap care between rural and urban areas. MWH are residential facilities near a qualified medical facility, where women coming from hard to reach rural areas can stay before and after childbirth.

to reach areas can await their delivery and be transferred to a nearby medical facility shortly before delivery or earlier should complications arise. WHO has directly supported 43 MWH located in hard to reach areas in five of the six regions (Zobas) of Eritrea. The support includes the supply of twenty equipment sets of Solar Suitcases and Lithium Ferrous Phosphate (LFP), including 12-volt replacement batteries for reliable electricity to support essential lighting, communication, and medical services in MWH, located primarily in rural settings in need of simple, reliable, accessible and affordable electricity. The solar suitcases are also climate change friendly and replacing fossil fuel sources of lighting and electricity, thereby freeing much needed time for health workers to efficiently provide timely and effective emergency obstetric health care for pregnant women, mothers and babies to prevent maternal deaths. In addition to ensuring stable electricity, WHO also supported service delivery in MWH by providing 20 fetal Doppler machines, 40 rechargeable headlamps with a micro USB cable, 20 multi-tip phones chargers, maternal pyjamas, baby cover and baby kits.

WHO’s efforts to sustain MWH operations have contributed to increasing skilled attendance at birth and increased health facility delivery among women living in remote and hard to reach rural areas. Skilled birth attendance among women living in Eritrea increased from 26.7% in 2009 to 51.6% in 2019. National administrative data also show progressive increases in health-facility deliveries, mostly accounted for by Zobas and health facilities linked to MWH. Consequently, maternal mortality in Eritrea has reduced significantly from 804 deaths per 100 000 live births in 2005 to 480 deaths per 100 000 live births by 2017.

WHO’s roles in delivering essential maternal health services to underserved communities help Eritrea consolidate the significant achievement recorded in maternal mortality reduction.
FEDERATED STATES OF MICRONESIA

COVID-19 Mitigation through Community Collaboration and Outreach in Pohnpei State

The Federated States of Micronesia is an island nation made up of four states. Transportation barriers between islands and rural regions (where most of the population lives) challenge access to health services, resulting in fragmented care.1 Thus, it is difficult to tackle non-communicable diseases (NCDs), which account for most deaths in Micronesia.1 In Pohnpei State, a recent analysis found that 73.1% of the adult population were overweight or obese, and 32.1% had diabetes.2 Moreover, 60% of the population exhibited three or more of the main NCD risk factors (daily smoking, overweight or obesity, high blood pressure, consuming fewer than five servings of fruits and vegetables per day, low physical activity), while only 1% of the population has no risk factors.

In 2017, the Pohnpei Department of Health Services worked with WHO to create the Dispensary Strengthening Program, an integrated

1 https://apps.who.int/iris/rest/bitstreams/1096362/retrieve#:~:text=HEALTH%20AND%20 DEVELOPMENT&text=Health%20services%20are%20highly%20subsidized,residents%20 from%20accessing%20hospital%20services, accessed on 02 February 2021.
community health outreach service to address NCDs and reach rural communities. This program emphasized community collaboration and involved two phases: microplanning workshops followed by outreach. In the microplanning phase, the Department of Health Services worked with traditional leaders (chiefs) to assess the existing community capacity, identify risks, and develop solutions. Together, they created microplans that would inform the outreach phase. The outreach phase involved household visits by multidisciplinary travelling health teams, who offer preventive services both for NCDs and CDs, maternal and child health services, immunizations, health education, and simple treatments. This program was also implemented in Chuuk State to tackle similar health issues.

With the spread of COVID-19 globally, many countries had to quickly harness existing resources to mitigate the pandemic’s impact. In MICRONESIA, all states implemented similar versions of the previously successful outreach service to tackle COVID-19. Particularly in Pohnpei, WHO and UNICEF teamed up with local entities, including the Department of Health Services’ Public Health Division, the Department of Education and the Micronesia Red Cross Society (MRCS), to apply the two-phased model to reduce the transmission and severity of COVID-19, with a special focus on patients with NCD conditions (during April and May 2020). Microplanning occurred in all municipalities, as well as churches and schools. Health teams distributed soap and buckets, provided health education to households, and conducted informational campaigns for communities on COVID-19 risk management and prevention. Additionally, volunteers delivered information on service decentralization to patients with chronic NCD conditions to minimize their exposure to the virus while ensuring continuous access to essential treatment and health services. Furthermore, recognizing an increased risk of COVID-19 mortality for people living with NCDs, health teams organized numerous information sessions and raised awareness on critical elements of NCD management.

Putting the local government and traditional leaders in the driving seat to reach as many communities as possible was at the backbone of this initiative. WHO played a vital role in forging new relationships between various entities, by facilitating discussions to garner approval for and commitment to the initiative (especially from traditional leaders) and meetings for microplanning. The Department of Health initiated this outreach program, and traditional chiefs were recognized as trusted community leaders with extensive knowledge of the needs and capacities of communities to deal with COVID-19, considering communities’ behavioural and cultural habits. Their expertise was essential for microplanning of activities that led to tailored, community-driven and needs-based solutions.

A team of 20 local MRCS volunteers and 10 public health staff formed the health teams that visited 3350 households and delivered medications as well as soap and buckets that were purchased with the support of UNICEF. Additionally, the team set up informational booths at local services and shops, thus enabling communities to have access to continuous and reliable information on COVID-19 management and prevention. Furthermore, a survey jointly run by UNICEF and WHO on COVID-19

preparedness gathered crucial information on households’ capacity for isolation, WASH infrastructure, and COVID-19 knowledge, which informed further COVID-19 preparations and strategies.

In sum, COVID-19 tested Pohnpei’s community health outreach program’s reliability and showed its ability to address new health issues. This program highlighted the importance of embedding community collaboration in health interventions and encouraging teamwork among different local entities. This contributed to keep the threat of COVID-19 at bay in all MICRONESIA states, led to community-oriented solutions, and prevented the duplication of efforts. In the future, it is hoped that government strategies will be aligned with the created microplans, and similar microplanning processes and integrated outreach services will continue to be used to tackle health issues in the other two states, Kosrae and Yap.
Strengthening Gambia’s Mental Health Services for Sustainable Reintegration of Migrants and Gambian Returnees

The capacity among health care professionals to deliver effective mental health and psychosocial support services (MHPSS) in the context of migrants and Gambian returnees from abroad remains a big challenge in the Gambia. At the beginning of 2020, the country didn’t have the necessary strategic framework and guidelines on MHPSS to enhance the sustainable reintegration of migrants and Gambian returnees into their respective communities.

WHO Country Office provided leadership and technical guidance in addressing MHPSS by forming strategic partnership with International Organization for Migration (IOM). WHO and IOM, under the UN Peace Building Fund, supported The Gambia to strengthen mental health and psychosocial support for migrants and Gambian returnees.

IOM provided administrative support while WHO provided technical and strategic guidance through initiating and guiding the development of a national Mental Health and Psychosocial Strategic Services (MHPSS) strategic framework and MHPSS Curriculum in line with WHO guidelines, facilitating printing and distribution of WHO guidelines on the management of stress and promotion of mental health during COVID-19, facilitating review and adaptation of WHO Mental Health Gap Treatment Guidelines, and training of health care workers on the use of the guidelines.

Strategic documents are now in place to guide the country’s delivery of mental and psychosocial support services for the successful and sustainable reintegration of migrants and Gambian returnees. The curriculum is being used in training health institutions to train students and health care professionals to strengthen the capacity in the country. The potential for mobilizing additional resources has been enhanced by leveraging on strategic partnership, trust, and confidence among key stakeholders.

It is believed that the development of the MHPSS strategic framework and curriculum will catalyze the overall integration of mental health and psychosocial support services into primary health care. This will further boost the equitable delivery of mental and psychosocial services in the country.
GAMBIA

ACHIEVING UNIVERSAL HEALTH COVERAGE

One BILLION more people benefiting from universal health coverage

National consultation with healthcare and social workers on addressing MHPSS issues. Photo credit: WHO Gambia
The Gambia is introducing a health insurance scheme for the first time

The WHO 2020 Global Health Expenditure report estimated that the average domestic spending on health in low-income countries was only US$ 34 per capita in 2018, about 4.4% of GDP, of which nearly 60% was out-of-pocket. In The Gambia, the World Bank estimate shows that public spending on health was as low as 11% of GDP in 2018. To drive The Gambia towards Universal Health Coverage (UHC), all key stakeholders agreed that the introduction of a national health insurance (NHI) scheme would help the country to reduce out-of-pocket expenditures and widen the access to essential health services across the country. Prepayment through insurance schemes is one of the main pillars for UHC in The Gambia.

WHO provided technical guidance to the ministry of health, lawmakers and the National Steering committee which leads the development of the NHI, since 2019. WHO joined the ministry of health during the sensitization of lawmakers in parliament on the need for the NHIS Bill. As the development of the Bill advances, frequent meetings were held and key activities of the NHI roadmap such as actuarial studies, to determine the appropriate premium and willingness to pay studies were

Hon. Dr A.L. Samateh, Minister of Health, delivering speech at a sensitization meeting Members of Parliament on NHIS Bill, Dec 2020. Photo credit: WHO Gambia
implemented. WHO is supporting the willingness to pay study. The bill is currently in the final stages of approval.

The main challenges revolved around delays in implementation of the milestone activities in the roadmap in 2020 in the context of the COVID-19 pandemic. The NHI introduction is also being supported by other development partners. WHO will continue to be the primary source of technical assistance, while other partners contribute towards other components of the introduction.

The next steps include establishing and capacitating an insurance agency; establishing purchasing schemes; increasing public and private sector awareness. Based on the guidance from the government and our comparative advantage, WHO will continue to focus on provision of technical guidance, capacity building and establishment of systems than procurement of good and supplies. One of the key lessons learnt is collaborating with other stakeholders and joint programming enhances value for money.

ACHIEVING
UNIVERSAL
HEALTH COVERAGE

One BILLION
more people
benefiting
from universal
health coverage
Georgia turns COVID-19 into an opportunity to advance PHC reform

In Georgia, three decades of transition and multiple waves of reforms resulted in a highly fragmented health system with multiple disease specific vertical programs and a complicated matrix of health financing mechanisms. Misaligned incentives and low confidence in primary care led to an overreliance on costly inpatient care. In addition, nearly 95% of health services are privately delivered and in the absence of strong regulation, escalating costs are often borne by households, especially for outpatient medicines.

In 2013, Georgia introduced the Universal Health Care Programme (UHCP), substantially expanding the share of the population with publicly financed health coverage and reducing financial barriers to health services for many. This was made possible due to growing political commitment to UHC and a significant increase in public spending on health. Yet compared to the European Region average (4.9% in 2018),

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1. Improved access to quality essential health services

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Family doctors, medical residents and medical students monitor COVID-19 patients remotely from an online COVID-19 clinic housed in the Ministry of Internally Displaced Persons from the Occupied Territories, Labour, Health and Social Affairs – Mariam Pilishvili (left), Ana Metreveli (right). Photo credit: Vladimir Valishvili
public spending on health in Georgia as a share of GDP remains low (2.8% in 2018). Nevertheless, it represented a notable shift in policy from publicly funded benefits targeted at a narrow segment of the population (e.g., vulnerable, children, elderly) to broader coverage of the population, albeit with the addition of a highly complex system of user charges (co-payments). While this signalled progress, financial protection has remained weak and in 2018, out-of-pocket (OOP) payments for health as a share of total spending on health (47.7% in 2018) remained well above the European Region average (29.8% in 2018).3,4

In 2019, the Ministry of Internally Displaced Persons from the Occupied Territories, Labour, Health and Social Affairs invited WHO to review plans to reform the primary health care system. A WHO mission under the UHC Partnership recommended revising the scope of primary health care (PHC) services to become more preventive and people-centred, expanding the scope of practice of nurses, and redefining the role of specialists in the PHC setting.5 Moreover, the WHO advised implementing performance monitoring and improved payment structures within PHC and provided technical support to guide the establishment of a new National Health Agency.

In early 2020, WHO assembled a team to work with the Ministry on revising and costing the PHC benefits package. When the COVID-19 pandemic was declared, public health attention shifted to the emergency at hand, delaying government reform agendas and straining budgets and health systems. Despite pandemic-related disruptions, WHO added a health policy advisor under the UHC Partnerships to the WHO Country Office (WCO) in Georgia and moved ahead with a virtual multidisciplinary team of local PHC and policy experts, international consultants, and staff from the WCO, the Almaty geographically dispersed office (GDO) and the Barcelona GDO. Working in close communication with the Ministry, this team revised and costed the refined PHC benefit package and proposed a phased implementation plan. The new payment model proposes a mixed system of capitated payments, rent allowance, and add-on payments for priority services. The phased plan will begin with strengthening the priority services packages (well child care, early child development, type 2 diabetes, hypertension, CVD, and mental health). It also envisages increased utilization of digital health services (which has accelerated in response to the pandemic) and leverages support provided by UNICEF to increase internet access for rural PHC providers and introduce remote visits. Overall, this builds on WHO’s experience in working with PHC leaders to deliver training and scale digital health services to address the need for remote management of COVID-19 cases at the PHC level.

In parallel with work on PHC, WHO experts also provided comprehensive guidance and inputs for the development of a new Law of Georgia on Medicinal Products. Their input is also informing the reorganization of the National Drug Agency. Notably, this has also triggered interest in further collaboration with WHO in the area of pharmaceuticals resulting in a request for additional assistance in improving access to quality pharmaceuticals.

Throughout 2020, the coordination of interventions to strengthen PHC in Georgia advanced, despite challenges related to the COVID-19 pandemic. This was possible through continued direct support to the Ministry by WHO and the intensive engagement of local partners (through virtual meetings and close follow-up on agreements and new initiatives).

**Key Takeaways:**

- COVID-19 has highlighted the need for sustained investment in health system strengthening and the critical role of PHC in health emergencies; it is crucial that we capitalize on this window of opportunity.
- Georgia’s response to COVID-19 (including the development of remote treatment protocols and training of PHC providers in telehealth) demonstrates the capability, demand, and need to invest in and build capacity in the delivery of digital health services in PHC.
- In times of crisis, when key government personnel are overstretched, engaging additional local experts is crucial to ensuring progress, coordination, and timely follow-up on the provided assistance.
Strengthening Ghana’s Health System in Response to a Poliovirus Outbreak

In 2019, Ghana’s decade-long polio-free status came to a halt. The country awoke to news of an outbreak of circulating vaccine-derived poliovirus type 2 (cVDPV2), and Ghana’s Ministry of Health declared a public health emergency of national concern. WHO immediately swung into action, liaised with the Ghana Health Service (GHS), and initiated investigation as per International Health Regulation (2005). WHO’s Country Office (WCO) oriented the investigation team on various guidelines, prepared risk assessments and presented this assessment to Global Polio Eradication Initiative partners (GEPI) within 72 hours of the confirmation of the outbreak. The assessment covered critical factors that influenced the type and scope of response and allowed GPEI to recommend appropriate response actions.

Between December 2019 to February 2020, WHO—in partnership with UNICEF, GAVI, Ministry of Health (MoH) and the GHS—initiated Polio Supplementary Immunization Activities (SIA) to protect 4.5 million at-risk children, across eight regions in Ghana. However, the onset of COVID-19 interrupted Phase-3 of the planned response. Concerns around infection rates brought basic health service delivery to a halt, including immunization. WCO recognized the immediate need to train frontline
workers in infection prevention and control (IPC) protocols—thus building the Government’s confidence and securing buy-in for reinitiating the polio vaccination campaign. Between March and September 2020, the WCO trained vaccinators, volunteers and supervisors on IPC, and provided them with personal protective equipment and alcohol-based hand sanitizers to ensure optimal infection prevention. In September 2020, the MoH approved a re-launch of the vaccination campaign and 95.4% of vulnerable at-risk children, across 130 districts were vaccinated. Since the campaign was rolled-out, Ghana has not reported any case of cVDPV2. Behind the success of this campaign, are three pivotal strategies implemented by WHO and GEPI partners:

1. **Harnessing the Power of Social Mobilization.** In the initial stages of the re-launch, the campaign hit many roadblocks in delivery and faced daunting challenges in service uptake. Rumours that the government was using polio as a decoy to test COVID-19 vaccines, fueled suspicion and skepticism—increasing vaccination resistance. WCO leveraged ‘social mobilization’ as a strategy to increase uptake, collaborating widely with other GEPI partners and government functionaries to reach specific groups of people—particularly those most vulnerable—for intentional dialogue. To prevent low vaccine compliance, collaborators designed a public health campaign, showcasing data on the reduction of vaccine preventable diseases in the country. Furthermore, frontline workers engaged with community members to understand their concerns and subsequently designed campaign messages to address them. Social mobilization ensured that every eligible child was reached and vaccinated. Door-to-door vaccination drives also became a medium to deliver key health messages related to COVID-19: personal hygiene, good sanitation practices and adherence to COVID-safety protocols by caregivers.

2. **Strengthening Health Surveillance Systems.** The social mobilization campaign offered an opportunity to further strengthen existing health surveillance systems—ensuring that no eligible child was missed. In partnership with the MoH, WCO set up a polio emergency operations center (P-EOC) that enabled real-time tracking and monitoring of activities in all response areas. To strengthen existing surveillance systems, WCO provided tools that allowed digitalizing data collection and monitoring—including ultra-modern GIS-based facilities. WCO also established regional-level P-EOCs and recruited surge officers who were deployed to high-risk regions in Ghana, thus enhancing polio surveillance activities. These surveillance officers not only tracked progress, but also built the capacity of lower-level staff to detect and investigate AFP cases. These efforts will serve well in the event of future outbreaks. Should Ghana experience another health emergency in the future, established regional-level P-EOCs, digitalized data collection tools, trained frontline workers and strengthened surveillance mechanisms will ensure last mile reach and coverage.

3. **Enhancing the Efficiency of Vaccine Management and Logistics Systems.** In coordination with other GEPI partners, the WCO streamlined all logistics needed to successfully implement the polio campaign. This included the safe transportation of vaccines, effective vaccine retrieval and destruction of open/partially used vials. The WCO played a lead role in enhancing the efficiency of vaccine management and logistics systems for vaccine delivery. Contributions from the WCO...
team included providing guidance for implementation (SOPs and guidelines), technical support for operational and data management activities, culturally-relevant SBCC materials, and monitoring support.

Through the CVDPV2 outbreak response, Ghana’s health system was significantly strengthened. By harnessing social mobilization, building the capacity of the health workforce, introducing e-surveillance and geo-coding, establishing regional-level polio-EOCs and streamlining all logistics for vaccine management—WCO has ensured that Ghana’s health system is primed to respond to any future outbreak.
Ghana’s regulatory system achieves a critical milestone

With support from the Pandemic Influenza Preparedness Framework Partnership Contribution (PIP PC), Ghana has developed a well-functioning regulatory system for medical products that has proved critical in enabling the country’s response to COVID-19.

A regional milestone

In April 2020, after being assessed by WHO using the Global Benchmarking Tool, the Food and Drug Authority (FDA) of Ghana was found to meet all indicators that define a maturity level 3 (ML3) agency. In doing so, it became the second confirmed country in Africa to achieve a stable, well-functioning and integrated regulatory system for medical products.

The achievements of FDA Ghana and FDA Tanzania (the other ML3 agency in Africa) mark a milestone for the region and open the door for stakeholders across Africa to work collectively for timely access to quality assured medical products. Their success was enabled by years of system strengthening investment, action and support, including support from PIP PC to build staff capacity and develop regulatory tools in areas such as pharmacovigilance, market control, marketing authorization and clinical trials oversight.

FDA Ghana has secured vital supplies of hand-sanitizers and other personal protective equipment during the COVID-19 pandemic. Photo credit: WHO/Blink Media - Nana Kofi Acquah
Securing supplies
In the face of COVID-19, FDA Ghana’s investment in regulatory system strengthening has been very beneficial. The agency has been a key enabler of the Ministry of Health’s pandemic response. For example, by providing timely support to local industry, FDA Ghana ensured the availability of affordable and quality-assured personal protective equipment during the pandemic, including the hand sanitizers and face masks that were at the heart of safety protocols for controlling COVID-19 infections. FDA Ghana’s capacity to quickly develop specifications and guidance, and to establish a fast-track for marketing authorization, enabled the country to secure vital supplies at a time of acute scarcity across the region.

At the same time, FDA Ghana made use of strategies such as working from home, electronic submissions, online reviews and virtual meetings and inspections to continue performing its routine regulatory activities.

Deploying vaccines
FDA Ghana’s capacity as a ML3 agency is also proving its worth as the country prepares to deploy COVID-19 vaccines. The FDA actively contributed in the development of the “National Vaccine Deployment Plan for COVID-19 vaccines” which served as the guiding tool for the deployment of Emergency Use Authorized COVID-19 vaccines in Ghana. Ghana is the first country outside India to receive vaccines through the COVAX facility; and FDA Ghana is using its full capabilities to ensure these can be rapidly and effectively approved, received, distributed and administered. The agency has, for example, already activated its Emergency Use Authorization Procedure to review submissions for the various candidate vaccines.

Ghana has long seen the value of strengthening its regulatory system. Building on its success during the COVID-19 pandemic, it remains committed to continuous improvement in preparation for the next influenza pandemic.
A phone call that makes a difference

For over a decade, Guinea has been working to provide immunization for vaccine-preventable diseases to all people, particularly the underserved ones. This process is also known as the Expanded Programme on Immunization and WHO has been supporting Guinea in many activities along the way. One of these activities is regular monitoring of the immunization progress. And numerous data gathered in this way point in one direction: fewer children and pregnant women got vaccinated between January and April 2020.

Indeed, more than 26% of children missed the first dose of BCG vaccine in this period, which endangered the vaccination plan for the rest of the year. Almost the same percentage of children was not immunized against chickenpox and measles – a 16% reduction compared to April 2019. Similarly, there was nearly 45% decrease in immunization against tetanus and diphtheria of pregnant women, coupled with irregular attendance of pre-natal consultations.

As the first case of COVID-19 was recorded in March 2020 in Guinea, its influence on the routine immunization became apparent very soon. Aware of the dangers of multiple epidemics, Guinea focused...
on community engagement to contain the spread of the known and emerging pathogens.

**WHO staff are on the ground**

Motivated by a good practice of a nurse, who bought a low-cost mobile phone and used it solely to remind mothers of vaccination appointments, WHO supported the scaling up of this approach. Beginning with two health centres, WHO strengthened capacities of technical teams on surveillance and follow up on immunization schedules. And the Vaccine Alliance, Gavi, provided the teams with more helping hands, by deploying a skilled technical assistant.

As outreach to people improved, health workers learned more about reasons behind the failing vaccination coverage: a steady flow and volume of information makes it challenging for people to tell the difference between facts and rumours. Giving rise to fears, rumours tend to spread quickly, if not counteracted with balanced and evidence-based messages. To this end, WHO and UNICEF assisted to build capacities of technical teams in effective communication. Not waiting long to apply new skills, health workers used phone calls not only to remind of vaccination appointments, but also to answer many questions people had related to COVID-19. This strengthened the mutual trust between health workers and Guineans. Finally, to make these efforts sustainable and available to the many, the Ministry of Health of Guinea funded the employment of more health workers.

**Present impacts and future lessons**

At Lambanyi health centre, one of the two pilot health centres, combined improvements in monitoring and community engagement lessened the impact of COVID-19 on routine immunization. In the same period between January and April 2020, Lambanyi recorded only a slight drop in vaccination rates: the number of children vaccinated with BCG went down from 260 to 230; vaccinations against chickenpox fell from 241 to 211; while the number of women immunized against tetanus and diphtheria sunk from 212 to 180. The same continuity could not be maintained in other health facilities. For example, a health centre in the neighbouring prefecture Matoto experienced higher fluctuations: BCG vaccinations declined from 313 to 213; vaccinations against chickenpox cut back from 301 to 71; while the number of women immunized against tetanus and diphtheria plummeted from 350 to 130.

With this impact in mind, WHO and the Ministry of Health went ahead to support the implementation of the call-to-the-appointment approach at 39 additional health centres throughout the country.

Working on the ground also gave more insights into the quality of health interventions and Guinea’s preparedness for possible health emergencies. Some of the insights have already informed the response to the COVID-19 pandemic. Others will serve as a time-proven approach in containing the re-emergence of Ebola in the first months of 2021.
Strengthening Guinea-Bissau’s National Health System through Infection Prevention and Control

Infection Prevention and Control (IPC) is a major challenge for health care systems around the world, particularly in low-income countries. Guinea-Bissau is one of the world’s lowest ranking countries on the Human Development Index (HDI value for 2019 is 0.480) positioned at 175 out of 189 countries. Despite prior experience with health emergencies—outbreaks of cholera, measles, meningitis, Zika and preparedness for Ebola—the country has a fragile national health system. Like many countries around the world, Guinea-Bissau wasn’t adequately prepared for the COVID-19 pandemic. The country was particularly at high risk for transmission on account of inadequately trained health workers, minimal local capabilities to implement IPC components and limited legislation around IPC protocols.

WHO’s Country Office (WCO) recognized the precariousness of Guinea-Bissau’s public health system and the urgent need to strengthen IPC to prevent COVID-19 transmission. Working closely with the Ministry of Health (MoH) and the High-Commission for COVID-19, WCO was instrumental in achieving three significant IPC-related outcomes:

Triage at Clinic Madrugada in Guinea-Bissau. Photo credit: WHO Guinea Bissau
establishing a national-level IPC team, training health care workers in IPC protocols and monitoring essential IPC activities.

**Establishing a National-Level IPC team**

At the start of the pandemic, Guinea-Bissau did not have an IPC program or Standard Operating Procedures for its core components. To address these gaps, WCO developed IPC implementation protocols and aligned the national IPC COVID-19 response plan with relevant WHO recommendations. To roll-out this response plan nationwide, a sufficiently large multidisciplinary team was required. Given constraints in local capacity, WCO put together a multidisciplinary team comprising several external experts with prior experience in health emergencies. This became the National IPC taskforce, also known internally as ‘ETN de PCI’. Through this IPC taskforce, WCO built local capacity to implement a national-level response plan for COVID-19.

**Building Capacity of Health Workers**

Once the national IPC taskforce was established and trained, WCO enabled this training to filter down to frontline health workers, particularly those working in health care facilities (HCFs) across the country. Approximately 1400 of 2942 registered health workers received WHO training on core IPC components—sterilization, hospital waste management, hand washing—to prevent health care-associated infections. WCO additionally identified and trained regional IPC supervisors across 11 health regions, and established IPC focal points in 69 public health facilities to monitor IPC indicators and update the national IPC taskforce. WCO team members led all training sessions, enabling 52% of Guinea-Bissau’s health workforce to be trained in IPC.

**Monitoring Essential IPC Activities**

To ensure compliance with IPC protocols, among both taskforce members and health workers, WCO monitored essential IPC activities in 71 of 139 public health structures in Guinea-Bissau, on a weekly basis. WCO noted a significant improvement in IPC indicators between weeks 25 to 44—demonstrating stronger adherence to protocols and stringent implementation of core IPC components. WCO is also working closely with the MoH to monitor cases of COVID-19 infection among health workers using a risk assessment form that draws from WHO’s guidelines. Through this process of risk assessment and monitoring, WCO is building national capacity to track, evaluate and modify IPC activities according to the degree of risk observed.

To deliver on all three of these outcomes, WCO worked closely with several development partners, including UNICEF and IOM. UNICEF contributed technical, logistical and financial resources towards IPC activities. IOM, together with WCO, carried out IPC assessments at crucial Points of Entry in the Bissau Autonomous Sector and some official PoE in other regions. These assessments highlighted various requirements, including the need for training on IPC to prevent COVID-19 transmission, and WCO subsequently trained over 70 workers.

IPC is critical to any health care system, and even more so during a crisis, as the COVID-19 pandemic has evidenced. WCO’s efforts in the region—building a national IPC taskforce, training health workers
in IPC and establishing monitoring mechanisms for IPC indicators—hold the promise of accelerating universal health coverage in Guinea-Bissau. IPC programs have gone from strength-to-strength across Guinea-Bissau’s health care facilities, serving well not just in response to the COVID-19 health crisis, but also in preventing and managing health care-associated infections. Through these efforts, Guinea-Bissau’s health system is better prepared for future health emergencies.
Mobilizing strengths, leveraging relationships to prevent noncommunicable diseases (NCDs) in Hungary

In 2019, it was estimated that the probability of a premature death between 30 to 70 years of age from the four target NCDs (cardiovascular disease, cancer, diabetes, chronic respiratory disease) in Hungary was 22.1% (vs. 16.3% European average).¹ In the biennial collaborative agreement between WHO and Hungary in 2018-2019, one of the key roles for WHO Country Office (WCO) Hungary was to provide high-level guidance on NCD policy and control. In 2019, WCO was involved in a pilot project to test out the collaboration between WCO, National Koranyi Institute of Pulmonology (NKIP), and local governments for NCD prevention at the community level.

Inspired from another partnership between the NKIP and local governments for providing specialised health care to the communities in the surrounding area of Buda region, WCO reached out to the Institute to see if WHO can partner with them to replicate a similar model, but for the goal of NCD prevention. WCO identified key opportunities to mobilize existing strengths and infrastructure in Hungary. For example,

cardiologists at the Institute have not only been providing clinical care but simultaneously promoting heart health (and hence, NCD prevention) in consultations and post-treatment for outpatients. Plus, while the NKIP was not working extensively with local communities since its mandate is on tertiary care and national-level training and research, it was well-positioned to facilitate community engagement. When the WCO introduced the idea to the Ministry of Human Capacities (responsible, among other sectors, for health care services), it was extremely well-received and in line with their strategic planning for NCD prevention in subsequent years. WHO’s proposal and seed funding encouraged the MoH to seek further investments from within the government and NKIP and WHO’s involvement established credibility of the initiative amongst local populations. What started out as a small collaboration was gained more traction.

WCO then met with local government representatives from the Association of Buda-Region of Municipalities, a collective of small localities, NKIP, and the MoH. Once focal points were identified from each of the institutions, the WCO met with local representatives to conduct resource mapping at the ground level. Recognizing that a one-size-fits-all approach was not going to be effective nor efficient for these small towns with various local economies, WCO and the project team went so far as learning about the localities at the individual level, examining how many physical education teachers and counsellors there were, to assess human resources capacity for the implementation of the project in the towns. The project served to demonstrate that, from a clinical governance perspective, national health institutes can be the driving force of a public health program. These institutions can build on their reputation to involve important stakeholders to successfully implement public health programs. The project also demonstrated that commitment at the local level is crucial for building a network of different partner organizations, a process that needs patience, endurance, motivation, creativity, flexibility, courage and “out of the box” thinking.

The project brought to life a novel approach in Hungary as it promotes partnership-based health program, with involvement of local and central government, health providers and other local actors such as schools. The credibility that the Programme has built can serve for sustainable fundraising in the near future. Evidence-based interventions, managed efficiently and in a coordinated, inclusive way will provide the expected return of investment in the improvement of the health of the population.

Lessons from the Buda Region Health Program and impact on broader NCD prevention initiatives in Hungary

This project resulted in the following lessons that influenced other NCD initiatives, which will have long-term impacts on population health. Although the initial plan was to start with a national policy discussion that would dictate the directions of the projects, the opposite was implemented in practice. The pilot project involving 12 municipalities was completed first, in order to inform the larger, national conversations around policymaking for NCD prevention. This approach revealed two crucial factors that enabled the success of this project: 1) NKIP has a great reputation and is trusted by communities and 2) working with smaller towns and communities reduced potential conflicts that are common
when working in much bigger locales. This strategy, starting small with the communities with the backing of trusted partners like the NKIP, will be an important reference model for NCD prevention in Hungary. In fact, it has already laid out the ground work and sparked the NCD prevention program called “Three Generations for Health,” which was recognised for its added value through the third prize of the European Union Health Award in March 2021. It has also informed the NCD prevention programmes targeted for mental health and healthy aging in the wake of the COVID-19 pandemic.

Throughout 2019-2020, WHO has taken a life-course and multisectoral approach, with an emphasis on building local relationships to support a sustainable development in the area of NCD prevention. These efforts are testament to the commitment and investment by the Hungarian government, national partners like NKIP, local governments, and WCO to prevent NCDs and undoubtedly contribute to WHO’s vision for another billion towards better health and well-being in 2019-2023.
WHO monitoring and supporting progress to combat antimicrobial resistance in Indonesia

Indonesia is among the five countries with the highest projected percentage increases in antimicrobial consumption by 2030, with a growing threat of antimicrobial resistance (AMR).\(^1\) In 2016, Indonesia developed a national action plan to respond to this threat in line with the Global Action Plan on AMR (GAP-AMR) endorsed by WHO in 2015.\(^2\)

The national plan set forth multisectoral links between Indonesia’s Ministry of Health (MoH), Ministry of Animal Resources and Fisheries, Ministry of Agriculture and Forestry, and WHO, in collaboration with the Food and Agriculture Organization (FAO), the World Organisation for Animal Health (OIE) and the United Nations Environment Programme. The WHO has provided solid support to the development and implementation of this plan in several ways.


First, together with the Indonesian Ministry of Health, the WHO Regional Office for South-East Asia developed and piloted a situation analysis tool to conduct a baseline analysis and inform the implementation, monitoring, and evaluation of progress across the seven focus areas of the GAP-AMR. The situation analysis process consists of guided discussions between the WHO team, the MoH AMR control committee, senior technical leaders of the national health authorities, the veterinary, agriculture and food sector.

Based on recommendations of the situation analysis, a notable achievement recorded following WHO support was the establishment and full operation of Indonesia’s AMR surveillance system. To achieve this, WHO supported Indonesia to enrol in the Global Antimicrobial Resistance Surveillance System (GLASS)\(^3\) in 2017. After enrolling with GLASS, Indonesia received WHO training to develop the strategies to oversee antibiotic use and consumption at different levels. Through this support, Indonesia has established at least twenty surveillance sites within the national surveillance system, sixteen of which regularly provide data to GLASS. The support also extended to promoting the rational use of antimicrobials. All the national Drug Regulatory Authorities (DRA) now have tools for quality assurance and registration of antibiotics in place. Routine inspection is implemented, with increased capacity building for enforcement of policies and regulation. AMR stewardship (AMS) programme has also been developed and implemented by relevant institutions.

Other areas that WHO supports include nationwide, government-led antibiotic awareness campaign targeting the general public and professionals. Awareness for professionals includes integrating AMR in some preservice training and specialized courses for continuous professional development and regular learning. General public awareness promotion includes using social media to improve population understanding of antimicrobial resistance. In November 2020, WHO Country Office in Indonesia collaborated with the Ministry of Agriculture, the Ministry of Environment and Forestry, the Ministry of Maritime and Fisheries, the National Committee of AMR Control, civil society organizations, United Nations Environmental Programme (UNEP), and FAO on an awareness campaign during the World Antibiotic Awareness Week (WAAW). The campaign disseminated information to relevant stakeholders on different topics concerning AMR in Indonesia. More than 800 participants/viewers from hospitals, health centres, farmers, professional associations (human and animal health sectors), environmental sectors, partners, and CSOs attended. Another nationwide campaign conducted was the GeMa CerMat campaign (Gerakan Masyarakat Cerdas Menggunakan Obat), a social media program to raise awareness of the rational use of medicines in the general public, among academics and health workers.

WHO also supports the One-Health engagement of Indonesia’s national plan, which emphasizes the relationships between the health of humans, animals, plants, and the environment. A notable achievement of this support includes the Minister of Agriculture Regulation No 14/2017, which

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\(^3\) WHO established GLASS to provide a standardized approach to collecting, analysing, and sharing AMR data by countries. GLASS recommends the establishment of three core components to set up a well-functioning national AMR surveillance system: 1) a National Coordinating Centre (NCC); 2) a National Reference Laboratory (NRL); and 3) Sentinel surveillance sites where both diagnostic and epidemiological data are collected.
prohibits using antibiotics as livestock growth promoters, and the Directorate General of Livestock and Animal Health Services (DGLAHS) Regulation No 09160/PK.350/F/12/2019 prohibiting the use of the antibiotic colistin, which is in the WHO list of Highest Critically Important Antimicrobials for Human Medicine – in animals. Also, 11 Indonesian Faculties of Veterinary Medicine are being engaged within Indonesia’s One-Health framework to improve infection prevention and control in the animal sector in line with international standards.

Although much remains to do, progress shown from the WHO-supported evaluation of Indonesia's national action plan on AMR control increases optimism that Indonesia can win the battle against AMR.
How WHO supported Indonesia to turn the tide against the COVID-19 pandemic

In 2020, Indonesia reported the highest number of COVID-19 cases in Southeast Asia. As of 31 December 2020, the country had recorded 735,124 cases and 21,944 deaths.¹ The protracted nature of the COVID-19 pandemic in Indonesia necessitated an urgent review of the national response to identify areas within the public health response that require strengthening to improve the ongoing COVID-19 response.

To fulfil this need, WHO supported Indonesia to conduct an Intra-Action Review (IAR) of its COVID-19 response in August 2020. The IAR critically reviewed and reflected on progress in the COVID-19 response across the nine pillars of Indonesia’s COVID-19 strategic preparedness and response plan. The nine pillars included: (1) Coordination, planning, and monitoring; (2) Risk communication and community engagement; (3) Surveillance, rapid response team, and case investigation; (4) Points of entry, international travel and transport, and large-scale social restrictions; (5) National laboratories; (6) Infection prevention and

control; (7) Case management; (8) Operational support and logistics; and (9) Maintaining essential health services and systems. Furthermore, vaccination pillar was also discussed during three monthly regular monitoring of IAR recommendation implementation.

Following IAR recommendations, WHO immediately expanded and designated members of its Incident Management Team (IMT) to support and monitor the implementation along the nine pillars of the COVID-19 strategic preparedness and response plan.

Notable outputs from implementing IAR recommendations include the complete revision of Indonesia’s health sector COVID-19 Strategic Preparedness and Response Plan (SPRP), with recommended adjustments to the command and coordination structure to ensure that operational and strategic functions are clearly defined. Indicators of the COVID-19 strategic preparedness and response plan (SPRP) are now monitored through an information flow dashboard at the national and sub-national level by multisectoral coordination comprising local and international stakeholders.

To improve risk communication and community engagement, WHO supported collaboration between the Ministry of Communications and Information and telecommunications companies for information sharing to the general public via WhatsApp, SMS and other information platforms. Furthermore, media coaching continued with ongoing coaching for the designated officials in the Ministry of Health to improve risk communication and community engagement for relevant government and community organisations.
WHO also supported interventions to improve surveillance and case management. Part of the support was to conduct a national seroepidemiological survey that covered samples in 17 provinces. WHO also supported piloting of a mobile technology application (SILACAK) for COVID-19 contact tracing and monitoring in 44 districts. Scale-up is ongoing in 98 districts. To further enhance contact tracing and monitoring at international travel entry points, provincial health officers can now access eHealth Alert Card data.

WHO has also supported developing an External Quality Assurance (EQA) dashboard to monitor the conduct of quality assurance of commercial and non-commercial laboratories providing COVID-19 testing. As of February 2021, more than 177 labs have had an EQA. Findings from the EQA have informed new policies, and technical guidance on COVID-19 testing, including the use of antigen detection Rapid Diagnostic Test (RDT) in COVID-19 testing, has been issued. WHO has also facilitated the development of technical guidelines and built the capacity of primary health workers to deliver optimal essential health services in Puskesmas as part of the COVID-19 response.

Since the official announcement of the first COVID-19 cases on 2 March 2020, a sustained increase in new cases and deaths occurred up till January 2021. Following the implementation of IAR recommendations, Indonesia has for the first time experienced a sustained downward trend in COVID-19 cases and deaths. The WHO support to facilitate the IAR provided the learning and improvement necessary to turn the tide against the COVID-19 pandemic.
WHO supporting Indonesia to achieve universal access to WASH services in health care facilities

Indonesia has made steady progress in improving water and sanitation access for its population. However, 12% of the population aged 3 and above have not practiced the correct defecation behavior which is the habit of defecating in the latrine and less than 50% of the population aged 10 years above have correct behavior in handwashing.1,2 This challenge has received increased attention from all levels of government in Indonesia, but implementing WASH interventions in health facilities across the country remains a monumental challenge, one that creates serious health risks and increased mortality from hygiene-related infections and diseases such as COVID-19. In Primary health centers, 14.77% of PHCs have no water services and 0.82% of PHCs no sanitation services.3,4

3 Global progress report on WASH in health care facilities: Fundamentals first. Available online at: https://www.who.int/publications/i/item/9789240017542
4 Profil Ketersediaan Sarana Air, Sanitasi, dan Higiene di Puskesmas, Litbangkes 2020

Health workers wash their hands with alcohol before entering the coronavirus isolation room. Photo credit: Opan Bustan / Opn ImagesN/Barcroft Media via Getty Images
WHO supports Indonesia to address these challenges by implementing the Water and Sanitation for Health Facility Improvement Tool (WASH FIT). WASH FIT is a risk-based management approach to improve quality of care by assessing seven domains in health care facilities, namely water, sanitation, hand hygiene, waste management, environmental cleaning and disinfection, energy and power, and management. WASH FIT enables health care facility managers to prioritize risks identified in these domains, define and implement actions for improvement, with strong considerations for gender, disability, social inclusiveness and climate.

WHO conducted a series of pre-service and ongoing in-service education and training programmes for all health care workers to manage WASH services, provide ongoing maintenance and operations and deliver appropriate and gender-responsive WASH and infection prevention and control (IPC) practices. So far, more than 185 primary health centres in 6 regions implemented WASH FIT in 2020. Planned scale up to PHCs in two more regions (West Nusa Tenggara and East Nusa Tenggara) is ongoing in collaboration with UNICEF, Plan International Indonesia and MOH.

WHO is working to align and strengthen the collaborative efforts of stakeholders within multisectoral coordination platforms to ensure adequate financing of all aspects of WASH in health facilities. The government has issued a Roadmap on Drinking Water Quality Surveillance 2020-2030, which includes improved water quality in health care facilities and committed to developing a national roadmap for WASH in healthcare facilities in 2021.

To further strengthen WASH monitoring and reporting, WHO supports Indonesia MOH to integrate WASH FIT parameters as indicators to report WASH in national monitoring mechanisms. One aspect of this support is the ongoing upgrade of the MOH’s online web-based application on data reporting from health facilities, called ASPAK, to include the critical WASH indicators. Once completed, findings will inform the costed national roadmap for WASH in health facilities, increase the knowledge base for WASH services in health facilities, and provide a robust basis for identifying priorities, making investments, and tracking progress on WASH.

Despite prevailing challenges, progress recorded through WHO support has demonstrated that universal access to WASH in health care facilities is achievable in Indonesia.
Systemic approach of cancer in the I.R. of Iran: emergency interventions for children, information management system, National Cancer Control Program

The inherent complexity of the fight against cancer and the burden of the disease act together to make it one of the most serious threats to public health in Iran. Iran is currently struggling with a significant burden of non-communicable diseases (NCD), which account for over 82% of all deaths in the country. Of these, cancer is the third leading cause of death and is on a rising trend.

In Iran, annually 3,5001 children are diagnosed with cancer - one of every two of them succumbs to the disease - and access to quality and affordable pediatric cancer medicines has become a serious problem. Because of current sanctions, access to quality and affordable pediatric cancer medicines has become a serious problem.

Access to quality and affordable pediatric cancer medicines has become a serious problem in Iran because of the sanctions, which

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1 Of 85,000 cancer patients diagnosed every year in Iran.

WHO is procuring 12 medicines worth nearly USD 2 million for childhood cancer to 32 childhood treatment centres or hospitals across Iran. Photo credit: WHO Iran
have had an impact on the procurement of these life-saving drugs. The sanctions were imposed on Iran following US administration’s unilateral withdrawal from the Iran nuclear deal in May 2018. This entailed a ban on transactions between Iranian bank accounts and the global banking system. Together with an over-compliance on the part of global suppliers that operate on the US market, this resulted in major disruptions hitting the import of end products, pharmaceutical raw materials, and medical devices, as well as an increase in the price of drugs and a shortage of some 70 essential medicines for high-burden diseases, including specialized cancer drugs. It should be noted that all cancer patients require uninterrupted, sustainable, and safe access to essential drugs. Studies indicate that a delay of around four weeks in starting treatment may result in a 10% mortality increase for most cancer patients. Furthermore, current COVID-19 epidemic has put a serious strain on the country’s overall health system.

WHO Country Office in Iran (WCO) has been focusing on emergency interventions in order to provide access to quality and affordable medicines for children living with cancer. With a US$2 million funding from the European Commission, WCO procured 12 of the most needed cancer medicines for children and distributed them to the 32 pediatric cancer treatment centers and hospitals across the country. WCO worked closely on this project with Iran’s Food and Drug Administration (IFDA) on all issues related to identifying the most urgent need, agreeing on the list of selected medicines, and to ensure that the drugs actually reach the target hospitals and children in need.

As part of WCO’s planned activity in the joint 2020-2021 program, another priority is the establishment of a comprehensive multi-sectoral mechanism, at a national and provincial level, towards the prevention and control of NCDs. A major part of this was the support given by WCO to the Ministry of Health and Medical Education (MoHME) in the establishment of a National Cancer Control Secretariat (NCCS) to strengthen collaboration of involved departments within the organization.

Furthermore, WCO supported MoHME in the enhancement of the Cancer Information Management (CIMA) system\(^2\), in the context of the COVID-19 pandemic. CIMA is one of the major global projects dealing with population-based cancer registry systems. Working with national and international partners, WCO supported national health authorities in identifying and analyzing the outcomes of more than 8 300 individuals with a history of cancer in COVID-19 registry data, making it one of the largest samples of this kind to date. The established record-linkage systems are vital in gathering essential information and evidence necessary for effective policy and clinical decision-making.

In addition, together with MoHME and NCCS, WCO documented the specific situation of pediatric cancer in Iran, producing documentaries with case stories of parents and their children, using photos, videos, and interviews as ‘voices from the front lines’. The documentaries are intended to raise awareness and serve as an advocacy tool by calling for further urgent support to provide life-saving medicines and other essential services to children living with cancer and their families\(^3\).

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\(^2\) CIMA Saratan is a Persian phrase meaning interface of cancer.
\(^3\) Two of the documentaries are to be found here and here.
In parallel to the actions taken regarding children’s cancer, WCO has succeeded in raising around US$80 million to fight COVID-19, the most successful WHO country office globally in resource mobilization to combat the pandemic.

As a step further, WCO will upgrade CIMA this year, with the scope of enhancing cancer registration data according to International Agency for Research on Cancer (IARC) and WHO guidelines. This will allow the country to collect essential information and improve the quality of basic information through linking lab information systems, hospital information systems, health information systems, and death records. Furthermore, National Cancer Control Programme Midterm Review as a strategic intervention by WHO and NCCS in collaboration with UNICEF, IAEA and IARC is on the agenda. Besides, WHO is supporting MOHME to join the WHO Global Initiative for Childhood Cancer.4

4 WHO launched the Global Initiative for Childhood Cancer with the goal of achieving at least 60% survival for all children with cancer globally by 2030. The Global Initiative for Childhood Cancer has the objective of ensuring that every child with cancer has the best opportunity of receiving care and that no child with cancer is suffering.
WHO supports generating evidence for decision-making in Jordan during COVID-19

On March 2, 2020, when the first cases of COVID-19 appeared in Jordan, the Government enacted a strict nationwide lockdown, closed airports and schools, public and private institutions until early June 2020. Working in partnership with the Ministry of Health (MoH), the WHO Country Office (WCO) of Jordan supported national efforts to respond to COVID-19 immediately.

Despite the scarcity of supplies in the global market, WCO managed to support the MoH to procure and deliver seasonal influenza vaccines for the public sector, hospital and laboratory equipment and supplies, personal protected equipment, testing kits, medical products, IT equipment for contact tracing whilst building capacities of healthcare personnel. In March 2021, WCO procured the first shipment of COVID-19 vaccines through the WHO COVAX Facility.

The value of scientific evidence for guiding decision-making in Jordan is highly acknowledged. Evidence-generating activities have also been prioritized within the national plan for preparedness and response to
COVID-19 across different public health areas. Accordingly, the WCO stood out in providing direct, strategic, and operational support to Jordan’s Government, leveraging its access to a vast global network of technical expertise and the most up-to-date evidence-based guidance on responding to COVID-19 to support their evidence-generating activities implementation.

With this support, Jordan was the first country in the Eastern Mediterranean Region to have completed three rounds of a national seroepidemiological investigation (that was population-based and age-stratified), one assessment of risk factors for healthcare workers in health facilities settings (as part of WHO’s Unity Studies), and several behavioural insight surveys. WHO also helped organize the first country-specific online clinical case management training, involving more than 400 clinicians in Jordan and technical experts globally.

At the onset of the pandemic, numerous epidemiological models had been developed globally. The COVID-19 International Modelling (CoMo) Consortium modelling research group (initiated by the University of Oxford, encompassing research groups in more than 33 countries across the world) created a model estimating trajectories in COVID-19 cases and deaths as well as the impacts on healthcare systems, according to the adoption and relaxation of specific Public Health and Social Measures (PHSMs). Recognizing the value in this scientific evidence approach, the WHO Country and Regional Offices for the Eastern Mediterranean Region worked together with the MoH and applied the CoMo Consortium model to Jordan. The first round of modelling results using national data was completed at the beginning of the pandemic, with successive rounds in October and November 2020, February 2021, and most recently, in March 2021.

The model incorporated the most up-to-date evidence on SARS-CoV-2 virology and epidemiology (including results from the WHO-supported national household seroprevalence survey) and complemented it with national data on Jordan’s health system and health service delivery capacities to cope with COVID-19. The model allowed for the estimation of the relative impact of different PHSMs, such as enhancing social distancing, reopening schools and airports, and working from home.

In each round of modelling, the MoH requests a series of scenarios, works directly with WHO Country and Regional Offices to run the model, and present the model’s findings to inform high-level and evidence-based decision making.

A significant achievement was the multi-sectoral impact of the modelling, which had not existed at the beginning of this endeavour. Starting after the second modelling round in October 2020, the Strategic Planning Department of the Jordanian Royal Hashemite Court, who had already engaged in some modelling of its own, showed a strong interest in such work. The Royal Court has supported these modelling techniques and bolstered them by expanding data availability, which was critical to initiate the process. In recent rounds of modelling, WCO and in the Regional Office meet regularly and work directly with senior management in the MoH. With such strong national support and inputs, and with

more evidence on the virus’ behaviour being generated, the estimations of relative impact have been constantly refined over time.

Through this modelling initiative for the pandemic, WHO demonstrated its comparative advantage in providing hands-on support to national health authorities for developing evidence-informed policies. It is clear that WHO was uniquely positioned to adopt a participatory approach (with the Jordanian authorities) in running COVID-19 modelling research, convey the model’s caveats and limitations, and disseminate modelling results among governing bodies and partners as appropriate. By leveraging and investing in WHO’s normative and research comparative advantage in addition to providing essential assistance for the pandemic (e.g. procurement, research, and capacity building), WHO created crucial evidence to help with decision-making within and beyond Jordan’s health sector.

During recent years, WCO in Jordan has embarked on an intense transformation process in line with the Thirteenth General Programme of Work (GPW13) and repositioned work, programme and operations to be fit for the purpose. These endeavours, which notably provide scientific evidence for decision-making, have been received with high praise from the Jordan MoH and partners and will continue to strengthen already excellent WCO work to drive health impact in Jordan. Especially during a novel and unpredictable health crisis, these efforts were extremely valuable and will continue to support a coordinated and multi-sectoral response to COVID-19 in Jordan.2

WHO Kazakhstan’s COVID-19 strategy: a blueprint for leadership and preparedness during a disease outbreak

Within a short span of a few months, COVID-19 changed the global healthcare landscape. The world looked to the WHO to play a leading role in navigating the largely unfamiliar territory that lay ahead. The Organization’s burden was extraordinary, including in the Kazakhstan WHO Country Office (WCO).

The Kazakhstan WCO was asked to respond to this outbreak with limited resources and operational capacity. At the beginning of 2020, the team functioned with minimal funding and was confronted with staffing shortfalls. Additionally, new WCO leadership was developing relationship with the Ministry of Health (MoH) and was strengthening its relationship whilst engaging with the United Nations (UN), ambassadors and other key actors.

The first cases of COVID-19 in Kazakhstan were confirmed on 13 March 2020 in Nur-Sultan and Almaty, which became the most affected cities along with Shymkent. WHO responded during the critical first six months of the crisis to raise approximately US$6.2 million, and build WHO’s

WHO Representative in Kazakhstan Dr Caroline Clarrivai with WHO Country office team members. Photo credit: WHO Kazakhstan
country level expertise and footprint. WHO’s country office could better support the national government in implementing WHO guidance and build trusted relationships with key national health stakeholders. A key reason for this turnaround was taking a management perspective in response to COVID-19 at the national level. These actions can be summarized in five steps.

1. **Fundraise with vision and values.** WCO made fundraising a top priority across the team. Centering fundraising around shared vision and values helped to quickly mobilize the required resources and allowed the team to promote values such as evidence-based knowledge sharing, neutrality and integrity in their work.

2. **Architect a team.** WCO clearly articulated each team member’s role, thus avoiding the overburdening of staff with work. It was crucial to recruit new highly qualified staff and to find time for existing staff to complete training programmes to acquire necessary skills. WCO also embedded opportunities for staff to raise issues regularly and discussed solutions, actively managed team dynamics and promoted an egalitarian management style so that everyone feels comfortable voicing their opinion and putting forward their ideas and proposing new solutions.

3. **Lay foundations with internal processes and communication.** WCO set up efficient remote methods of communication to reduce unnecessary email burden, encouraged video conferencing, and established video conferencing guidelines that enabled proper pacing, language, and management of interruptions. With the input from an external specialist, WCO reviewed internal working patterns and processes (e.g., remote communication methods and collaboration tools).

4. **Read and contextualize.** WCO employed international experts for the contextualisation of WHO guidelines, thereby ensuring continuous and comprehensive conversations with national stakeholders and WHO experts in each field. When delivering contextualized training to healthcare professionals in Kazakhstan, WCO customized information to different groups’ language and expertise so that WHO’s recommendations were practical and had a clear rationale. WCO regularly shared easily-to-understand risk communication materials with the general public on social media and supported the creation of a 24/7 call centre and chat-bot to answer pandemic-related questions. This was complemented by establishing a UN inter-agency risk communication group to regularly review the key messages and the public perception of any UN operational response.

5. **Deliver.**

   - **Incident management.** The WCO established its incident management system to operationalize the response, provide technical advice, and mobilize medical supplies. This fed into, and worked closely with, the incident management support teams established for COVID-19 at the regional and global levels to guide and operationalize WHO’s overall support to countries.

   - **Resource management.** The WCO promoted ethical discussions among the team to allocate resources fairly, thus strengthening the team’s cohesion and ensuring that operations were conducted...
with integrity. WHO’s country office led the UN’s COVID-19 response in Kazakhstan, coordinated and oversaw the supply chain management with the UN Resident Coordinator by managing large scale relief operations and appointing coordinators for validating and prioritising national supply requests. To streamline logistics operations among the MoH and UN agencies, WHO and UN partners launched an innovative UN inter-agency logistics coordination platform. This mechanism allowed for the coordination of logistics and procurement for all UN agencies in Kazakhstan while filtering local authorities’ requests and avoiding duplication. WCO served as the focal point for national authorities, partners, NGOs, and the COVID-19 Supply Chain System Control Tower. Lastly, the WCO supported private entities with advice on quality assurance regarding the supplies they intended to purchase.

**Knowledge generation.** WCO supported the MoH in its mission to generate additional knowledge through COVID-19 research. Approximately five research projects were ongoing, and findings will be shared globally to contribute to the overall knowledge generated on this current outbreak. Investing in research is paramount during an ongoing outbreak, this is also true for sharing newly established knowledge in key technical areas such as infection prevention and control, case management and laboratories as well as in risk communications.

Through these strategies and activities with key partners, the WCO made several accomplishments in their COVID-19 response. Approximately 4,000 healthcare workers trained on IPC, laboratory capacity, and case management (through over 40 webinars in Kazakh, Russian and English, delivered by experts), 2.5 million items of personal protective equipment (PPE) and 4,000 tests were delivered, over 44,000 PCR tests and 12,000 hygiene kits distributed, and many new research were initiated.

COVID-19 demonstrated that health systems must be well prepared to ensure access to essential health care services is not put at risk and that acquired health gains are not lost. Kazakhstan faced many barriers at the start of the crisis but has demonstrated its commitment to mitigate the impact of the COVID-19 outbreak. The combination of WHO’s continued work and the efforts from tireless health care workers and people in Kazakhstan (notably the rigour with which people adhere to the recommendations of hand hygiene, wearing of masks physical distancing) will play a key role in the continued fight against COVID-19.

**The key takeaways from Kazakhstan’s experience of managing the COVID-19 pandemic are:**

1. **Promoting ethical decision making.** Many decisions during an outbreak are rooted in ethical dilemmas. Distributing the resources equitably requires careful consideration, justification and transparency. Adhering to and abiding by clear shared values in a team fosters an ethical debate and leads to proper decision making.

2. **Hire people who share the same values, not the same skill sets.** A team sharing similar values will communicate well, trust each other and collaborate on difficult problems. A team with diverse skill sets will have the tools and knowledge at their disposal to find creative and efficient solutions.

3. **Invest in your team's professional development.** Nurturing staff wellbeing and development will grow your team’s expertise and increase wellbeing, loyalty, and motivation, ultimately reducing staff turnover.
Health Sector Working Group: Strengthening Resilience for the Pandemic through Coordinated COVID-19 Pandemic Response in Kyrgyzstan

The Health Sector Group under the Disaster Response Coordination Council (DRCU) in Kyrgyzstan led by Ministry of Health (MoH) and WHO, comprises various organizations, international partners and NGOs. The Health Sector Group was revitalized in May 2018 supported by Kyrgyzstan’s International Disaster Relief Law for proper coordination and timely management of international aid, that was ratified in 2017. The group provided platform for coordination, advocacy and capacity building to advance country’s core capacities to implement the International Health Regulations (2005), strengthening country’s preparedness to address priority public health risks. The established group was tasked by DRCU to lead the coordination of health preparedness response to COVID-19, as WHO declared COVID-19 a Public Health Emergency of International Concern (PHEIC).

Upon activation of WHO’s WHO/Europe COVID-19 Incident Management Support Team (IMST) on 23 January 2020, efforts were immediately put towards bolstering the Central Asia WHO Health Emergencies Programme...
(WHE) hub with additional expertise to prepare for crisis response nationally and other central Asia countries. Members of the Health Sector Group (MoH, WHE team at the Kyrgyz WHO Country Office (WCO), and external partners) co-created Kyrgyzstan's Intersectoral Interagency Contingency Plan for COVID-19, which was approved and put in motion after Kyrgyzstan recorded its first COVID-19 case on 22 March 2020.

The contingency plan outlined the responsibilities of Health Sector Group members, other DRCU sectors, and state bodies. It contained nine pillars, including coordination, risk communication, surveillance, rapid response teams and case investigation, points of entry, laboratory, infection prevention and control, case management, and maintaining essential health services.

The WHO Country Office and Kyrgyz MoH took on a leading role within the Health Sector Group, working together to coordinate 25 Group members and external partners (including UN agencies, NGOs, and other partners supporting countries) to deliver on all pillars of the contingency plan. Together, they delegated actions to support and advance national capacity, update and develop guidelines and standard operating procedures, procurement of supplies and equipment, infrastructure support, risk communication and community engagement, and conducting assessments and studies to inform evidence-based decision making. They led bi-weekly DRCU meetings and provided updates on health sector activities, challenges and way forward to all DRCU partners regularly. By November of 2020, approximately US$ 53 million had been raised and 50% of the plan's activities had been marked complete.

The contingency plan had an initial focus on early detection, isolation, and surveillance. In this initial phase, WHO led emergency risk communication, surveillance control, and infection prevention and control in hospitals. Meanwhile, the government played a crucial role at Kyrgyzstan's borders, working with neighbouring countries to implement screening and quarantining protocols for individuals who may have been exposed to the virus from travel. WHO also conducting analytics to track the implementation of the entire response plan, which involved keeping count of the funds mobilized for each pillar, number of trainings conducted, and items procured.

One of the most outstanding achievements by WHO was its success in upskilling multiple key health workers. Early on, WCO held trainings with Regional Office experts for doctors and nurses on clinical management of COVID-19 and other trainings to upskill laboratory and public health staff. By November of 2020, 4090 individuals were trained on IPC, 2019 on case management, 129 on essential health services (unrelated to COVID-19), 100 on surveillance, and over 50 on laboratory testing.

Moreover, WHO supported MoH and Border Control authority to assess points of entry preparedness and response capacity, utilizing a tailored checklist developed by WHO EURO Regional Office. The assessment informed number of strategic actions to advance public health measures at airports and border crossing points, in line with WHO recommendations.

Beyond COVID-19, WCO supported MoH in maintaining essential health services in 2020. Notably, jointly with MOH, it proceeded to run an extensive vaccination program for measles and other vaccine-
preventable illnesses during the European Immunization Week (in April 2020) through mobile outreach teams. Additionally, through virtual means, WCO continued to offer training, briefings and webinars on diabetes, hypertension and mental health.

With each barrier that Kyrgyzstan's COVID-19 response encountered, WHO reacted quickly with solutions. This was evident in the WCO's leadership role in the Health Sector Group and stepping in to coordinate Group members’ roles and responsibilities and in its quick transition to virtual training sessions for medical professionals after lockdown. Another key to the Health Sector Groups' success was that members took potential threats seriously and enacted preemptive measures. This is demonstrated by its overall COVID-19 response, with the rapid development of and commitment to a contingency plan, even well before the first COVID-19 case. Additionally, recognizing potential political unrest in Kyrgyzstan, the WCO worked with partners and other government entities to develop a contingency plan for such a scenario. This preventive measure was necessary, as political instability could compromise public health measures and access to testing, treatment and health promotion efforts.

The proactive and solution-focused approach to managing COVID-19 in Kyrgyzstan was essential for addressing and preventing the pandemic’s negative impacts. The WCO played a significant role in mobilizing numerous partners within the Health Sector Group, which led to highly coordinated efforts to put the Intersectoral Interagency Contingency Plan for COVID-19 into action. Moreover, the lessons gained from this experience go beyond Kyrgyzstan because of its role as the WHE hub for central Asia, benefiting countries with similar political, socioeconomic, and health system capacities.
Building a Responsive Health Information System in Lao People’s Democratic Republic from the Ground Up

A responsive and reliable health information system is pivotal to accelerating universal health coverage—particularly, during a health emergency. Health information systems provide a platform to monitor the delivery of essential health services, and a means to make informed decisions. With disaggregated health data, it is possible to plan initiatives that reduce health inequities, at all levels of care. Although vital, health information systems in many countries are fragmented, unstandardized, and unresponsive—particularly in low-resource settings. Fragmented health information systems are usually a result of health programs operating in silos and not sharing vital data. Donor agencies can exacerbate the problem with their own reporting formats and demands for data, and by funding the development of program-specific systems.

The Health Information System of Lao PDR was similarly challenged. Each health program operated their own information system, supported
by development partners. Impacted by a lack of standardization, poor data security, and high costs associated with developing and maintaining multiple systems—the country’s health information system needed an overhaul. WHO’s Country Office (WCO) recognized the need to address these challenges. In 2013, WCO initiated the process of building an integrated health information system in Lao PDR. Over the past eight years, WCO has supported the Ministry of Health (MoH) to build and operate an integrated health information system on DHIS2 (a free modular web-based, open source software package). Today, Lao PDR can boast of a robust, integrated health information system that was built from the ground up. Among other factors, WCO’s strategy to (1) secure government ownership early on in the process, and (2) bring all development partners to the table, ensured the success of this initiative.

1. **Securing government buy-in and ownership:** WCO secured early buy-in from the MoH, building strong political commitment, and across Ministry programs. The Country Office team attained government support and ownership through sustained advocacy efforts, multiple rounds of discussion, promoting a bottom up approach in information system design and capacity building initiatives. Cognizant that ownership needed to trickle down to all levels of the health sector, WCO made concerted efforts to empower end users to be part of the design of information systems and to build national capacity to use the health information system efficiently, and with ease. WCO team members supported DHIS2 academies and local training sessions, and even brought in international experts to conduct training programs. Through these capacity building efforts, all players in the health sector acquired experience in data entry and generating information for action. WCO’s multi-year strengthening process thus ensured ownership and better utilization of the health information system, at all levels in the health sector.

2. **Bringing all development partners to the table:** To address the issue of multiple, and oftentimes conflicting, donor data requirements—WCO worked to channel contributions from multiple development partners towards building and sustaining the health information system. WCO leveraged existing convening platforms such as sector working groups and informal development partner meetings to facilitate discussions and build agreement among multiple players. Mindful that sustaining an integrated health information system requires significant investments, WCO advocated for long-term support from these development partners. WCO’s efforts paid off, and key funders contributed significantly towards Lao PDR’s national health information system. GAVI continues to contribute to a strong information system for the Expanded Program on Immunization, Gates Foundation through PSI funds the development of an effective Emergency Operations Centre system, the Global Fund supported systems for the TB, HIV and Malaria control programs and more recently with World Bank to track and monitor Disbursement Linked Indicators, European Commission supports the strengthening of Nutrition Information Systems and Asian Development Bank collaborates closely with WCO in developing a digital health enterprise architecture which will serve as the basis for a five-year e-health strategic plan in Lao PDR. These contributions were considerable, not only in terms of building the health information system, but also in terms of sustaining it for years to come.
Testing Waters during COVID-19

Strategic investments in building and sustaining a robust health information system supported Lao PDR’s preparedness for and response to COVID-19. The country’s responsive and agile health information system easily adapted to information demands during the COVID-19 response—and delivered great value for money. Investments in capacity building paid off, and trained health care workers are efficiently able to monitor and track essential health service indicators using the national health information system. This allows decision makers to easily perceive health trends and make informed evidence-based decisions in response to COVID-19. Thus, previous efforts to build and strengthen the health information system has ensured better coordination, pooling of resources and enhanced transparency—in turn building donor trust and thereby increasing resources for health strengthening. WCO’s efforts in the region significantly enhanced progress towards GPW13 indicators, particularly towards accelerating universal health coverage and better protection during health emergencies through integrated health information systems.
Malawi combines time-proven and innovative approaches to improve child health

Even as the health sector in Malawi faces competing priorities and some resource limitations, the country is implementing time-proven and innovative approaches to improve child health, with support from WHO. The results of the collaboration are generating progress to reduce suffering, illness and deaths among vulnerable children. Two activities stand out as milestones in Malawi’s public health: mass drug administration to combat neglected tropical diseases and the landmark pilot implementation of the world’s first malaria vaccine in childhood vaccination.

Towards the elimination of neglected tropical diseases
Neglected tropical diseases affect the most vulnerable people and have historically received less attention than other diseases. Yet, they can lead to severe health outcomes such as blindness, disfigurement, cancer or death. By mass drug administration, a number of these diseases could be eliminated or controlled so that they no longer present a public health concern. In Malawi, there are eight widespread tropical diseases

Grace Butawo completed her 4th dose and at home she still sleeps under a net. Photo credit: WHO Malawi
and five of them could be eliminated via mass drug administration: Trachoma; Schistosomiasis, also known as snail fever; Soil-transmitted helminths, commonly known as intestinal worms; Onchocerciasis, also known as river blindness and Lymphatic filariasis.

With WHO’s support in providing medicines and technical guidance, Malawi administered treatment against these five diseases to children across ages and across stages. The coverage of above 80% has been achieved for snail fever and intestinal worms. As a result, the five tropical diseases are now on the verge of elimination. To verify this status, WHO supported Malawi to develop dossiers and apply to be certified free of Lymphatic filariasis and Trachoma. The successful verification would mark a milestone in Malawi’s public health and make it one of few countries in Africa that is free from these diseases.

**A potential new tool: RTS,S malaria vaccine for added malaria protection**

Malawi has been taking historic steps to deliver added malaria protection to children through pilot implementation of the RTS,S malaria vaccine. The national immunization programme was the first in the world to launch the country-led malaria vaccine pilot in 2019, followed by Ghana and then Kenya. From pilot initiation through 2020, nearly half a million (490 000) doses of RTS,S malaria vaccine have been administered to children by the Ministry of Health in select areas of 11 districts, and about 184 000 children received their first vaccine dose and should benefit from the additional malaria prevention. Malawi has managed to reach and provide added protection against malaria to around 90% of children in the vaccinating districts. The number of children reached with malaria vaccine indicates good community acceptance of the vaccine.

The vaccine provides considerable added protection against malaria to children when used with other WHO-recommended malaria control measures, building on the successful child vaccination platform. From 2010 to 2017, use of insecticide-treated nets (ITNs or bed nets), indoor residual spraying and antimalarial medicines nearly halved malaria prevalence (from 43% to 24%) among children in Malawi. Yet, malaria remains the leading cause of death among children under the age of five in the country, and new tools and approaches are needed to add to those currently recommended, to further drive down illness and death in this high-risk group.

The WHO-coordinated malaria vaccine implementation programme (MVIP) was designed to answer several outstanding questions related to the public health use of the vaccine. The pilot evaluation is assessing the feasibility of delivering the recommended 4 doses of the vaccine, the impact of the vaccine in reducing childhood deaths, and the safety of the vaccine when provided through the routine childhood vaccination programme. Accrued safety data from the evaluation are reassuring. Results of the evaluation will inform a potential WHO recommendation for wider use of the vaccine across sub-Saharan Africa.

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In addition to the feasibility, safety and health impact of the vaccine, the MVIP includes a qualitative research component that is looking into social determinants of vaccine acceptance.

Two years on, as of April 2021, the pilot programme is progressing well across the three pilot countries, despite the COVID-19 pandemic – more than 1.7 million doses of the malaria vaccine have been administered and more than 600 000 children have received at least one dose of vaccine. (In Malawi, about 220 000 children have been vaccinated with their first dose.) This level of coverage shows the strong capacity of the routine childhood immunization programme to deliver this vaccine with a novel schedule.

The malaria vaccine pilots are now approaching a major milestone: a review of data on the routine use of the RTS,S vaccine by WHO global advisory bodies for immunization and malaria, and a potential WHO recommendation for wider use in 2021. Should there be a positive recommendation for broader use, Malawi will have made a substantial contribution to the MVIP and, potentially, made it possible for children in other areas with high malaria burden to benefit from an entirely novel approach to malaria prevention.
MALAYSIA

Inclusive vaccination puts a halt to polio outbreak

Polioviruses can take several forms and wild polioviruses are the most commonly known. Yet, there is another form of polio: circulating vaccine-derived poliovirus, or cVDPV. While this form is rare in the past, it has been on the rise in recent years due to low vaccination rates in communities.\(^1\)

The Global Polio Eradication Initiative registered worldwide 1067 cases of cVDPV in 2020\(^2\) and one of these cases was reported from Malaysia as well as 3 cases in 2019.

The virus was detected in December 2019, in two areas: the state of Sabah and the Federal Territory of Labuan. Located close to international borders, these areas host a high number of immigrant and stateless people. It is estimated that in Sabah non-citizens make up 28% of the

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\(^1\) Circulating Vaccine-Derived Polioviruses (Vaccine-Derived Polioviruses – GPEI (polioeradication.org), accessed on 25 February 2021.
\(^2\) Circulating Vaccine-Derived Polioviruses (Vaccine-Derived Polioviruses – GPEI (polioeradication.org), accessed on 25 February 2021.
population, while in Malaysia as a whole, the number amounts to 3 million. This poses a challenge to routine immunization services: if there are pockets of unvaccinated children, disease can spread among susceptible people. As poliovirus spread internationally, it has been declared by WHO as a public health emergency of international concern since 2014. For this reason, the Ministry of Health (MOH) urgently teamed up with WHO to contain it.

**Cooperation on three levels for one cause**

Relying on expertise and capacities of the three-levels of the Organization, WHO utilized global, regional and local resources to support the outbreak response in Malaysia. First, it assembled a team of experts, who assessed risks; surveilled the circulation of the poliovirus; provided supplemental immunizations; managed vaccines and supported risk communication. The team gave recommendations such as defining the target population as all children under the age of 13, who have not been immunized before. Another recommendation expanded surveillance from 6 to 66 environmental sampling sites across Malaysia. As a result, the country ensured early detection of the virus circulation. Second, the MOH and WHO joined forces in procuring vaccines, with WHO supplying 2.5 million doses of monovalent OPV-2 vaccine and the MOH purchasing the necessary quantities of bivalent OPV-1, 3 vaccine. Yet, before the work was done, it had to be revisited due to the onset of the COVID-19 pandemic. This is where WHO supported Malaysia in adjusting initial plans to include infection prevention and control measures, physical distancing and related preventive measures. For example, house-to-house immunization shifted to fixed sites, making space for drive-through and mobile clinics. Although COVID-19 made the polio response temporarily slower, timely adoption of public health measures ensured it did not stop it.

**Inclusive immunization is a success factor**

As a result, Malaysia immunized more than 90% of children in the area with supplemental immunizations. Since March 2020, there has been no cVDPV detected in the country. In addition to the efficient outbreak response, there was another success factor: equity and human rights. By providing vaccination to non-citizens under the same conditions as for citizens, Malaysia walked the talk of leaving no one behind.

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A success to cherish during the pandemic: elimination of rubella and congenital rubella syndrome

In July 2020, World Health Organization officially announced that Maldives was verified for the elimination of rubella based on the recommendation of WHO South-East Asia Regional Verification Commission for Measles and Rubella. This feat was achieved several years ahead of the 2023 target and was the result of decades of dedication from the Ministry of Health, generations of health workers, communities, as well as the technical guidance and support of WHO and the contribution of United Nations Children’s Fund (UNICEF). Since the introduction of the measles vaccine in 1981, WHO has advocated for the primary health care approach, supported strategic interventions, and provided technical support for the national vaccination programmes, achieving >95% coverage of the MR and MMR vaccine in the past decade.

Elimination of disease as a national pride: building capacity
Elimination of Rubella was high on the agenda as it is one the key targets of the regional flagship programme of the WHO South-East Asia Region. WHO has been working in close collaboration with the National Verification Committee and Maldives Technical Advisory Group on Immunization, guiding the national programme. Leading up to 2020,
WHO Maldives supported the Health Protection Agency in developing a plan towards attaining and validating rubella elimination. The WCO coordinated input from experts and facilitated the assessment of the two essential criteria and five lines of evidence needed for the validation process. Based on the initial findings, WCO incorporated appropriate activities into the WHO work plan and built capacity in Maldives to work towards elimination. Specifically, WHO Maldives helped introduce the second dose of rubella-containing vaccine in routine immunizations in 2017 and in launching the measles and rubella catch-up campaigns in 2017 and 2020, which were inclusive of the migrant population. Furthermore, the rubella case definition was recently expanded in the existing case-based surveillance system to avoid overlooking any potential cases. Since the case-based surveillance system had been in operation since 2010, WCO provided extensive technical support and training for doctors, nurses, and all relevant healthcare professionals in adopting this new case definition. This resulted in increased identification of suspected cases, which allowed WCO to then promptly test and diagnose. WCO also brought in experts to improve proficiency of laboratories, working with the Global and Regional Measles and Rubella Laboratory Network to accurately diagnose rubella. These efforts contributed to a robust and effective surveillance system spanning the many islands and consequently strengthened the health systems, the health workforce, and preparedness to identify and respond to outbreaks.

COVID-19 adaptations & scenario-based approaches
There have been significant disruptions to routine immunization services and also a decrease in demand for services due to the pandemic around the world.1 Thankfully, WHO Maldives’ advice on quick and responsive adaptation of services has successfully helped the government maintain good levels of routine immunization throughout 2020. As Maldives is a nation composed of geographically dispersed islands, WHO proposed a scenario-based approach. With careful consideration for each island’s context and COVID-19 situation, the government made decisions to maintain operations without interruptions and acted swiftly to adapt services while balancing the demands of the pandemic. Early on, WHO developed and distributed a guideline for vaccinations during the COVID-19 pandemic in two languages for local usage. Further, in anticipating the decrease in demand and services, WHO also implemented the “measles and rubella intensification activities” at local health centres for communities (as opposed to holding mass immunization campaigns, which would draw large crowds). As the healthcare staff turnover rate is high in Maldives, WHO supported the recruitment of international and local experts, to support reliable and thorough investigation of suspected cases of rubella.

WCO’s support for the national programme in the rigorous detection, data collection, and documentation ultimately helped produce the Ministry of Health’s submission to the National Verification Committee for the certification of rubella elimination in 2020. The elimination of rubella and CRS is surely a success story to be celebrated during the challenging times of the COVID-19 pandemic and speaks more broadly, to WHO’s delivery of its international commitment and reward in strengthening primary health care systems.

WHO supports post-conflict efforts to address health workforce shortage and maldistribution in Mali

Perpetual multisided armed conflicts since 2012 have reversed many years of progress to achieve adequate and equitable distribution of human resources for health (HRH) in Mali. The widespread lack of in-country expertise resulting from the conflicts has undermined the national capacity to respond to the worsening humanitarian situation’s wide-ranging public health effects. By the end of 2020, more than 5,000,000 people needed humanitarian assistance, and 358,000 displaced people lacked access to essential healthcare, resulting in an upsurge of both communicable and non-communicable diseases.1

Since 2015 WHO has assisted Mali’s Ministry of Health and Social Development (MHSD) to strengthen human resources management for the health workforce, particularly for regions and districts affected by armed conflicts. The first prong of this support was to develop and roll out a decentralized computerized human resources information

system (iHRIS) to manage the health workforce better. Following the forced displacement of many health workers due to armed conflicts, health managers could leverage the health information system in iHRIS to re-engage displaced health workers and incentivize them to return and provide much-needed care for the conflict-affected populations as part of the government post-conflict recovery strategy. The health information system was also valuable in national resource allocation and prioritization for health worker training and deployment during the COVID-19 pandemic response. Following gaps identified through the human resource information system, WHO supported 40 contact tracers and procured and configured 110 tablets on the DHIS2 platforms for COVID-19 pandemic contact tracing.

Another critical component of WHO support was to increase health worker retention in remote, underserved and conflict-affected areas. Since 2017 WHO has been deploying Technical Support Doctors (TSD) across health districts in underserved regions such as Gao, Kidal, Ménaka, Mopti, and Timbuktu to ensure continuity of health services. The technical doctors provide a wide range of interventions, including revitalizing local health management committees, facilitating rapid decision-making, surveillance and prompt investigation of outbreaks for vaccine-preventable diseases, and scale-up capacity-building opportunities to the health workforce (physicians, midwives, and nurses) in affected districts. The technical support doctors trained 138 staff members of the Ministry of Health on disease surveillance tools and trained 133 frontline health workers on infection prevention and control, epidemiological surveillance, and health information management within the health districts.

WHO support to strengthen human resources for health in Mali has yielded notable achievements, including developing and implementing a finalized national comprehensive humanitarian response plan which has helped structure Mali’s health sector response during and after armed conflicts. The plan offers a comprehensive overview of health protection risks, scheduled activities, progress indicators, and steps to prevent, mitigate, and address public health consequences of conflicts. A mid-term review at the end of 2020 showed solid improvement across 37 indicators and outputs, an indication of the improvement in access and quality of care in the country.

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National Immunization Programme in the Republic of Moldova: WHO’s continuous support for 25 years

With a strong and solid strategy over the last 25 years, in researching, organising, communicating, teaming up with WHO, Republic of Moldova has made a significant evolution in addressing the issues of access to essential medicines, vaccines, diagnostics and devices for primary health care, through National Immunization Programme (NIP), now at its 5th edition.

The immunization process of the population, through vaccinations, was recognized as a public health priority and the positive results were achieved in the last years through the direct technical support of the WHO Country Office in the Republic of Moldova. NIP aimed to eliminate or reduce morbidity, disability and mortality by providing the population with mandatory immunizations, guaranteed by the state.

There were many issues to address in 1996, when NIP began, and some still linger as the general immunization coverage in the Republic of Moldova is below the regional target of WHO European Region. Vaccine

Gabriela Suleac is 28 and the mother of two children: a four-year-old girl named Jaclin and a three-year-old boy called Benjamin. She strictly follows the national immunization schedule as she is convinced that this is the only way to keep her children safe, “Through vaccines I can protect my children from deadly diseases that have affected many people in the past”. Photo credit: WHO Moldova
coverage decreased in the Republic of Moldova from 2005 to 2019 by over 6% for all antigens in the national immunization schedule. Besides vaccine hesitancy, there were other impediments, like a lack of human resources specialised in health, data quality issues or budgeting of the campaign. Also, national internal funds for public health actions were very limited and had wide spread of actions in public health domains.

But with a coherent strategy and implementation, these problems are being addressed and some solved. The WHO Country Office in the Republic of Moldova has included rise of vaccination coverage in priority actions by implementation of new approaches in communication, development of information immunization system and research activities for national, regional and global level.

A well-developed electronic Immunization information systems (IIS) in partnership with EPI (note: The Expanded Programme on Immunization, developed by WHO) for the public health system was developed and implemented in pilot areas. From 2021 the IIS will be used in order to increase quality of data not only for vaccination status, but for a well function stock management evidence of vaccines, in real time, at all levels, national, regional and local level. All 1380 vaccination points from Republic of Moldova will have access in 2021 to the IIS platform, so that the information technology improves efficiency and accuracy of immunization information management and reporting.

Another fundamental project implemented recently in the Republic of Moldova, a collaboration of WHO with Robert Koch Institute and National Agency for Public Health in Moldova, was the development of research, by conducting a serosurvey for vaccine preventable diseases, in order to evaluate the impact of the Hepatitis B (HBV) vaccination in the Republic of Moldova and also whether the control goal of ≤ 0.5% of HBsAg prevalence in vaccinated cohorts has been achieved. This study was conducted with a response rate of more than 96,5% during COVID-19. To date, no seroprevalence survey has been conducted in Republic of Moldova to determine the impact of HBV vaccination, so this is a premiere, and a successful one, as from the total initial proposed 3352 samples to be taken from children (born in 2013), 96.5% were collected, and data (to be issued later in 2021) will serve not only for national level, but for international level at the same time, and will deliver significant important data.

This 25 years long process of continuous effort, in different stages, has resulted in the construction of a national integrated system - logistic, human resources, financial wise – to raise the access of general population to immunization services, to build up a functional model, at all levels, in order to gain increase demand for vaccines (through innovative communication campaigns), equipment to sustain the logistics (like the development of cold chain principle, referring to the reception, storage and distribution of vaccines), or to obtain political commitment and financial sustainability.

The access of children to vaccines is now free of charge in Moldova and vaccination is mandatory at enrolment in educational institutions (except HPV vaccine, which is recommended for girls age 10).
Mongolia FETP support in COVID-19 response operations

Mongolian Field Epidemiology Training Program (FETP) graduates are serving at the forefront of emergencies and outbreaks where their contribution is having a measurable impact. They have strengthened the country’s capacity to rapidly detect and respond not only to COVID-19, but to public health emergencies and outbreaks at all levels.

The FETP has been instrumental for the country’s COVID-19 response operations, with graduates placed at all levels of response operations. Mandated through Ministerial Orders, 15 COVID-19 surveillance and rapid response teams were established, comprising 98 members. Of these, 20% are FETP graduates, with eight teams led by graduates. These teams have primarily been responsible for contact tracing of suspected cases, interviewing repatriated individuals, confirming hospitalized cases using a standard questionnaire, and collecting samples for testing.
Training and Retention
In part supported by the Pandemic Influenza Preparedness (PIP) Partnership Contribution (PC), the Mongolia FETP produced 70 graduates across nine cohorts. Graduates hail from various sectors, professions, and levels including doctors, public health leaders, laboratory specialists, biologists, and veterinarians. Most importantly, the program features a high post-graduate retention rate, with 86% currently working for the Government, 75% working in the national epidemiology and surveillance system, 8% in the private sector, and 6% in non-governmental organizations. While initially the development of the program was supported by development partners, the Mongolian government progressively took ownership of the program delivery – demonstrating long-term sustainability for their health workforce development.

On-the-ground research and analysis
The Mongolian FETP has played a vital role in improving scientific knowledge following outbreak investigations. Leaders have instilled a culture among graduates of publishing results from epidemiological investigations – most notably with seven scientific pieces on the COVID-19 response published by FETP graduates.

Of note are two studies conducted by cohort trainees. One focused on the clinical characteristics of initial COVID-19 confirmed cases, and showed that 21% of cases had no symptoms upon testing, and 33% had mild illness. The second study focused more on an analysis of risk communications and community engagement (RCCE) data – particularly around calls to hotlines, and prevention and care information shared through the Ministry of Health’s social media channels. This study found that when the first COVID-19 case was confirmed in Mongolia, there was a peak of inbound calls 2.9 times higher than the average number of daily calls, with the highest number of calls about medical services.

This on-the-ground data collection, research, and analysis is integral for operational decision-making, with RCCE a key pillar of the Mongolian response to COVID-19. Over time, the continuous strengthening of Mongolia’s health workforce is better preparing the country for future outbreaks and pandemics.
Setting up data systems to be a step ahead of the virus

Since COVID-19 reached Montenegro in March 2020, case numbers and deaths have been fluctuating and the virus continues to pose a major threat to the people of this Southern European country. As a small coastal state, Montenegro has an open economy that relies on tourism and service industries for generating income. With this comes a high fluctuation of people, which often leads to high transmission rates. And the summer brought general parliamentary elections that, together with softer epidemiological measures at that time, put COVID-19 cases on the steady rise, to reach a peak in November 2020.

A delicate balancing act
As more people get hospitalized, more beds, ventilators and health workers are needed to care for them. This pulls resources away from other essential health services and endangers their continuity. So, the challenge becomes to care for the raising number of infected people, while maintaining other life-saving services with the given resources. The Ministry of Health of Montenegro faced this challenge daily.

Committed to leaving no one behind, the country initiated a development of an IT tool for integrated clinical case management, that will give real time information about capacities in health facilities.

A snapshot of the an IT tool for integrated clinical case management, that will give real time information about capacities in health facilities. Photo credit: WHO Montenegro
time information about capacititates in health facilities. Once this is known, the Ministry of Health will be able to plan and prioritize resources where they are most needed.

**Data in the service of people**

In all countries, the ability to bring health information together to offer immediate real-time analysis and visualization of the overall situation. Traditionally, much of this information is held in different places, but to be able to take evidence-based decisions immediately, such data needs to be brought together during emergencies. Towards the end of the 2020, the integrated clinical case management went live. And with it, daily updates on available and absent health workers, patients, medical equipment and bed capacities.

WHO assisted in many stages of this process. First, the Organization mobilized resources and expertise for software development. By understanding the needs on all levels of health care, the IT tool was tailored to include a data base, an analytical function and options for data visualization. Second, with WHO support, the new tool was integrated into the national health information system, but also made available to health care facilities outside of this network. This proved to be an important step in ensuring inclusive and reliable information sharing. Finally, WHO supported capacity building for use of the software by adding and extracting real time data to inform their work.

**Here to stay**

With the integrated clinical case management, Montenegro and WHO employed digital technologies to the benefit of the many. Instead of lagging behind the virus, health workers are now a step ahead of it: quick information-flow allows timely planning of capacities and fast reaction to bottlenecks. This makes the Montenegrin health system more resilient and capable of protecting the people and those who care for them.

Epidemics come and go, while this IT tool is here to stay and to lay a foundation for a broad emergency operation centre that Montenegro aspires to.
Ensuring access to essential services during the pandemic: continuity of palliative care for cancer patients

In 2020 the prevalence of cancer in Morocco was 344.4 per 100 000 or 127 120 cases.1 In 1995, Morocco introduced oral morphine to relieve the pain of cancer patients. Since then, palliative care has progressively developed in the country. Fifteen years later, the National Cancer Prevention and Control Plan 2010-2019 became a key document in further developing and expanding palliative care. WHO has also contributed to this development by providing financial and technical support, including its technical input to the national guide for palliative care in 2018.

Still, establishing effective, accessible, and efficient palliative care has not been without its challenges in Morocco. For instance, there is stigma around the use of opioids. Socioeconomic and geographic barriers hamper access to the continuum of care and policy decisions are not well integrated into the country’s health systems structure. In 2020, the COVID-19 pandemic posed an extraordinary challenge as it jeopardized the continuity of access to much-needed palliative care for cancer patients.

1 Estimated number and proportion (5-year) in 2020, all cancers, sexes, ages.
patients with cancer. This was largely due to new safety protocols in all services and for reorganization of resources to implement new public health measures to combat the spread of the virus.

Morocco’s COVID-19 Multi-Partner Trust Fund (MPTF) Project contextualizes the country’s response to this issue through its objectives: maintaining essential health services (particularly for populations in vulnerable situations) and strengthening protection and prevention for healthcare and other frontline workers. With the scope of this project, WHO, United Nations Population Fund, and United Nations Industrial Development Organization were three agencies that provided tailored support to the government to ensure continuity of palliative care for patients with cancer.

WHO led the research and evaluation of the impact of COVID-19 response measures and drafted recommendations for national health authorities to mitigate negative consequences of COVID-19 for patients with cancer. Additionally, as a Co-Chair of the Monitoring Committee for this Project, WHO evaluated, monitored, and reported on several programmes under the project.

Within this project, the WHO Country Office (WCO) carried out three different activities to ensure access to palliative care for patients with cancer throughout COVID-19 pandemic:

1) Mobile palliative care units (MPCUs). WCO procured four vehicles to operate MPCUs for bedridden patients in four different provinces, Agadir, Tiznit, Beni Mellal and Errachidia. In total, more than 400 patients from rural and isolated areas have benefited from and will continue to receive palliative care through home visits under this programme. The presence of MPCUs made possible several visits for the most vulnerable cancer patients in December 2020.

2) Two new hospital-based palliative care units (HPCUs). WHO facilitated the procurement of vital medical equipment for two HPCUs at the Regional Oncology Centres in Agadir and Beni Mellal. These units started their operation in January 2021 and will have a lasting impact on access to palliative care for cancer patients for years to come, throughout and beyond the pandemic.

3) Online training programme for healthcare professionals to deliver palliative care. Additionally, based on the national guide, WHO prepared an online, five-day training module for palliative care and pain management (4). As a result, 50 health professionals including nurses, general practitioners, specialists, social workers, programme facilitators, and mobile palliative care teams enhanced their technical knowledge on how to organize and coordinate palliative care, communicate with patient and their families, and manage end-of-life care.
Nepal story on COVID-19 vaccine deployment: a good start

The first COVID-19 case in Nepal was recorded on 23 January 2020. The number of cases started increasing from the third week of March 2020 and by the end of 2020 there were 260,593 cases, with 1,856 recorded fatalities.1

In early 2021, Nepal’s Ministry of Health and Population (MoHP) submitted the National Deployment and Vaccination Plan (NDVP), which was developed with technical support from WHO Country Office (WCO) and partners, to the COVAX Facility. The NDVP was reviewed and quickly approved by the Regional COVID-19 Review Committee. The plan was to secure enough doses to vaccinate 20% of the population at highest risk of COVID-19 disease and death through the COVAX Facility.2 Under the first COVAX allocation, the COVAX

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2  COVAX, the vaccine pillar of the Access to COVID-19 Tools (ACT) Accelerator, is co-led by the Coalition for Epidemic Preparedness Innovations (CEPI), GAVI, and the World Health Organization, working in partnership with developed and developing countries, vaccine manufacturers, UNICEF, the World Bank, and others. It is the only global initiative involving governments and manufacturers to ensure COVID-19 vaccines are available worldwide to both higher-income and lower-income countries.
Facility was expected to deliver 1.92 million vaccine doses to Nepal, out of which 348,000 doses as a first tranche has already been delivered to the country in March 2021. Based on vaccine availability, Nepal could further receive 9.73 million vaccine doses (indicative allocation) in 2021.

Meanwhile, Government of Nepal has also proactively secured additional 2.8 million doses of COVISHIELD and SARS-CoV-2 Vaccine (Vero Cell), Inactivated (InCoV) through diplomatic negotiations and direct procurement.

Nationwide vaccination campaign started at the end of January 2021 with operational committees and task forces formed at all levels - federal, province, districts, and local level (palika, municipality). These committees and task forces were leveraged existing immunization coordination committees that exists at all levels, which were expanded as per need for COVID-19 vaccination response. WHO Nepal played a role in coordinating and monitoring the action plan, alongside government, UNICEF and other partners. A dedicated team of WCO experts – under the WHO Immunization Preventable Disease programme (WHO-IPD) – advised MoHP on the introduction and rollout of COVID-19 vaccines as well as on other immunization-related policies and standard operational procedures based to ensure vaccine delivery with safety, quality, and efficacy. Furthermore, WCO served as technical secretariat for the National Immunization Advisory Committee (NIAC), mandated by the Immunization Act 2072 (C.E 2016) of Nepal to guide and support the overall immunization programme across the country. WHO Nepal also coordinated with different nodes of Ministry of Health and Population and helped design data systems to enable daily reporting of immunization data.

Nepal launched the COVID-19 vaccination campaign on 27 January 2021 and so far, has delivered 2.48 million vaccine doses vaccinating 6.95% of the total population with the first dose, and 1.2% with the second dose of COVID-19 vaccines. At first, based on the NDVP, health and social sector and frontliners (first priority group) were vaccinated achieving 86% coverage. Following this, people over 65 years old throughout the country and those over 55 years old in all high mountainous terrain districts were vaccinated, achieving 77% coverage (preliminary data). Recently, the first priority group have also been provided second dose of the vaccine.

The Department of Health Services of the Ministry of Health and Population, through the Integrated Health Information Management Section (IHIMS), has developed a daily reporting system and produces a daily bulletin on immunization coverage in DHIS-2 tool, with close support from WHO.

WHO-IPD staff at central level, and surveillance medical officers and consultants at field level supported the government in training, microplanning workshops, monitoring, and all aspects of surveillance concerning adverse events following immunization (AEFI). The National Immunization Programme conducted in-person health worker and vaccinator trainings that took place in the Kathmandu valley and nationwide in cascaded manner, and also virtual trainings from the centre for health workers, vaccinators, and AEFI focal persons, with close technical support from WHO-IPD.
WCO has also developed the monitoring checklist for the Government and partner agencies to use in the process of monitoring and supervision at vaccination sites. Monitoring checklist includes checkpoints for immunization site management, session site logistics, vaccine safety, information management, AEFI preparedness, and infection prevention and control measures (IPC). Data collected is collated and analysed by WHO and shared with MoHP, provinces and stakeholders on a regular basis to help programme managers use that information for immediate corrective action.

Other partners that contribute significantly to the vaccination campaign are UNICEF, Water-Aid, Red Cross, and Nepal Health Sector Support Programme.

The Government of Nepal plans to vaccinate up to 72% of its population as COVID-19 vaccination response. As more vaccines need to be procured for the rest of the population besides the 20% fully subsidized doses expected from the COVAX Facility, there are multiple alternative strategies of the government addressing the matter: government-to-government agreements or in-kind support through diplomatic channels, direct procurement agreements, as well as intent to finance procurement of COVID-19 vaccines via the COVAX Facility beyond the fully-subsidized doses.

Based on its robust routine immunization system and experience of conducting nation-wide mass vaccination campaigns, and proactive vaccine acceptance in the community at large, Nepal has safely and successfully demonstrated rapid roll out of COVID-19 vaccination. However, uncertainty regarding supplies and shortage of vaccine doses remain challenges to quickly vaccinating the entire targeted populations.
Addressing the mental health needs during COVID-19 pandemic in Nepal

The lockdown, curfews, self-isolation, social distancing, and quarantine that COVID-19 pandemic brought about have affected the overall physical, mental, spiritual and social wellbeing of the Nepalese. However, the people already suffering from mental health conditions are at a higher risk. The Government’s current attempt to integrate mental health services at primary care level is facing obstacles because of the lack of infrastructure, intermittent availability of medicines, and frequent change of trained health-care providers.

More than 4% of Nepal’s 29 million people (approx. 1.1 million individuals) are estimated to be currently experiencing mental disorder, with additional 5.2% of 13-18-year-olds. The situation has worsened after COVID-19 pandemic. A study1 from 2020 based on data collected online between 23 April 2020 and 3 May 2020 that aimed to track the psychosocial status of Nepalese people during the pandemic showed that half of the respondents experienced at least one psychological symptom. Data2 provided by the Nepal Police also showed an increasing

1.1 Improved access to quality essential health services

A psychiatrist helps an elderly couple at a recently expanded mental health outpatient service at the community hospital at Bajrabarahi Municipality of Nepal. Photo credit: WHO Nepal

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number of deaths from suicide, resulting in 16 to 18 deaths by suicide every day in 2020.

WHO Country Office Nepal (WCO) assisted the Minister of Health and Population (MoHP) in developing a COVID-19 Mental Health & Psychological Support (MHPSS) intervention framework. WHO supported in developing a legal and policy frameworks for implementation of National Mental Health Strategy and Action Plan developed by MoHP it – the necessary guidelines, standard operating procedures (SoPs), and training manuals.

The Health Emergency Operations Centre (HEOC) of the MoHP coordinated the pandemic response and activated the Inter-Agency Standing Committee (IASC) cluster and sub clusters including the Mental Health Sub-Cluster. The Epidemiology and Disease Control Division, Department of Health Services, led the Mental Health Sub-Cluster and WCO Nepal acted as a co-lead. The WHO experts supported the national response intervention in coordination of MHPSS partners’ aligning to WHO and IASC guidelines.

Working closely with the sub-cluster partners, WCO led the drafting of a short-term plan for COVID-19 MHPSS Intervention Framework, which gave strategic direction to the partners’ work in mental health interventions during the pandemic response. The document also played a key role in to setting a benchmark on optimum MHPSS response at the subnational level especially in provinces. In addition, IASC guidelines have been translated and adapted to the national context in collaboration with the Psychosocial Working Group.

WCO held regular mental health sub-cluster meetings to co-ordinate work among partners; at the provincial level similar coordination was facilitated by WHO Provincial Health Officers (PHOs) deployed in all seven provinces, to support provincial health authorities. As a result, more than 40,000 people received some form of psychosocial support. More than 20,000 children and adolescents were provided essential mental health support and 3,000 health-care providers saw their mental health needs addressed through stress management workshops and webinars. Also, 160 community psychosocial counsellors were trained and multiple FM radio stations across the country were engaged to disseminate messages. The main partners providing various mental health and psychosocial services are government hospitals, medical colleges, professional associations, and various NGOs with support from Government bodies or UN Agencies.

WCO also facilitated in national adaption and translation of the International Federation of the Red Cross Guideline on Remote Psychological First Aid, in collaboration with the Nepal Association of Clinical Psychologists. This document served as a guide to adjust to the unique challenges posed by the pandemic in delivering the psychosocial support. At least 120 counselors were oriented on this guideline to deliver PFA remotely.

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3 The Inter-Agency Standing Committee is an inter-agency forum of UN and non-UN humanitarian partners founded in 1992 to strengthen humanitarian assistance. The overall objective of the IASC is to improve the delivery of humanitarian assistance to affected populations.

4 Kanti Children Hospital, Tribhuvan University Teaching Hospital, Psychiatrist Association of Nepal, Nepalese Association of Clinical Psychologists, Association of Psychologists in Nepal, Centre for Mental Health and Counselling, TPO Nepal, Koshish, Nepal Red Cross Society, Child Workers In Nepal, Health Foundation Nepal, Unity in Health, Partners in Need
Additionally, WCO collaborated with the Government, TPO Nepal and Tribhuvan University Teaching Hospital and launched an online platform\(^5\) to support the mental health needs of health-care providers. The website offers tips on mental healthcare, modules on stress management, webinars, audio-visual and Information Education and Communication (IEC) materials, self-screening tools, and appointment and follow-up services.

Furthermore, the EDCD with WCO’s support, has developed a Program Implementation Guideline on Tele-mental Health. WCO installed videoconference (VC) equipment at the National Health Training Center, the EDCD, Mental Hospital Patan and two district hospitals at Illam and Kailali. With this support, 50 doctors and health workers in these two districts are trained on delivering essential mental health care and are supervised distantly through VC.

With the long-term vision of strengthening mental health programs in the country, WCO supported the Ministry of Health and Population in developing the National Mental Health Strategy and Action Plan. One of the main objectives of the strategy is improving the access to quality of mental health services and increasing the resource allocation for mental health in Nepal. WCO has been supporting in implementing the strategy with necessary guidelines, standard operating procedures (SoPs), and training manuals.

Laboratory capacity building for COVID-19 response

When WHO declared COVID-19 a pandemic, on 11 March, there was only one public diagnostic respiratory virology laboratory in Nepal - the National Influenza Centre (NIC) at the National Public Health Laboratory (NPHL). Furthermore, it was limited to testing for the influenza virus and HIV. On 13 January 2020, when the first suspected case of COVID-19 appeared in Nepal, NPHL did not have the reagents specifically required to test for SARS-CoV-2. Thus, WHO Country Office in Nepal (WCO) helped with shipping the sample taken from the patient to the WHO Collaborating Centre in Hong Kong, where tests came out positive. It was clear that in case of a widespread outbreak the country was at high potential risk because of a severe lack of necessary equipment, infrastructure, supplies and trained manpower for rapid diagnosis needed at scale.

Since mid-March 2020, WCO closely supported the Ministry of Health and Population (MoHP) in its broad effort to develop a national network of laboratories for testing and detection of SARS-CoV-2. The result of this endeavour is impressive: there are now 83 laboratories dedicated to the testing and detection of the SARS-CoV-2 virus (of which 48 are public and 35 privately owned).

Scaling up laboratory capacity for COVID-19 testing. Photo credit: WHO Nepal
The road leading up to this was difficult and started with a single first step: NPHL started testing for the virus on 15 March 2020, becoming the first and only laboratory capable of such testing. WCO contributed by facilitating a partnership among NIC and a private research organization, Centre for Molecular Dynamics (CMDN), located in Kathmandu, which provided COVID-19 rRT-PCR primers and probes to NPHL to enable quick COVID-19 testing. Subsequently, WCO facilitated the supply of COVID-19 rRT-PCR reagents to NPHL. The Sukraraj Tropical and Infectious Disease Hospital was the designated primary hospital for the treatment of COVID-19 and the country began a process of establishing isolation wards, makeshift hospitals and quarantine centres to prepare for the virus.

Anticipating the challenge of transporting samples for testing from different areas of the country to NPHL, WCO selected and provided financial support to a local courier agency to ship the samples to NPHL from all 77 districts of Nepal in the first 3 months since the first confirmed case.

WCO acknowledged the requirement of high-level technical support in molecular diagnostics that the health system needed. In mid-March 2020 the Organization deployed to NPHL a senior laboratory expert through the Global Outbreak and Alert Response Network (GOARN). By the end of March 2020 more than 20 standard operating procedures for COVID-19 testing were developed - relating to COVID-19 testing proper, biomedical waste handling, laboratory biosafety and biosecurity, and training for NPHL staff. Also, the WHO expert supported NPHL to develop surge testing plans aimed at increasing the number of samples tested each day, operating the equipment, the procurement of reagents, and allocating staff and work shifts. Responding to the request of NPHL, WCO provided direct financial support to engage additional staff in NPHL and also coordinated the recruitment process for national and international consultants and medical officers.

WCO supported NPHL in identifying and approving the existing laboratories that were subsequently repurposed to test for COVID-19. Also, WHO consultants worked closely with various agencies under MOHP – NPHL, Epidemiology and Disease Control Division (EDCD), and Directorate of Health (DOH) to develop and issue the Interim Guidelines for SARS-CoV-2 PCR laboratories in National Public Health Laboratory Network Nepal.

WCO team supported NPHL in developing and reviewing more than thirty COVID-19 diagnostic laboratory SOPs, work instructions, assessment and audit reports referring to COVID-19 specificities. A fundamental aspect in the process of building laboratory capacity for COVID-19 pandemic response was the development of a comprehensive laboratory quality assurance programme for every new laboratory in the country, which WHO coordinated. Also, WCO supported the development and

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1 E.g.: Sample processing and aliquoting, viral RNA extraction (manual and automated), SARS-CoV-2 real time PCR assays, biorepository and archiving of samples, laboratory biosafety practices, use of biosafety cabinets, preparation of positive and negative control panel for kit validation, evaluation and verification of PCR kits for COVID-19, virus transport media kits for COVID-19.

2 WHO used a five-pronged approach to ensure lab quality: validation, re-testing, online assessment tool (jointly developed by WHO and NPHL) and desk review; Neqas PT panel, on-site review (conducted at regular intervals by a joint team of NPHL, MOHP and WHO, in laboratories in various provinces of Nepal).
implementation of a COVID-19 centralised management information system (MIS) and supported NPHL in data analysis. This tool showed that as of 4 March 2021 Nepal recorded a running total of 274,488 COVID-19 cases, 270,683 recoveries, and 3,010 deaths since the beginning of the outbreak. The disease has been detected in all provinces and districts, with Bagmati Province and Kathmandu the worst hit province and district, respectively. Also, 2,179,047 real-time RT-PCR (RT-qPCR) tests have been performed in 83 laboratories across the country, with the direct help of WHO.

Looking back at the process of developing the laboratory network in addressing COVID-19, Nepal has come a long way in terms of preparedness for public health surveillance and pandemic response. Almost all laboratories were performing molecular diagnostic assays for the first time in the first phase, when WHO conducted the laboratory quality assurance programme.

Nepal’s expansion of laboratory capacity presents a struggle to obtain key resources following the identification of the first case. Following this identification of the challenges, both NPHL and WHO identified strategic locations to support laboratory expansion rollout, and ultimately resulted in 83 sites being established. From this expansion, more than 2.1 million tests have been performed. Moreover, the expansion of laboratory capacity also shows how WHO CO worked together with the regional office, WHO Collaborating Centres associated with the WHO GISRS, GOARN and the Ministry of Health and Population, Govt of Nepal to not only expand physical sites, but to ensure quality of capacity expansion through enabling Quality Assurance mechanisms and establishing genome sequencing.

The expansion of laboratory capacity presents many lessons learned. Government, WHO, academia and the private sector came together in support of comprehensive health systems strengthening that enabled the expansion of laboratories to every district and more. Working together, key stakeholders were able to take limited resources and manpower and strengthen the lab capacity and operations so that not only was an expansion undertaken, but it was done so in relatively short time period of less than one year. In this respect, government and WHO worked collaboratively to identify the challenges and come up with strong solutions that not only addressed immediate response needs in the wake of COVID-19 pandemic, but supported Nepal’s overall health system in strengthening and scaling up human resources, capacity and equipment. Therefore, the lessons of this expansion identify the great teamwork presented by WHO and national government in enabling strong solutions for ensuring health security and universal health coverage.
Improving maternal and new-born health in Niger: a targeted approach to universal health coverage

Maternal, new-born and child health situation in Niger
A vast country located in the Sahel region, Niger is among the developing countries, ranking 189th on the Human Development Index. For over 20 years, Niger has sought to improve maternal, new-born and child health (MNCH) through national development plans. In the framework of the Millennium Development Goals (MDGs), Niger made substantial progress on Goal 4 by reducing child mortality from 123 per 1000 in 1992 to 52 per 1000 in 2015. Nevertheless, considerable efforts are still needed. In 2015, while the MDG 5 aimed to reach 175 maternal deaths per 100 000 live-births in Niger, the country recorded 189 maternal deaths per 100 000 live-births.


Curative consultation at CSI Yantala. Photo credit: WHO Niger

DISCLAIMER: This image was taken during a time of no community transmission of COVID-19. Community transmission is defined as the inability to relate confirmed cases through chains of transmission for a large number of cases, or by increasing positive tests through sentinel samples (routine systematic testing of respiratory samples from established laboratories). Preventative measures such as mask wearing and physical distancing should be used to prevent the spread of COVID-19.
Niger, the country recorded 555 of these. The neonatal mortality rate in 2015 was 27 per 1000 live-births. These indicators constitute major challenges for the health system. These challenges are compounded by the unequal distribution of health services in the country, a non-existent functional referral and counter-referral system (including emergency obstetric and neonatal care), insufficient quantity and quality of health human resources (in particular midwives and obstetricians), inadequate distribution of personnel, and insufficient equipment, health structures and training institutions. Niger also faces a shortage of trained personnel in MNCH specifically, including community outreach workers, socio-cultural barriers with respect to family planning services uptake, as well as an inadequate and uncoordinated health care supervision framework across levels of the health system. As a health priority, MNCH represents a strategic opportunity to strengthen Niger’s public health system.

**WHO support to improve maternal and new-born health**

Thanks to the mobilization of funds from the Islamic Development Bank (IDB) and the French Muskoka Fund, WHO, in collaboration with other agencies such as UNICEF, UNFPA, UN Women, and the World Bank, is supporting Niger’s efforts to improve maternal and child health, thereby contributing to the first pillar of the WHO’s Thirteenth Programme of Work (GPW 13) “1 billion more people with universal health coverage”.

WHO has implemented a comprehensive approach to strengthening the health system and improving maternal, new-born, and child health services by supporting the mobilization of communities to provide health services, building the capacity of health facilities and pre-, in-, and post-service health workers, ensuring adolescents’ access to sexual and reproductive health and rights, improving nutrition, and promoting women’s empowerment through the implementation of high-impact, intersectoral interventions. Through these efforts, Niger has seen a reduction in maternal mortality in recent years (509 deaths per 100 000 live-births in 2017), neonatal mortality (24 per 1 000 live-births in 2019), infant mortality (47 per 1 000 live-births in 2019), and under-five mortality (80 per 1,000 live-births in 2019 compared to 94 per 1 000 live-births in 2015).

In order to continue to improve maternal and new-born health services, strengthen monitoring of progress and identify strategies/actions to prevent maternal and new-born deaths, in 2020 WHO supported the revision and provision of tools (partographs, pre- and post-natal consultation cards, as well as maternal and child health diaries) for data collection and monitoring of maternal and new-born health. In additions, WHO built staff capacity by training 86 providers on quality maternal and neonatal care, resulting in improved and patient-centred health care in three regions (those with the lowest levels of service and the highest maternal and neonatal mortality rates). WHO also contributed to improving the quality of care for nearly 5 000 pregnant women requiring caesarean sections and 5 910 new-borns by equipping the Issaka Gazoby Maternity Hospital, a third-level referral maternity hospital in the capital, with four multi-parameter dynamaps, two mobile ultrasound scanners, a mobile

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labour monitor, two neonatal resuscitation tables, an electric hoover, two paediatric hoovers and two oxygen concentrators.

WHO has also strengthened high-impact interventions including the introduction of the community-based maternal and new-born care strategy and the integration of essential new-born and maternal care in 23 public and private health schools in Niger. Similarly, in order to ensure a comprehensive continuation of sexual and reproductive health for young people by adopting a life course approach, WHO has helped to introduce reproductive health education for adolescents into secondary school curricula in Niger, thereby reducing unwanted pregnancies in schools and contributing to the control of sexually transmitted infections. In addition, WHO supported the mapping of youth and adolescent sexual and reproductive health stakeholders, which led to the development of a roadmap for improving the quality of educational content and delivery of intensive school-based sexuality education.

Opportunities for maternal, new-born and child health post-COVID-19

In 2020, while the COVID-19 pandemic slowed progress on these activities due to movement restrictions, WHO continued discussions and worked virtually with central and regional levels and other partners to provide guidance and other necessary support. WHO took advantage of the slowdown in the implementation of planned activities to produce documents and to prepare for the mobilization of resources allocated at regional and district levels in order to move forward quickly once the restrictions were lifted.

In addition, in order to contribute to the continuity of essential health services in health facilities during the pandemic, WHO supported the training and raising awareness of health workers on infection prevention and control in health facilities, the redefinition of the patient circuit in these health facilities, as well as the provision of protective equipment (gowns, gloves, masks, etc.) and hand-washing materials.

In recent years, WHO has been able to contribute significantly to the improvement of maternal and new-born health in Niger by maximizing exchanges and communications with the government and various partners to advance the maternal health agenda. The engagement of maternal and child health actors has also helped to address the socio-cultural challenges before and during the pandemic. While the majority of women usually tend to use health care only when they get sick instead of attending preventively, the COVID-19 pandemic has raised awareness among the Nigerien population about the importance of accessing health care regularly. Despite the risk of COVID-19, health workers did not stop working and services did not close in 2020. This has strengthened trust and links with communities and represents a strategic opportunity to continue to improve maternal, new-born and child health and to move towards universal health coverage in Niger.
How WHO's polio investments are yielding dividends in Nigeria's COVID-19 pandemic response

The global drive to eradicate polio has made Nigeria home to the most extensive polio programme in Africa. WHO and other stakeholders have made significant and sustained polio-related investment over the years that have created valuable infrastructure, a cadre of highly experienced human resources and strong community networks that fulfilled a wide range of public health functions which served as the backbone for Nigeria's Coronavirus disease (COVID-19) pandemic response.

After Nigeria officially announced the first case of the COVID-19 pandemic on 27 February 2020, the Nigeria Centre for Disease Control (NCDC) activated a National Emergency Operations Centre (EOC), a model first introduced in the Nigeria polio programme with significant input from WHO. Extensive experience and investments from years of EOC operations as well as experience in response to a range of other outbreaks, provided a springboard to NCDC for a well-coordinated national preparedness and response to the COVID-19 pandemic. WHO substantially supported the multi-sectoral National COVID-19 EOC, which NCDC led with inputs from other government and non-

Immunization at the IDP camp. Photo credit: WHO Nigeria
government actors, and facilitated the activation of EOCs at sub-national levels.

WHO scaled up COVID-19 surveillance by supporting the government to leverage the existing polio infrastructure at state level including the Auto-Visual Acute Flaccid Paralysis Detection and Reporting (AVADAR) system, which WHO helped establish for polio surveillance. WHO facilitated integration of COVID-19 surveillance modules into AVADAR, enabling health workers to make free calls through a closed user group platform for surveillance reporting. More than a 7 128-strong network of community health agents conducted surveillance activities and facilitated tracking and follow-up of more than 6,655 contacts. The NCDC also leveraged this network in deploying the Surveillance Outbreak Response Management and Analysis System (SORMAS). SORMAS, an open-source mobile and modular web application, was deployed initially during previous polio and Ebola Virus Disease outbreaks but was updated to include COVID-19 contact tracing. The already available and experienced polio workforce enabled the rapid national scale-up of SORMAS to all local government areas.

One key feature that Nigeria’s polio programme had were long-standing and far-reaching community engagement teams. Their well-established relationships with local and community leaders enhanced successful public health advocacy efforts in sensitizing more than 11 700 religious and community leaders, in addition to 50 689 community volunteer informants who were a valuable resource for risk communication against anti-vaccine messages and information on infection prevention and control.

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**Trend of COVID-19 new confirmed cases, Nigeria.**

The critical roles that the WHO-funded polio assets and networks played in tackling the COVID-19 pandemic have contributed to Nigeria implementing successful measures to control the COVID-19 pandemic. Following an initial uptick in cases after the official outbreak announcement, Nigeria implemented strict protocols that limited the number of total cases, easing pressures on medical facilities, and kept overall death rates low. Reductions in new confirmed cases allowed the country to begin a rapid but careful reopening of the economy in August 2020. Nigeria experienced a second pandemic wave between December 2020 and February 2021, but the country mounted an effective response to limit the spread. Overall, the country has only recorded 784 cases per million population as of 21 March 2021, compared to the average of 3,056 cases per million in the Africa region.¹

Furthermore, polio structures also provide expertise to deliver vaccines urgently to children who have missed out on vital vaccines during the pandemic.

The diversity of interventions in Nigeria’s COVID-19 pandemic response through the WHO polio-funded infrastructure and human resources demonstrates vital contributions toward resilient health systems and the advancement of future national and global health security.

Accelerating Access to Essential Health Services during North Macedonia's COVID-19 Response

COVID-19 strained health systems around the world, reducing capacities to maintain preventive and curative services—particularly for underserved communities. North Macedonia’s health care system was similarly challenged and as a consequence a range of essential health services (EHS) were disrupted or suspended across the country.

During 2020, WHO/Europe’s Clinical and Health Interventions pillar of the COVID-19 Incident Management Support Team developed and implemented a four-step approach for countries to maintain EHS in the context of the pandemic. This was adapted with WHO’s Country Office in North Macedonia (WCO) and the MoH, tailoring the process to the North Macedonian context. In June 2020, WCO supported the MoH, the Health Insurance Fund and the Agency for Medicines and Medical Devices to conduct a rapid assessment and situation analysis of the impact of COVID-19 on EHS. The MoH in cooperation with WCO subsequently established a technical working group to develop an action plan for maintaining EHS during North Macedonia’s COVID-19 response. WCO and MoH recognized the importance of securing the

Efforts to reverse a trend of increasing perinatal death rates in North Macedonia. Photo credit: WHO North Macedonia
government’s endorsement of the EHS action plan and established an EHS focal point within the national emergency management team—enabling a consensus on the list of EHS to be maintained during all future health emergencies.

MoH supported by the WHO country team is now implementing an Action Plan to restore and maintain the continuity of EHS centred around addressing the needs of those most vulnerable or at risk. In order to achieve this, North Macedonia is strengthening institutional and human resource capacities, prioritizing safeguarding the mental health and wellbeing of frontline workers, prioritizing the health of mothers and children, providing continuous immunization, rolling out palliative services and leveraging technology to reach every last mile of the country.

**Strengthening institutional and human resource capacities to maintain EHS alongside the nation’s COVID-19 response.** In response to the pandemic, MoH bolstered institutional and human resource capacities, increasing the number of physicians, nurses epidemiologists at the IPH and beds within infectious disease departments and clinics. Strengthened the surveillance and lab capacities as well as governance for EHS to ensure maintaining continuity of the EHS. Further, to address the surge in demand for health services, MoH utilized prefabricated modular hospitals, created special pathways in healthcare institutions, and repurposed existing facilities to provide care for COVID-19 patients, alongside maintaining essential health services.

**Safeguarding the mental health and wellbeing of frontline workers:** COVID-19 put a tremendous strain on health care workers (HCWs)—both physically and psychologically. WCO recognized that frontline health workers staffed at primary care facilities across North Macedonia were facing the brunt of increased demands for services and required additional support. WCO therefore worked with the MoH to deliver three training modules on mental health and psychosocial support services for HCWs in North Macedonia. Over 1,000 HCWs availed this training within the first month of its launch. WCO thus raised awareness on the importance of mental health and psychosocial support—both for the general population and HCWs. Furthermore, WCO enhanced the capacity of HCWs to identify symptoms associated with increased stress, utilize strategies for self-help in emergencies, and thus manage their own well-being. Primary health care workers were also trained to identify psychosocial needs of their patients and provide appropriate care and support.

**Prioritizing the health of mothers and children:** Prior to the pandemic, WCO had worked closely with MoH to reverse a trend of increasing perinatal death rates. In order to keep up the momentum of these efforts, a National multi-year master plan to enhance perinatal care outcomes was presented at the 2nd National Health Forum in early 2020. WCO’s technical inputs, advocacy and mobilization of financial resources to implement recommended maternal healthcare reforms lead to two pilot projects implemented in 2020 and a national roll-out planned for 2021. These efforts were informed by a national perinatal mortality audit.

**Leveraging technology for last mile reach to ensure EHS coverage.** In November 2020, WCO supported MoH to deploy an Integrated Telemedicine initiative in public and private health institutions...
across North Macedonia. This initiative enables general practitioners and health specialists to schedule and perform secure video consultations with patients using existing e-health infrastructure (MojTermin). Through WCO’s support, MoH leveraged a range of e-health interventions for last mile reach: telephone consultations for primary care, e-prescriptions for patients with chronic diseases, telemedicine for consultations, e-modules for immunization and a digital roster for healthcare workers. These e-health interventions ensured that vulnerable and underserved groups—rural communities, migrant groups, elderly persons, people living with disabilities, and refugees—had access to EHS. Technological advances facilitated the exchange of knowledge and best practices among practitioners, and between patients and healthcare providers. Additionally, an e-module for immunization was implemented during this period—enabling better monitoring of routine vaccination services, enhancing immunization coverage and paving the way for COVID-19 vaccination roll-out.

North Macedonia’s EHS action plan emphasizes that EHS provision is a cornerstone in any health emergency response. With the support of WHO’s regional and country level efforts, North Macedonia achieved an optimal balance by implementing a true dual-track response between responding to the COVID-19 pandemic and delivering EHS. E-health infrastructure will be leveraged in the future to expand EHS coverage and provide e-learning opportunities for health professionals. Working in partnership with North Macedonia’s MoH to streamline service delivery during an emergency, WCO has ensured that the country is better prepared and thereby better protected in the event of future health emergencies.
OMAN

Oman continues spearheading the patient safety movement amidst COVID-19

Resilient health systems that can manage a global crisis while maintaining regular services and ongoing initiatives were crucial to managing the health of populations in 2020. One remarkable case of this is Oman’s healthcare system, which maintained current initiatives and expanded its scope of work to address the pandemic’s capacity needs. In particular, the Ministry of Health (MOH) was actively involved with COVID-19 efforts while continuing its duties as one of the global leaders of the patient safety movement.

After countries join the PSFHI, the selected hospitals undergo improvement processes (e.g., amendments of hospital policies or additional staff training) and assessment (internally through a self-assessment or externally by WHO).

During COVID-19, MOH’s Directorate General Quality Assurance Centre (DGQAC), who leads Oman’s patient safety initiatives, proactively supported several hospitals’ audit activities to ensure patient and staff safety. Moreover, the Directorate contributed significantly to the efforts of the MOH call centre in educating people on COVID-19, a setup established mainly for responding to queries and concerns raised by healthcare workers and the general public. The DGQAC was also heavily

Leadership engagement and oversight for patient and staff safety during COVID-19 pandemic - Visit of HE Dr Mohammed Al Saidi, Minister of Health in Oman to the COVID-19 Centers in Royal Hospital. Photo credit: WHO Oman
involved in developing and updating several clinical guidelines, hospital regulations, and national policies to align with COVID-19 conditions and led a committee to document all efforts and processes conducted during the pandemic in the health sector.

As one of the leading implementers of the Patient Safety Friendly Hospital Initiative (PSFHI) in the Eastern Mediterranean Region, MOH continued to provide crucial mentorship to other countries that participate in PSFHI. Working with WHO, they continued supporting Pakistan in PSFHI implementation (building on the previous hosting for a ten-participant delegation from Pakistan in October 2019) by organizing a virtual surveyor training on the third edition of PSFHI standards in July 2020. This training was attended by 40 professionals from both Oman and Pakistan and was delivered using Oman’s newly established web-based global resource platform for best practices in Patient Safety and Quality of Care.

The PSFHI was initiated in 2011 by EMRO in response to evidence of high rates of preventable adverse events, deaths, and permanent disabilities in hospital settings. This initiative, technically supported by WHO, is under the stewardship of governments that lead on:

- establishing relevant national committees
- identifying and enrolling hospitals, providing coaching, and coordinating efforts to assess
- improving and sustaining PSFHI

Oman has become a prominent global pioneer in patient safety, establishing its first national patient safety day in 2018 (later endorsed by WHO as World Patient Safety Day in 2019). Despite MOH preoccupation with the COVID-19 response, Oman was able to celebrate the third National and second International Patient Safety Day under the theme of “Health Worker Safety: A Priority for Patient Safety” in September 2020. This two-day virtual event featured a message from EMRO’s Director, Dr Ahmed Al Mandhari, and international, regional and local experts with more than 350 attendees. On this commemorative day, Oman also made headway on patient safety within primary care, officially launching the Patient Safety Friendly Framework for Primary Care. By December 2020, MOH completed a pilot test of this framework’s standards and started adopting the framework within selected primary healthcare centres in Oman to better understand its field feasibility prior to its roll-out. MOH has also since developed tools and methodology for a patient experience survey planned for 2021.

As a long-standing WHO partner for patient safety, and the PSFHI specifically, Oman was hence able to swiftly sustain its patient safety activities during COVID-19. Dating back to 2016, Oman and WHO’s PSFHI collaboration builds on a long history of joint progress towards Universal Health Coverage (UHC). The DGQAC considers PSFHI a natural step towards UHC, as access to safe and high-quality health service is essential to the UHC mission. As per 2019 MOH figures, Oman’s UHC service coverage index stands at 75, well above the EMRO average. Moreover, Oman stands as a regional model, augmented by the designation of the DGQAC as a WHO Collaborating Centre for Quality and Patient Safety Training in 2018.

Some PSFHI achievements since its pilot in 2016 in Oman:
- 26 hospitals, both public and private, have joined PSFHI (almost 90% of hospitals in Oman)
- More hospitals have been assessed, all achieving 100% of the PSFHI’s critical standards and classified as either level 2 or level 3 (i.e., in addition to meeting the critical standards, they also achieved 60-89% or more than 90% of the core standards; respectively)

Since joining the global patient safety movement, Oman has comprehensively integrated the initiative into its strategic planning and health system targets. Oman has also embedded patient safety into curricula at health science universities that educate and train future health care professionals. Their well-established work in patient safety proved invaluable for both regular patient care and for addressing COVID-19, making hospitals better-equipped to stop transmission and spread of the virus within and beyond its doors. In showing its health system’s resilience against a global pandemic, Oman has demonstrated the value of investing in safe and high-quality health services globally. Furthermore, these enduring efforts have demonstrated Oman’s ability to be a reliable and sustainable partner for WHO and other countries involved in the patient safety movement.
Flexible in approach and committed to goals

“We change our strategy as the pandemic evolves. We change our plans as cases rise and fall. WHO stands fully committed to provide unconditional support to the Government of Pakistan to strengthen its response to curtail COVID-19 pandemic is Pakistan,” stated Dr Palitha Mahipala, WHO Representative in Pakistan. And this statement aptly describes the flexibility and involvement of WHO in supporting Pakistan to respond to the COVID-19 pandemic. As a developing country with over 200 million inhabitants, Pakistan fared well in the first months of 2020. By the middle of the year, however, the confirmed cases began to rise and reached a peak in June 2020. With the introduction of non-pharmaceutical Public Health measures, effectively advocating and encouraging communities to adopt hygiene practices, the COVID-19 virus numbers started to decrease, before levelling out at the higher average values at the year’s end. During ups and downs, and everywhere in between, WHO supported the Government of Pakistan to respond to the public health emergency by strengthening Surveillance system, enhancing lab testing capacity, strengthening Infection Prevention and

1 COVID-19 in Pakistan: WHO fighting tirelessly against the odds, assessed on 4 March, 2021.
Control (IPC), Strengthening points of entry, country level coordination, case management, Risk Communication and Community Engagement (RCCE), maintaining essential health services and providing technical support to guide implementation of non-pharmaceutical measures.

Assisted by WHO, the Government adopted the Preparedness and Response Plan that guided measures and actions to come. The plan also served as a basis for mobilizing international support, while its mechanism ensured transparent coordination of funds. In addition to the time-proved tools, WHO made innovative steps, too. One of them has been the formation of a Think Tank that closely follows public health trends and advises on possible actions. Composed of members from academia, public bodies and ministries, the Think Tank combines different points of view to give informed opinions.

As the virus was spreading, measures and efforts were put in place to strengthen Pakistan’s surveillance and reporting system for the country-wide surveillance of infectious diseases. Pakistan has a surveillance system in place of more than two decades of experience with the poliovirus. Supported by WHO, this system was redirected for early case detection and reporting on COVID-19 pandemic. In addition to this, to ensure the adequate skills but also safety of health workers, WHO deployed 14 surveillance consultants, and trained 142 rapid response teams and 15,965 health workers. The similar was true for laboratories. WHO also donated 34 Real Time PCR Testing Machines to the Government of Pakistan to enhance the testing capacities of the Public Health Laboratories. Supported by WHO, Public Health Laboratories in Pakistan increased their testing capacities from less than 500 to over 100,000 tests per day. Similarly, WHO donated Personal Protection Equipment (PPEs), hand hygiene products and antigen testing kits to the Federal and Provincial Health Ministries for curtailing the spread of COVID-19 virus across the country.

Meanwhile, the Government of Pakistan has been informing the people on public health measures and personal hygiene recommendations, while fighting myths and misconceptions. Together with WHO, Pakistan launched the ‘WE CARE’ program, which gives motivational support and safety advice through videos, TV and radio. By November 2020, ‘WE CARE’ trained nearly 100,000 health workers. And to deliver the message to the many, WHO partnered with social media platforms and reached out to media professionals, religious leaders, influencers and the people who recovered from COVID-19 to engage and inform communities.

To further strengthen the response at country level, the various levels of WHO; Headquarters and Regional office, supported the country office through virtual meetings. This was instrumental to the country because required technical expertise was made available on time through these meetings.

Finally, COVID-19 did not stop Pakistan’s efforts to make essential health services available to the whole population. Although some services, like immunization, nutrition, maternal and child health slowed down, they caught up within few months. And the importance of other essential health services including mental health was reaffirmed during the COVID-19 pandemic to ensure universal health

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2 COVID-19 in Pakistan: WHO fighting tirelessly against the odds, assessed on 4 March, 2021.
coverage. For instance, WHO supported Telemedicine as an alternative modality to provision of health services to the communities in the country.

Looking to the future, WHO and Pakistan started a serological study that assesses the presence of COVID-19 antibodies in the general population. Its findings will support public health policies in the year to come. WHO has also supported the government with 36 ambulances and 150 motorbikes that will be useful for a comprehensive response to COVID-19 including support to vaccination. WHO reaffirms its commitment and support to the Government of Pakistan in responding to the COVID-19 pandemic in the country.
WHO and Philippines: Covering lost grounds to end polio and measles during the COVID-19 pandemic

In the Philippines, the COVID-19 pandemic is a new chapter in an old story of threats to progress with immunisation services and children's health. Before the pandemic, immunisation (DPT3) coverage in the country decreased by 14 percentage points between 2010 and 2019,1 and this has led to the recent resurgences of polio, measles, and other vaccine-preventable diseases.2 Key challenges confronting the country's immunisation programme include stock-outs and vaccine hesitancy due to suspected or actual adverse events from vaccination. A critical task was to rapidly resume implementation temporarily halted by initial COVID-19 pandemic restrictions.

Amid the COVID-19 pandemic, in the national fights against deadly vaccine preventable diseases, the government of Philippines has demonstrated strong commitment, leadership and resilience, and contributes in-kind and up to 85% of operational costs. Ensuring

1 WHO and UNICEF. Immunization coverage: are we losing ground? Available at https://data.unicef.org/resources/immunization-coverage-are-we-losing-ground/, accessed on 25 March 2021.
immunization goals are met and maintained is an important contributor to the GPW 13 goals and to achieving the SDGs.

WHO facilitated safe delivery of immunisation services while curbing COVID-19 pandemic transmission by supporting in-country strategic planning at national, regional, and local levels. A notable outcome of this coordination effort was inclusion of WHO guidelines on maintaining essential immunisation services as part of the national protocol for Coordinated Operations to Defeat Epidemic (CODE). Based on this guidance, WHO advised the Philippines Department of Health (DOH) in issuing guidelines on implementation of routine immunization, measles outbreak response immunization, polio outbreak response immunization and conduct of the National Measles-Rubella-Polio supplementary immunization activities (SIA) during the COVID-19 Pandemic. Furthermore, WHO provided medical supplies and personal protective equipment (PPE) to enable health workers to comply with hygiene and physical distancing requirements.

WHO also provided operational support to deliver planned interventions in line with CODE. For example, in place of the face-to-face model of training health workers, WHO played a critical role in adopting internet based virtual platforms to conduct training for health workers and volunteers. This shift enabled the continuation of a wide range of public health functions, including disease surveillance, data management, and community engagement. By the end of February 2021, over 3400 frontline workers and volunteers had been trained in close coordination with local community leaders, enabling the synchronisation of efforts for both polio, measles, and COVID-19 pandemic control.

It was also essential to address misinformation and vaccine hesitancy through effective communication and community engagement approaches. WHO worked with the Philippines' government at all levels to develop communication guidance, messages and materials to address these issues while closely engaging with local chief executives, community leaders and communities. This close engagement at the local level allowed the bridging of resource gaps for robust surveillance and case-finding within communities.

These WHO-supported efforts have resulted in resumption of routine immunisation as well as essential polio and measles outbreak response activities despite challenges imposed by the COVID-19 pandemic. On 20 July 2020, the Sabayang Patak Kontra Polio (SPKP), the national immunisation campaign which had been halted due to the COVID-19 pandemic, resumed in a phased approach for children under five years in Mindanao, Region 3 (Central Luzon), and provinces of Laguna, Cavite, and Rizal in Region 4A.

In the Mindanao region, 98.1% (3 400 000) of eligible children aged under 5 years were immunised, surpassing the WHO epidemiological threshold of 95% vaccination coverage to respond to outbreaks. Children aged under 10 years in selected areas in Mindanao also received polio vaccination. In Central Luzon, 81.6% (1 093 317) of eligible children were immunised, while more than 80% (2 000 000) of eligible children were vaccinated in the more challenging region 4A with a higher incidence of COVID-19. WHO provided on the ground critical technical support for the planning, training and monitoring of this campaign and all the subsequent campaigns.
The second round of the SPKP campaign for the measles-rubella and oral polio vaccine campaign was conducted on 14 – 27 September 2020. More than 85% (1,185,005) of eligible children aged under 5 years were immunised in the three provinces (Laguna, Cavite, Rizal) of the Calabarzon region. The country also embarked on 26 October an even more challenging injection campaign against measles-rubella disease with the inclusion of oral polio vaccine for all eligible children less than 5 years old. The first phase included 11 of 17 regions. This campaign resulted in over 92% national immunisation coverage for measles-rubella vaccine and 89% for oral polio vaccine. The last phase of the national campaign in the remaining 6 provinces started February 2021 and will soon be completed again reaching 90% of the target population. It should be noted that all these campaigns were hindered by typhoons, other inclement weather and compromised security situations, in addition to the on-going COVID-19 outbreak. This makes the achievement all the more remarkable.

The Philippines experience shows that with political commitment and coordination, immunisation programmes can be quickly restored and maintained following unexpected disruptions. WHO’s efforts in the Philippine contributed significantly to make this happen.
Influenza preparedness helps ready the Philippines for COVID-19

Joint influenza preparedness planning and swift inter-agency action enabled a quick response to COVID-19 in the Philippines, buying the country’s health system much-needed time to prepare for an inevitable surge in cases.

The first death from COVID-19 outside China was reported in the Philippines on 1 February 2020. The event quickly prompted an interagency contingency planning workshop to agree priorities for government interventions. The workshop, held on 27–28 February 2020, included participants from the departments of health, agriculture, natural resources, interior and local governance, education, social welfare and development, public works, trade, transport, foreign affairs and justice, as well as representatives from the Office of Civil Defense, the police, the armed forces, the Philippine Red Cross, UNICEF and WHO.

The same group of agencies had come together several months before, in November 2019, to test the country’s Pandemic Influenza Preparedness Plan through a tabletop exercise. The lessons learnt from that joint exercise, and the recommendations issued by participants...
to strengthen pandemic preparedness, were to be used to update the plan in 2020 but have since also proved invaluable in informing the Philippine government’s approach to COVID-19.

For example, the inter-agency connections forged in November enabled the Department of Health to identify and convene the right stakeholders quickly and effectively in February and cement working relationships. This greatly facilitated the activation of an Inter-Agency Task Force for the Management of Emerging Infectious Diseases (IATF-EID), led by the Secretary of Health, to coordinate the country’s COVID-19 response. Similarly, the awareness around responding to pandemic influenza that was built among government stakeholders in November enabled the quick identification of priority interventions and their rapid adoption in February and March. One of those interventions was a strict lockdown imposed from 13 March, which prevented significant morbidity and mortality by slowing the spread of disease during the early days of the COVID-19 crisis and allowing the country to prepare its health system for the inevitable surge in cases that came on easing restrictions in June 2020.

Pandemic influenza preparedness has also provided the platform for laboratory capacities in the Philippines’ COVID-19 response. Thanks to capacity strengthening provided through the Pandemic Influenza Preparedness (PIP) Partnership Contribution, all five of the government’s dedicated influenza laboratories were able to quickly convert into COVID-19 laboratories; and testing capacity has been steadily growing since. The Philippines currently has 220 COVID-accredited laboratories that combined can test up to 70,000 samples per day.
Strengthening Rwanda Food and Drugs Authority: impacts to last for generations

Prior to the establishment of Rwanda Food and Drugs Authority (Rwanda FDA) in February 2018, there was insufficient infrastructure and human resources to implement and operate an autonomous regulatory institution for both foods and pharmaceuticals. This contributed to inadequate assurance of quality, safety, effectiveness of medicines and food products in Rwanda. With enthusiasm and commitment from the Government of Rwanda and advocacy by WHO and other stakeholders, Rwanda FDA was established. In subsequent years, WHO has continued to help build capacity and strengthen the newly-established institution.

Building operational and regulatory capacities for the sustainability of Rwanda FDA

WHO Rwanda took part in several activities to help build capacity for Rwanda FDA to become more self-sustainable and effective. To begin, the first benchmarking activity that WHO Rwanda helped conduct in 2018 assessed the maturity level of the regulatory institution. At the end of the assessment, 136 recommendations were identified in an Institutional Development Plan (IDP) to move the institution from...
maturity level 1 to maturity level 3. Following this, WHO Rwanda facilitated the establishment and convening of the Coalition of Interested Parties (CIP), which included WHO (Country Office, Regional Office for Africa, and headquarters), United States Agency for International Development, Global Health Supply Chain Management, Unites States Pharmacopeia/Promoting the Quality of Medicines Plus (UPS/PSM+) Management Sciences for Health/Medicines, Technologies, and Pharmaceutical Services Program (MSH/MTaPs), Trademark East Africa, Partners in Health in Rwanda, Food and Agriculture Organization of the United Nations (FAO), University of Rwanda, Ministry of Health, and Rwanda FDA with the aim of supporting the identified gaps during the first benchmarking by WHO. WHO Rwanda built strong partnerships through the CIP, which helped achieve consensus among stakeholders on the Rwanda FDA roadmap to implement the recommendations.

To improve operational capacity, WHO Rwanda alongside the other CIP members, supported the development of more than 100 operational regulatory documents including regulations, guidelines, manuals, SOPs, and forms for medicines and food products. Additionally, WHO provided technical assistance necessary for the training of new Rwanda FDA staff. These efforts have resulted in more than 120 qualified staff members newly hired and trained by 2020, helping strengthen human resources capacity and the operations of the institution. Despite being a young organization, Rwanda FDA has been able to license 17 pharmaceutical manufacturing companies (four big and 13 small-scale), more than 700 retail and wholesale pharmacies, and has been able to approve more than 4,000 human and veterinary medicines up to February 2021.

All of these efforts have ultimately led Rwanda FDA to better serve the Rwandan population in vital ways throughout the COVID-19 pandemic. The organizational improvements have enabled the appropriate regulation of COVID-19-related products. From the beginning of the pandemic up to now, Rwanda FDA has inspected more than 100 manufacturers and sellers of COVID-19-related products such as hand sanitizers, face masks, face shields, and other personal protective equipment (PPEs). WHO will soon be supporting Rwanda FDA in improving capacity on monitoring and regulation of COVID-19 vaccine quality and safety.

**Ongoing evaluations and actions for improvements**

To support continued improvements of Rwanda FDA, moreover, WHO is Piloting WHO Global Competency Framework with Rwanda FDA and conducted a needs assessment in coordination with the WHO Regional Office for Africa (AFRO) and WHO headquarters to identify areas of improvement for the regulation of clinical trials. WHO Rwanda has been preparing for the second benchmarking activity scheduled in August 2021. These ongoing evaluation efforts mark a crucial point in time for Rwanda FDA, a time for reflection on the strides of progress made in the sector to identify the organizational changes needed to bring the maturity, efficiency, and effectiveness of Rwanda FDA to the next level. WHO support in Rwanda FDA’s journey, has and will continue to improve regulatory capacity to ensure the quality, safety, and efficacy of health products for the Rwandan population for years to come.
Implementing the DHIS2 to accelerate Universal Health Coverage in São Tomé and Principe

The Democratic Republic of São Tomé and Principe is a Least Developed Country (LDC) as well as a Small Island Developing State (SIDS), with a fragile and externally dependent economy and high poverty rates. The country witnessed an epidemiological transition, with a double burden of communicable and non-communicable diseases that coexist with high burden of neonatal disorders.

As in many countries around the world, until recently São Tomé and Principe faced issues with good quality data collection, validation, and decision-making due to the lack of a single health information system meeting international standards. There existed several parallel information subsystems, mostly paper-based, related to different health programs and

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1 In 2020, an estimated 68% of the population lived below the poverty line for lower middle-income countries ($3.2 in 2011 PPP); World Bank. (2020). Macro Poverty Outlook - Sub-Saharan Africa. Washington DC.
health facilities. Consequentially, without full integration, data collection efforts were duplicated, leading to lower data quality and usability.\(^3\)

To address this structural weakness and to improve routine health data collection, data quality, and data analysis, across the entire health system, the Ministry of Health (MoH) of São Tomé and Principe decided to officially adopt and expand the District Health Information Software (DHIS2) platform.\(^4\) World Health Organization (WHO) and United Nations Development Programme (UNDP) provided technical and operational support to the government of São Tomé and Principe on the launch of DHIS2.

After the initial implementation of the aggregated data module for the programs funded by the Global Fund and GAVI, the DHIS2 individual tracker was, in 2020, customized to several other health services and programs, and implemented for individual data reporting and patient registry for many areas. These include single patient registry at primary healthcare (PHC); emergency consultation at PHC; death registration; HIV testing and treatment; tuberculosis treatment and monitoring; malaria investigation; reproductive, maternal, infant, and adolescent health; immunization; reporting of laboratorial results for COVID-19; COVID-19 vaccination, and monitoring of adverse effects (AEFI tracker).

WHO trained healthcare personnel on reporting, validation, and analysis of aggregate and individual data, at the national, district, and facility levels, while UNDP purchased the equipment and tablets needed to implement the system.

WHO’s technical support was essential for strategic planning and coordination of the DHIS2 expansion project across the various institutions involved. WHO is the co-chair of the Country Coordinating Mechanism (CCM) as well as the Health Information System Steering Committee, composed of MoH, different agencies and technical partners, such as the Global Fund, Gavi, Republics of China, Portugal, Brasil, some national non-governmental organisations and the civil society. Partners rely on health data that is generated through DHIS2 to identify priority investments in health sector and to monitor these investments’ progress and results.

Currently, WHO and other UN agencies are implementing a UN Sustainable Development Goals (SDG) Joint Programme entitled Reaching the furthest behind first: A catalytic approach to supporting the social protection in São Tomé & Principe.\(^5\) Through this project a special DHIS2 module has been developed to ensure that the MoH information system can monitor access to health services for all, and particularly for the most vulnerable people. This universal health coverage pilot project will enable the most vulnerable to benefit from subsidized access to essential health services, and DHIS2 is the health information platform that will enable to monitor progress and impact by linking-up the health

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3 As an example, to improve the surveillance and monitoring and evaluation of the HIV / AIDS, Malaria and Tuberculosis programs, the National Endemic Center in 2018/2019 created its own information subsystem, similarly to what happens in the Healthcare Directorate in relation to diseases of mandatory reporting and to the Program of Reproductive, maternal, infant, and adolescent health, and immunization. Simultaneously, most of the system remained largely paper-based and highly fragmented in nature.

4 This decision falls under the purview of a wider National Health Information Management strategy which aim is to ensure that DHIS2 becomes the sole health information platform to inform the MoH policymaking and planning.

services with the social registry. WHO is the leading agency providing technical support to MoH and to Ministry of Labour and social protection and services in this project.

In addition, São Tomé and Principe used DHIS2 in its COVID-19 response, most notably, for daily reporting and monitoring of COVID-19 cases and subsequently vaccination and adverse effects.

These efforts need to be continued for a sustainable implementation of DHIS2 at all levels of care consolidating the currently implemented modules and expanding to the national programs not yet in the system. A great focus is given to data generation for policy making, strategic decision-making, health planning, performance and program monitoring and evaluation, with the goal of improving the provision of quality essential health services and universal health coverage.
Turning the tide against road traffic accidents in Saudi Arabia

The Kingdom of Saudi Arabia has put road safety as one pillar of its National Transformation Programme (NTP) toward a bold and ambitious social and economic reform plan, Vision 2030. Reports show that the country aims to reduce the number of road traffic fatality to less than 10 per 100 000 by 2030.1 As of 2016, when the NTP began, Saudi Arabia had a road traffic fatality rate of 28.8 per 100 000 population, which was higher than the average rate in low-income countries (24.1 per 100 000) and more than triple the average rate in high-income countries. The economic consequences are also enormous, at an estimated US$ 3.75 billion, roughly 2% of national gross domestic product.

The National Ministerial Traffic Safety Committee (NMTSC), established in 2018, embodies the strong national commitment to address this problem by overseeing the implementation of a 4-year national road safety strategy, which established collaborative relationships between the Ministry of Health, Ministry of Interior and other relevant stakeholders for joint actions to address the multiple determinants of road traffic

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accidents. WHO has given a solid impetus for achieving the national road safety strategy goals in various ways.

First, WHO developed a multidimensional road safety assessment tool to support the NMTSC in conducting a situation analysis and making recommendations, following the five pillars of the WHO global plan for road safety, the Global Plan of the Decade of Action for Road Safety 2011-2020. Following a recommendation from the situational analysis, WHO supported the review and alignment of Saudi’s road safety laws and legislative frameworks with the WHO road safety legislative change model.

As part of the Vision 2030 smart cities’ design and the quality of life programmes, WHO also provides technical support to strengthen post-injury care, including disability and rehabilitation services. In the same vein, WHO also supports a review of Saudi’s emergency care system using the WHO Emergency Care System Assessment (ECSA) tool to generate action priorities for further system development, especially at the primary health care level. Engagement with insurance companies is ongoing to incentivise payment for such care costs and play a more active role in national efforts toward road safety.

WHO supports Saudi Arabia’s engagement in global road safety dialogues by guiding the country on WHO mechanisms and processes for documenting country efforts and achievements as a case of best practice to be shared with other countries globally. Through the support, Saudi assumed membership of the WHO Member States advisory group of the 3rd Global Ministerial Conference on Road Safety and is now playing a more active role in the newly established UN Road Safety Trust Fund, including becoming a signatory to UN Road Safety Conventions. Saudi Arabia also supported a recently passed resolution at the UN General Assembly to reduce global road traffic deaths and injuries by at least 50% from 2021 to 2030.

The reported incidence of road traffic injuries has reduced remarkably in the few years since the WHO began supporting Saudi Arabia’s road safety vision. Between 2016 and 2018, the number of accidents decreased by 25%, from 17 632 to 13 221, and related injuries fell by 25.5%, from 14 481 to 10 755. Strategies implemented in this period have been evidenced-based, in line with the WHO global road safety plan, the Decade of Action for Road Safety 2011-2020. Saudi’s experience in turning the tide against road traffic accidents demonstrates that comprehensive government initiatives that utilise evidence-based interventions can produce notable results.

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Safe practices during the Pilgrimage to the Grand Magal of Touba in Senegal during the COVID-19 Pandemic

By September 30, 2020, Senegal had confirmed 14,982 cases of COVID-19 and there had been 310 deaths attributed to the disease. It was during this global health emergency that the pilgrimage to the Grand Magal de Touba was set to take place. This religious gathering of more than 3 million people in the city of Touba had the potential to cause a new wave of COVID-19 infections and fatalities. The World Health Organization committed itself to helping the Region of Diourbel, where Touba is located, adopt good practices to prevent the pilgrimage from becoming a Super Spreader event.

In order to promote social distancing and other safe practices, the WHO trained 80 religious leaders on the means of transmission for COVID-19. They also learned how to communicate its risk and to influence peoples’ behavior in ways that was sensitive to the religious spirit of the gathering. Posters explaining good hand hygiene in Arabic and Wolof were distributed at the end of the training for them to use during the pilgrimage. Joint visits by infectious disease control and prevention teams were conducted in places of worship. In crowded places where
social distancing was not possible, such as cemeteries, the homes of marabouts, and community kitchens, added measures were taken to ensure people understood that their behavior can be their best defense against contracting COVID-19.

The WHO’s technical assistance helped this annual event, that is so important to the community, take place without endangering the health of the pilgrims or local population. Thanks to the training and the availability of communication materials developed in local languages, awareness-raising activities were carried out during caravans, in mosques, in homes, and at entry points to the city of Touba. This support also made it possible to document what went well and what needed improvement to help create future best practices in risk communication and community engagement.

Despite the risks that the pilgrimage represented, there was no noticeable rise of COVID-19 cases two weeks after the end of the festival. This goes to reinforce that preventive measures are effective and should be promoted, especially given that mass vaccination is not yet feasible in Senegal.

This initiative experienced many challenges. These included financial constraints; rumors and false information, social stigma and even denial that the disease existed among some segments of the population. All these created problems convincing worshipers to fully embrace social distancing and other protective measure. There were efforts to mitigate this through additional messaging and community awareness.

The lessons learned from this initiative will be used to prepare for future cultural and religious mass gatherings. Given the risk these large functions pose to public health, thoughtful preparation that still recognizes how important these events are to communities will continue to be a pressing need. As such, the WHO will continue to engage with community and religious leaders to reach the general public.

The WHO’s support in Senegal during the COVID-19 pandemic has been cross cutting, but the emphasis on risk communication and community engagement has been essential in enabling communities to adopt preventive measures and, so far, avoid the worst outcomes experienced in other parts of the globe.
Through learning to better caring

Older people are more vulnerable to COVID-19

From the firstly reported cases of pneumonia in late 2019, over the onset of a global pandemic in March 2020, to diverse national response models our knowledge about the virus has been changing. Treatment protocols get adjusted, policies updated, and behaviours followed. There was an observation, however, that remained the same throughout the year: older people are at higher risk of adverse outcomes of COVID-19 infection. That is why long-term care facilities in Serbia, like nursing homes and rehabilitative centres, diligently applied preventive measures. Restricting or prohibiting visits, minimizing social activities or increasing administrative demands for contact tracing have been some of them. Among other factors, they contributed to the relatively low share of infected residents (2.64%) and health/social workers (2.68%) as of May 2020. Yet, at the same time, new challenges were taking shape - prolonged working hours, necessity to acquire new skills under time pressure or information sharing between multiple bodies. In order to review effects of its actions, but also to learn from their impacts, Ministry of Labour, Employment, Veterans and Social Affairs (MLEVSA)

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initiated a review of its response to the pandemic, in line with the WHO methodology.

**Integrated approach - health and social care**

Trusted with a coordinator role, WHO provided a know-how to a working group consisting of interdisciplinary members, broadly categorized in three groups: (1) social/health workers from long-term care facilities; (2) social workers from social institutions of other kind (for example centres for social work); (3) health workers from public health institutes and hospitals. From May to June 2020, the group met in plenary sessions, workshops, and ad hoc meetings to exchange experiences and identify recommendations. Equally important was a perspective from residents and employees in long-term care facilities other than social/health workers: psychologists, cleaning personnel, financial managers or cooking staff. Their opinions came through focus groups and interviews in nine long-term care facilities. The review identified good practices and outlined more than 20 actions able to strengthen MLEVSA’s emergency preparedness.

**Looking ahead to leave no one behind**

Good practices and recommended actions covered a multitude of topics and actors. To facilitate their implementation, they were prioritized based on the shared estimate of urgency. Firstly, the correct usage of personal protective equipment (PPE) and related preventive measures were dominant challenges in the short term. WHO developed 24 000 posters that were distributed to more than 300 social care facilities across the country. Illustrating ways to use and dispose PPE, maintain hand and respiratory hygiene, and protect others the posters gave continuous support to health/social workers and visitors alike. This was especially important in early stages of the pandemic, as it took some time for protective routines to translate to peoples' behaviour. Secondly, expanding the knowledge on infection prevention and control was one of recommended actions in the medium term. Towards the end of 2020, WHO organized a training on these topics for nearly 100 social/health workers from more than 40 social care facilities. Ensuring a diversity of participants and facilities, the trainings straightened both individual skills and institutional knowledge in infection prevention. Finally, looking ahead in the long term, recommendations focused on maintaining good practices and ensuring resiliency of the system. WHO support to this end looks into ways of improving pieces of legislation issued during the pandemic - updating them with new knowledge. Moreover, the learning part goes beyond the legislation to include self-care advice for all people, who had COVID-19 related illness. This is the topic of the WHO developed brochure that reaches people in 2021, thus providing advice for faster recovery from disease, with a view to promoting well-being for all at all ages.
Bridging the Gap in access to Adolescent-Friendly Reproductive Health Services in Seychelles

Seychelles has made remarkable progress in its health development—achieving impressive healthcare indicators and ensuring that universal health coverage (UHC) is a constitutional right. It is globally recognized as a country that is most likely to achieve Sustainable Development Goals and has demonstrated strong political commitment to doing so through endorsement of a national Sustainable Development Strategy (2011-2020) that integrates public health within all policies. Despite significant advancements towards health equity, Seychelles still faces challenges in the quality and delivery of adolescents’ sexual and reproductive healthcare (SRH) services. These challenges are reflected in increasing adolescent fertility rates (pegged at 94/1000 in 2018), a growing percentage of pregnancies ending in abortion (22%–26%) that occur among women in the age category of 20–29 years and escalating rates of teenage pregnancies with two-thirds of all first pregnancies occurring in the age category of 15–24 years.

To address these challenges, Seychelles set a target to reduce teenage pregnancies by 50% in its National Health Strategic Plan (2016–
2020) and has been implementing measures accordingly. However, persistent gaps exist including low contraceptive use and high rates of unintended pregnancies and abortions among adolescents. In recognition of these challenges, WHO’s Country Office in Seychelles (WCO) has been supporting Seychelles’ Ministry of Health (MoH) to improve SRH outcomes and health-seeking behaviour among adolescents. To encourage evidence-based practices, WCO facilitated national-level surveys and research on adolescent reproductive health in 2019.

WCO then leveraged emerging findings to develop an integrated Reproductive, Maternal, Neonatal, Child, Adolescent Health and Nutrition (RMNCAH+N) strategy, and monitoring and evaluation framework. In 2020, through policy guidance and technical support from WCO, MoH conducted a national workshop designed to build agreement around the RMNCAH+N strategy among various stakeholders within the health system, thus enabling implementation. The national workshop secured participation from other bilateral agencies and development organizations working towards related health outcomes, including UNFPA, UNESCO, Doctors4Doctors, Alliance of Solidarity for the Family (ASFF). Bringing together representatives from relevant MoH programs and departments—Health Policy Development program, Youth Health Centre, Pharmaceutical Unit, and the Agency for the Prevention of Drug Abuse and Rehabilitation—WCO was able to secure nation-wide buy-in for proposed RMNCAH+N interventions.

Recognizing that implementing newly designed, high-impact, adolescent-friendly interventions would require increased capacities among healthcare workers (HCWs), WCO also facilitated training programs for HCWs across the country. These training programs sensitized HCWs on various barriers that adolescents face when accessing SRH information and services; gaps identified through WCO-led, deep-dive national-level research in 2019. To address this challenge, WHO's Regional Office for Africa, in collaboration with the Department of Sexual Reproductive Health and Research in Geneva, conducted capacity building workshops for over two dozen healthcare workers on providing comprehensive abortion care services. WCO-led training programs thus built alignment with and adherence to WHO recommendations and clinical guidelines on integrating adolescent- and youth-friendly services within the health system, among HCWs across Seychelles.

Efforts to implement Seychelles’ RMNCAH+N strategy were briefly interrupted on account of the COVID-19 pandemic. Strengthening essential health services during the country’s COVID-19 response strained health resources and temporarily disrupted efforts to strengthen RMNCAH+N services for adolescents. However, given that healthcare workers had received extensive training in providing comprehensive, adolescent-friendly SRH services prior to the onset of the pandemic—these services were quickly restored as demonstrated by continued uptake of RMNCAH+N services in 2020. Available data on continuity of SRH services show no significant disparity during the outbreak, including: number of antenatal care services provided by a trained healthcare worker, number of births in a health facility and number of women and newborns receiving post-natal care within two days of delivery. WHO’s
efforts thus strengthened and improved Seychelles’ healthcare system, facilitating continued provision of comprehensive, adolescent-friendly SRH services. Going forward, WCO will continue to support implementation of other key recommendations from the RMNCAH&N program assessment (2019) including development of a Comprehensive Adolescent Strategy.
COVID-19 response in a fragile setting: leveraging a challenge for UHC in Somalia

Key takeaways

1. Need to improve efficiency of work processes within the Organization to promptly respond to resource constraints to provide contextually-appropriate responses in countries such as Somalia, which has a fragile health system and security-compromised areas.
2. Need to plan for and transition to supporting capacity-building for government entities to work sustainably towards UHC and a stronger health systems in the long-term.

COVID-19 pandemic has overwhelmed and severely strained health systems around the world, the social and political context of Somalia has presented particularly unique challenges to maintain the country’s achievements in progressing towards universal health coverage (UHC). For the last 30 years, Somalia has been in a complex humanitarian emergency situation with compromised security and fragile health systems due to decades of civil war and recurring climatic shocks, such

Ensuring continuity of essential health services in Somalia. Photo credit: WHO Somalia

DISCLAIMER: This image was taken during a time of no community transmission of COVID-19. Community transmission is defined as the inability to relate confirmed cases through chains of transmission for a large number of cases, or by increasing positive tests through sentinel samples (routine systematic testing of respiratory samples from established laboratories). Preventative measures such as mask wearing and physical distancing should be used to prevent the spread of COVID-19.
as chronic droughts, floods, and cyclones. Therefore, the WHO Country Office’s (WCO) preparations for COVID-19 in Somalia began in January 2020, long before the first case was confirmed on 16 March 2020.

The WCO assumed a key technical advisory role for national health authorities, supporting the development of the national pandemic preparedness and response plan and the incident management system team in the Federal Ministry of Health and Human Services. Through active engagement and transparent communication with donors, the WCO also mobilized approximately US$ 15.6 million bilaterally. As a result of WHO’s fostered collaboration with the UN agencies and multilateral donors, close partnerships emerged with the European Union (EU) Delegation to Somalia, World Food Programme (WFP), and UN Humanitarian Air Service (UNHAS). Each provided in-kind flight support to WHO for the transportation of crucial equipment that enabled the establishment of testing laboratories, and the provision of life-saving supplies to maintain essential health services. In addition, as a result of WHO’s coordination role among partners, Somalia continued the collection of samples for testing both during and after the lockdown period.

Furthermore, the WCO directly operationalized its test, track, trace and treat strategy using data, innovation and technology to improve national surveillance and monitoring efforts. COVID-19 was rapidly added to the Early Warning, Alert and Response Network (EWARN)—an existing web-based epidemic-prone disease surveillance system, with 694 health facilities currently enrolled. Public Health Emergency Officers from the WCO trained staff at 260 newly-included facilities to identify and report cases through this system. In addition, WHO deployed 3,372 community healthcare workers (CHW), comprised mostly of women, to increase COVID-19 awareness in communities, identify suspected cases, follow up with confirmed cases, refer the severe cases to designated health centers, and trace potential contacts. Of all confirmed cases of COVID-19 in Somalia, approximately 42% were detected by CHWs at the household level. Rapid response teams comprising of 200 staff from WHO’s polio network went to 51 districts, including those with compromised security or lack of infrastructure. While there continues to be a gap in surveillance in many inaccessible areas, the effective use of technology and the mobilization of CHWs has kept community spread under control in Somalia’s fragile setting.

In focus: transforming immediate challenges into lasting health impacts

Before COVID-19 reached Somalia, there was little to no medical grade oxygen supply in the country. In To meet the immediate need for medical oxygen and related equipment WHO conducted a survey for existing supply and based on the survey’s results procured required equipment to address the identified gaps. Leveraging these measures, the WCO is working with United Nations Children’s Fund (UNICEF), WFP and UN Population Fund (UNFPA) through the Global Action Plan to scale up the availability of oxygen in all health centers which is likely to have a significant impact in preventing deaths, including from childhood pneumonia. Furthermore, three polymerase chain reaction (PCR) machines had been procured by WHO for setting up testing laboratories in Mogadishu, Hargeisa,
and Garowe in 2020. Moving forward, the WCO plans to expand laboratory testing capacity through additional PCR machines in other states, including the use of GeneXpert technology. This will not only be useful for increased COVID-19 testing capacity but also the detection of other epidemic-prone diseases.

Ongoing activities on scaling up the oxygen programme, research and evaluation for recovery of health systems, as well as WHO’s support to the government on maintaining essential health services (e.g. routine immunization for polio and measles and improving access to care for HIV/AIDS, tuberculosis, malaria and essential medicines) have proved vital to maintain Somalia’s achievements in progressing towards UHC. WHO’s work on ensuring that health systems strengthening and emergency response activities go hand in hand has reaffirmed the Organization’s key technical advisory and operational role in Somalia.
Critical reflections for a more effective and efficient COVID-19 response strategy: the role of Intra Action Reviews

South Africa has accounted for well over half of all COVID-19 cases and deaths in the WHO African region. Soon after the first case of COVID-19 was confirmed on 5 March 2020, the President of South Africa declared a state of national disaster on 15 March, enacting a series of stringent public health and social measures. All WHO South Africa staff were immediately repurposed for COVID-19 incident management. In line with the vision of WHO-AFRO Transformation Agenda and the WHO General Programme of Work 2019-2023 of bringing impact on the ground, the WCO team was swiftly deployed to the COVID-19 response. When the first wave of the pandemic in South Africa peaked in July 2020, the Department of Health requested WHO’s additional technical support towards the response. With coordination from the global, regional, and country levels of the Organization, by August 2020, 27 international experts, 12 locally recruited experts, and 19 WHO Country Office (WCO) staff comprising the surge teams were stationed in eight of nine provinces and at the national level. Human resources were managed efficiently as experts were assigned according to the specific needs of each province across areas including coordination;
risk communication and community engagement; epidemiology and surveillance, data and information management; infection prevention and control; case management; and operations support.

Among many deliverables, the WHO Team was tasked with a review of the COVID-19 response. One national-level and eight provincial reviews were conducted using the WHO Intra Action Reviews (IAR) methodology in collaboration with the National Department of Health (NDoH), Incident Management Team (IMT), and Provincial Departments of Health. The IAR provided an opportunity for the officials engaged in COVID-19 response to review and reflect what worked well (or not) and why. A number of good practices were identified: whole-of-government response with clear, strong leadership from the NDoH; coherent evidence-based response strategy; synergistic partnership with the private sector; and the rapid scale-up of laboratory capacity with widespread community screening and testing. However, discussions also revealed that the IMTs were fragmented and operated in silos and that critical pillars, such as the continuity of essential health services were overlooked in the provincial-level IMT. Further, there was a disconnect between national and provincial IMTs in planning and implementation of key interventions.

These reviews culminated into activities and action-oriented recommendations for implementation by different stakeholders. More concretely, the IAR informed the development of national and province-specific resurgence plans with support from the NDoH and WHO. These resurgence plans enabled a better coordinated response at both provincial and district levels during the second wave of the pandemic (November 2020–January 2021), and contributed in shortening the duration of second wave despite the higher number of cases and deaths. Furthermore, the IAR resulted in the inclusion of continuity of essential health services as a key priority within provinces. Several long-term recommendations were also made from the national and provincial IAR that aimed to strengthen the health system capacity in public health surveillance and data management. Other recommendations on the Infection Prevention and Control Programme and the human resources management (particularly for field epidemiologists) for implementation of the International Health Regulations continues to contribute to improved health security in South Africa.

The IAR and its impact truly highlighted the importance of open and structured review as well as sound monitoring and evaluation practices. As exemplified in the case of South Africa, an evidence-informed introspection has allowed for a more thoughtful, efficient, and comprehensive response to the pandemic and is an exceptional example of broader WHO goals to work towards a more effective and efficient Organization in supporting countries.
Disease surveillance protects people from health emergencies

Decades of civil strife and insecurity left an impact on health and social services in South Sudan. It is estimated that less than 50% of people have access to basic health services. Looking at its geography, South Sudan is a landlocked country and shares international borders with six countries. In border areas people tend to travel frequently, thus increasing the risk of importing viruses from neighbouring countries. All of this makes South Sudan prone to epidemics of various diseases: from measles, over malaria, to Ebola and COVID-19.

Aware of the risks, the country has been expanding its disease surveillance and response network for more than 15 years, in support of the Integrated Disease Surveillance and Response (IDSR) strategy. During this period, it has strengthened capacities to detect, report and respond to public health emergencies. The journey is, however, not completed: old challenges are still present in areas affected by conflict and in the countryside, while new challenges emerge with new diseases, such as COVID-19.

Supported by WHO, South Sudan established the surveillance network at two levels. At the national level operate several emergency response
bodies and national rapid response teams (NRRTs). Composed of interdisciplinary members, the NRRTs play an important role in investigating alerts of possible outbreaks. At the local level, there are local rapid response teams and focal points, who perform surveillance and response activities in states, counties, and health facilities. With the assistance of WHO, teams on both levels learned how to detect, report, investigate and respond to diseases. This led to faster identification and reaction to emerging threats, thus improving prevention and strengthening the public health response. Once in place, the IDSR network was able to cover new diseases, too. In 2020 it expanded to include case definitions, alerts and action points for COVID-19 case detection, investigation and response.

As the physical surveillance network grew, a web-based early warning, alert and response system (EWARS) was taking shape, as well. Supported by WHO and other development partners, the countrywide EWARS roll out was finalized in 2019. Health workers acquired skills in data management and health facilities were equipped with gadgets like computers, smart phones, and power banks. The web-based system is especially helpful for disease surveillance in conflict-prone regions and in the countryside, where civil unrest or floods often limit essential health services’ outreach. Although it still faces difficulties, like unstable telecommunications and power cuts, EWARS keeps improving owning to the teamwork of many stakeholders. One example of this is the Emergency Preparedness and response (EPR) committee, a forum co-chaired by the Ministry of Health and WHO, whose members meet regularly to discuss trends and ways to prevent and respond to outbreaks and other public health emergencies.

IDSR gradually grew and is currently used in all 10 states and three administrative areas; 80 counties and 1,221 health facilities in South Sudan. In stable areas, where the IDSR network is functional, the share of health facilities that submitted surveillance reports reached 90% in 2020. Similarly, the share of EWARS reports from health facilities serving internally displaced people grew from 72.5% in 2019 to 81% in 2020.

With improvements in disease surveillance, South Sudan makes a firm step forward in protecting the people from health emergencies. As new diseases emerge, systems adjust to effectively respond to them. Together with the Government, partners and donors, WHO remains a committed ally along this journey.
Successful Mental Health and Psychosocial Support response in Sri Lanka during COVID-19 Outbreak

The Democratic Socialist Republic of Sri Lanka committed to improving access to quality essential health care services during the peak of COVID-19 outbreak. Since the mental health sequela of the outbreak was prominent, the Directorate of Mental Health (DMH) within the Ministry of Health (MoH) of Sri Lanka prioritized the delivery of Mental Health and Psychosocial Support (MHPSS) under the mandate of the Deputy Director-General for Noncommunicable Diseases. The country has successfully maintained a comprehensive MHPSS. With the support of WHO, the DMH took proactive preventive measures combined with an effective public health approach, to strengthen its MHPSS response.

WHO provided seamless support to DMH and MHPSS communities through the provision of strategic support, capacity building, coordination and technical assistance. This helped the population, the frontline health practitioners and the most vulnerable to have continued access to essential mental health services and medications at a time when

The counsellor providing psychological support through 1926 mental health helpline at the National Institute of Mental Health. Photo credit: National Institute of Mental Health
the Government was focused on effectively controlling the transmission and management of cases. Building on the work in the past biennium, WHO worked in tandem with MoH to reinforce the preventive health system and sustain the delivery of care to communities.

During the outbreak, undue stigmatized behaviour in the general public was soaring. Therefore, the DMH conducted a rapid online survey to define the magnitude and nature of stigma and discrimination and developed an evidence-based communication campaign to combat this situation. WHO supported this initiative by providing information in Sinhala and Tamil languages including sign language to deliver the message. WHO also supported the MHPSS response by developing messages about wellbeing that were shared to the population via electronic media and community based organizations. The wellbeing messages were inserted as ring tones in all mobile phone lines for three weeks during the peak of COVID-19.

Global resources developed by WHO headquarters and Inter Agency Standing Committee reference group for MHPSS were translated and adopted in local languages with the support of WHO. These guidelines reinforced the standard response for continuity of mental health services and built capacity of the frontline workers in providing care to patients. To ensure the continuation of medications for patients with existing mental health conditions and psychiatric disorders, oral medications were sent through postal services to patients for two consecutive months and injectable medicines were administered either at community level or in clinics. Medical Officers of Mental Health (MOMH) teams and the community of Psychiatry Nursing Officers conducted home visits to the most vulnerable patients for the administration of injectable medicines.

Healthcare staff taking care of COVID-19 patients and public health personnel involved in contact tracing and quarantine processes were at the highest risk of stress and burnout. The DMH with the help of the National Technical Committee on Mental Health developed guidelines for health administrators of the curative and preventive health sectors to promote mental wellbeing of frontline health personnel and contain future mental health conditions. Through close collaboration, WHO helped MoH conduct a Mental Health Wellbeing Programme dedicated to frontline health workers and their families, assisting more than 2000 families along the line. All hospitals have since taken initiatives to promote the wellbeing of their employees in accordance with these guidelines.

WHO is currently working with DMH and Sri Lanka Telecom to build capacity and decentralize the helpline service (1926) of the National Institute of Mental Health to district level, as a means to accommodate an escalation in distressed calls.

Furthermore, WHO is providing technical assistance to uplift the capacity of the quarantine centres and reinforce the proficiency of the personnel through capacity building efforts in self-care, mental and psychosocial wellbeing. Consequently, staff members will be better equipped to deal with the wellbeing of COVID-19 patients.

Following the comprehensive MHPSS response, MoH received constructive comments from members
The success of the response was the outcome of a robust partnership and the collective action of MoH, WHO and key partners; a strong political commitment from the Government; solidarity of all stakeholders and the dedication of health care professionals.

In the context of Sri Lanka, early identification of mental health issues and appropriate interventions will be pivotal to further limit the psychological catastrophe of COVID-19. Hence screenings will be mandatory for individuals at risk and those in need of special attention namely health care workers, affected females, the elderly and quarantined individuals. Knowledge of previous disaster management will assist in setting up support networks and assessment mechanisms. The Psychological First Aid (PFA) will play a substantial role in sustaining these networks to preserve the mental wellbeing of Sri Lankans.
How Sudan is stepping up the fight against antimicrobial resistance (AMR)

Antimicrobial resistance (AMR) is a global and national priority. Since 2017, Sudan’s government has pushed transformative improvements across the country that strengthen and expand its ability to respond to the threats posed by AMR.

In 2018, Sudan developed and launched a National Action Plan (NAP) against AMR, being only the fourth country in the WHO Eastern Mediterranean region to do so. The Plan takes a One Health approach, which recognizes the relationships between the health of humans, animals, plants, and the environment. The Plan set forth multisectoral links between Sudan’s Federal Ministry of Health (FMoH), Ministry of Animal Resources and Fisheries, Ministry of Agriculture and Forestry, and WHO, in collaboration with the Food and Agriculture Organization (FAO), the World Organisation for Animal Health (OIE) and the United Nations Environment Programme. The NAP supports four main goals, which are to achieve:

1. Better understanding and improved awareness of AMR,
2. Stronger surveillance and research, and better prevention of AMR

WHO supports the Ministry of Health in fighting antimicrobial resistance in Sudan. Photo credit: WHO Sudan
WHO played various roles to support Sudan in accomplishing these goals. In 2019 the WHO, FAO, and the OIE launched the Tripartite AMR Multi-Partner Trust Fund (AMR MPTF), which provided financial and technical support to implement Sudan’s NAP. A notable accomplishment was setting up surveillance systems for AMR as the first step in implementing the NAP. To do this, Sudan enrolled in the Global Antimicrobial Resistance Surveillance System (GLASS)\(^1\) in 2018 and received WHO training to develop the strategies to oversee antibiotic use and consumption at different levels. Just one year later, Sudan achieved a significant milestone by expanding new surveillance sites that reported 1,136 isolates/infections, including blood samples and several pathogens to GLASS. The evidence generated as part of a regional network survey called Point Prevalence Surveys (PPS) on the prevalence of antimicrobial use and healthcare-associated infections was used effectively across platforms to keep AMR on the radar and as a priority public health issue for the country.

Sudan also launched a behaviour change pilot project in 2018, the Tailoring Antimicrobial Resistance Programs (TAP), which focused on modifying prescription practices among farmers, veterinarians, prescribers, dispensers, and antibiotics consumers in rural communities. The AMR unit of the WHO Regional Office for the Eastern Mediterranean collaborated with the FAO and WHO Country Office in Sudan to support TAP implementation. Early evaluation of WHO-supported TAP in February 2020 showed a decrease of 19.3% in broad-spectrum antibiotics prescription, demonstrating the feasibility of positive behaviour change in antimicrobial practice. Discussion is underway to scale up TAP to other regions in Sudan. Other joint FAO-WHO initiatives to promote prudent antimicrobial use in Sudan include an innovative phone video competition, "Video for change in AMR", and technical workshops with poultry and dairy producers. WHO and FAO also compiled and distributed reliable information about the COVID-19 pandemic and its impact on food safety and AMR.

Another way WHO supports Sudan’s AMR national plan is using social media to improve population awareness and understanding of antimicrobial resistance. In November 2020, WHO Country Office in Sudan collaborated with the FMoH, Ministry of Animal Resources and Fisheries, and Ministry of Agriculture on an awareness campaign during the World Antibiotic Awareness Week (WAAW). The campaign disseminated information to relevant stakeholders on different topics concerning AMR in Sudan, including EML and the use of WHO ‘AWaRe’ classification. More than 16,000 participants attended the event.

Although much remains to do, progress shown in the WHO-supported TAP and Sudan’s functioning surveillance system increases optimism that Sudan can win the battle against AMR.

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\(^1\) WHO established GLASS to provide a standardized approach to collecting, analysing, and sharing AMR data by countries. GLASS recommends the establishment of three core components to set up a well-functioning national AMR surveillance system: 1) a National Coordinating Centre (NCC); 2) a National Reference Laboratory (NRL); and 3) Sentinel surveillance sites where both diagnostic and epidemiological data are collected.
Working inter-programmatically in Suriname to respond to COVID-19

COVID-19 arrived in Suriname when the country was just beginning to review its medical policies and to develop a national health information system.\(^1\) With limited experience in health emergencies, Suriname faced a challenge in responding to the new virus, while maintaining essential health services throughout the country.\(^2\) However, it was not alone in these efforts. Since the start of 2020, PAHO/WHO has been supporting the Government of Suriname to prepare and respond to the outbreak in line with PAHO/WHO guidelines and the COVID-19 National Preparedness and Response Plan later developed. The response focused on four main areas: saving lives; protecting health workers; slowing the spread; and strengthening epidemic intelligence.\(^3\)

A large part of Suriname’s terrain is covered by tropical rainforest. In remote villages live indigenous and maroon communities and migrant

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\(^1\) Stories from the field: Special series on the COVID-19 response - Suriname | Universal Health Coverage Partnership (uhcpartnership.net), accessed on 5 March 2021.
\(^3\) Stories from the field: Special series on the COVID-19 response - Suriname | Universal Health Coverage Partnership (uhcpartnership.net), accessed on 6 March 2021.
populations, who often work in the goldmining, forestry or logging industry. Availability of health care facilities is limited to specific locations, while a combination of hard-to-reach localities and cross-border movements makes it difficult to provide essential health services. So, during times of health emergencies, people living in the interior become some of the most vulnerable. And this was true for COVID-19, having a high impact on livelihoods especially among the Maroon communities living along the Eastern border, often living and working on both sides of the border along the Marowijne river. Per March 2021, the epidemic had caused many cases among the Amerindian population with a relatively high infection rate of 2,708 per 100,000, compared to 1,555 per 100,000 for the country overall. The case fatality ratio among the Amerindian population is also higher with 5.1%, compared to 1.9% for the country overall. With the increasing cases in bordering countries and the existing gold mining in the interior, migrant populations played an increasing role in the possible spread of the disease. All these factors emphasized the importance of the need for a sustained, heightened surveillance and case detection capacity among these vulnerable populations in the interior.

There are two main providers of care in the interior: The Medical Mission, a foundation that provides primary care services and is subsidized by the Government; and the National Malaria Programme, whose service delivery workers conduct screening, testing and treatment for cases of malaria and is a known and well accepted entity among the migrant population communities. These two entities were key partners in the response to COVID-19 in the interior.

**Slowing the spread through active surveillance**

Together, PAHO/WHO and the Ministry of Health organized a series of training sessions for health workers, who work in the epidemiology department and manage the public health helpline of the rapid response teams. The sessions focused on active surveillance, case investigation, use of Antigen Rapid Detection Tests and contact tracing. They also addressed data analysis and identifying areas with high disease incidence in villages and border regions. This knowledge, in turn, facilitated the work of surveillance missions to high-risk communities, with the objective to test and manage cases, communicate potential risks, but also to learn about challenges faced by the communities. Where the outreach was limited due to lack of infrastructure, PAHO/WHO facilitated the Medical Mission and the Malaria Programme’s access to these rural and migrant communities.

The Malaria Programme also played another important role. Its service delivery workers, already familiar with the migrant populations, were sensitized to the symptoms of COVID-19 so that they could support surveillance of not only Malaria, but also COVID-19 during field activities in hard-to-reach areas in the interior. The TropClinic, initially established to provide affordable malaria-related care to mobile migrant communities in Paramaribo, extended its services to other infectious diseases, and most recently, to COVID-19.

The use of the PAHO donated rapid antigen tests on site, also resulted in higher testing capacities resulting in increased detection capacity and improved access to health services for the vulnerable
population, including the Spanish and Portuguese-speaking communities in Paramaribo and the interior of Suriname. Knowledge obtained through contact tracing and genetic sequencing from the last epidemiologic wave identified the importance of the need for early case detection among the groups working in the gold mining industry and shows the importance of an inter-programmatic approach to surveillance of COVID-19.

**Cooperation between programmes for inclusive communication**

The risk communication and community engagement followed the inter-programmatic approach, as well. With the support of the education sector and other UN agencies, PAHO/WHO developed manuals, printed, electronic and audio materials that supported community leaders to spread the message on preventive measures. With a guiding motto of leaving no one behind, communication materials captured and addressed the needs of different groups, in different languages.

Finally, the general public learned about and engaged with the public health measures through the “MoHanA” campaign. Composed of the initial letters of the public health measures — Mondkap op translated from Dutch to Wear your mask; Handen wassen to Wash your hands; and Afstand houden to Keep a distance — “MoHanA” reminds people in an easy way to observe these measures. The campaign had a special song, video, dance and a challenge to demonstrate implementation with prizes for the most creative winners.
SYRIAN ARAB REPUBLIC

Routine Immunization and Polio
Eradication in the Syrian Arab Republic

The Syrian Arab Republic is experiencing a protracted political and socio-economic crisis that has resulted in a severe deterioration of living conditions because of the civil war that started in 2011. Up to 90% of the population is estimated to live below the poverty line, and at least 12.4 million people are in dire need of health assistance. As the crisis enters its tenth year, 6.7 million people remain internally displaced and million people have fled the country as refugees. Hospitals are in a state of disrepair, requiring extensive maintenance and rehabilitation to provide a minimum level of essential health service delivery. The eruption of COVID-19 in the country on 22 March 2020 has further augmented the crisis.

The Routine Immunization Programme experienced a setback during the lockdowns from March to May 2020, which affected vaccination coverage due to domestic travel restrictions, cessation of all mobile routine immunization activities, and the suspension of mass immunization campaigns. But the Syrian Ministry of Health (MoH) maintained the Expanded program immunization (EPI) in primary health care units (PHC)
throughout all this period, with special emphasis on physical distancing for the staff as well as the use of personal protective equipment (PPE).

With strong support from the WHO Country Office (WCO), MoH strengthened EPI activities after the lockdown, starting with a set of trainings for core staff in health and vaccination centres. The trainings covered COVID-19 case identification, investigation, reporting and follow up. WCO facilitated capacity building activities in all governorates, with 622 EPI team participants benefiting from increased knowledge. In addition, WHO organized induction and refresher trainings for vaccinators on the surveillance of vaccine-preventable diseases to boost early detection and response. To measure teams’ use of and adherence to WHO guidelines on distancing, use of PPE, and COVID-19 awareness-raising, WHO developed a monitoring tool. Further, WCO provided training on the Vaccine Management System (vSSM) for national and governorate EPI staff and MoH information management department. Also, WCO conducted a series of advocacy meetings for the private sector, NGOs, the Syrian Arab Red Crescent (SARC), and the academia, for ramping up vaccine-preventable disease surveillance, to monitor disease occurrence within the community.

In collaboration with WHO, Syrian Ministry of Health organised two rounds of National Immunization Days– one national and one sub-national polio campaigns in July and October 2020 respectively. As a result, more children especially in high-risk areas, like the camps for internally displaced people received polio vaccination. Additionally, WHO supports nationwide routine immunization in the Syrian Arab Republic and integration of vaccination in a comprehensive package of health services to increase vaccination coverage in the north-east of the country.

National Immunization Week Round 1 was conducted in June 2020, when 79 039 children were vaccinated. Round 2 took place in November 2020. Together with repeating the multi-antigen approach of round 1, it provided an extra injectable polio vaccine for all children aged 3 to 23 months, irrespective of previous vaccination history, to protect against vaccine-derived polio. 64 293 children were vaccinated in this round.

WCO supported MoH to strengthen supervision of vaccination campaigns at all levels from national to governorate to districts, with a special focus for the hard-to-reach and newly accessible population, like the people living in IDP camps. Furthermore, WCO was the implementing technical partner of MoH in the process of remapping communities and new settlements that is done regularly to follow population movement. The vaccination plan in the north-east of the country focuses on mapping high-risk areas with low routine immunization performance and developing special strategies to close gaps, training new vaccinators and providing on-the-job refresher courses for existing vaccinators. All these activities are aimed at ensuring outreach to vulnerable populations and hard-to-reach communities.

WHO aims to reach all populations across the country and those groups of people that are in hard-to-reach areas, e.g. camp and camp like settings and across differing control areas. This includes the three governorates in the north-east: Hassakeh, Deir ez-Zor and Raqqa.
In Deir ez-Zor governorate, the governorate is heavily affected due to several years of continued hostilities and civil unrest. With two Polio outbreaks in 2013 (37 NSL1) and 2017 (74 cVDPV2), WHO supported MoH both technically and financially; the two outbreak were effectively dealt with and MoH was able to successfully end both after series of quality Polio campaigns. MoH conducted four Periodic Intensification of Routine Immunization (PIRI) rounds in 2020 (three of which were post-lockdown) and three special activities for nomadic populations – with around 3500 children under 5 years of age vaccinated (all were multi-antigen vaccination operations). WCO provided technical support – with a field presence in these particularly sensitive geographical areas – as well as financial support to cover all EPI and polio activity operational costs, which include the transport of vaccines and personnel. More specifically, the PIRI actions in the north east of the country, which faces a deficit of Primary Health Centers and vaccination sites, enabled reaching almost 40 000 children, who received all eligible vaccines. This this had a substantial impact on the reduction of the risk of communicable diseases, especially polio and measles.

Capacity strengthening for the Polio National Laboratory (NPL) was another major initiative for the health system in the Syrian Arab Republic. The country has a robust surveillance system for polio that was consistently able to track any deviation and guide response actions. In 2017 it added environmental sampling to increase detection capability. With a major contribution from WCO, NPL became a referral laboratory capable of performing the most sophisticated polio tests. Currently, the National Polio Laboratory is accredited by the WHO as one of the referral laboratories in the EMRO region. Accreditation provides formal confirmation that the laboratory has the capability and the capacity to detect, identify and promptly report wild and vaccine-derived polioviruses that may be present in clinical and environmental specimens. WCO funded all supplies and equipment required by the NPL and supported capacity building for senior NPL staff through internal and external workshops, in coordination with the WHO Regional office.

The national programme supported by WHO prioritizes capacity building at the national and the subnational level, innovative solutions for hard-to-reach areas located in the Autonomous Administration of North and East Syria (NES), like the periodic intensification immunization activities.
Laboratory system strengthening in Tajikistan important factor in the response to COVID-19 during 2020

After officially announcing the first 15 cases of COVID-19 on April 30, 2020, daily confirmed cases in Tajikistan rose to 200 daily cases by May. COVID-19 transmission in Tajikistan continued during the course of 2020, but during this period, WHO intervened with a range of support measures, including Emergency Medical Teams, deployment of WHO and GOARN epidemiologists, and through the provision of laboratory support in the form of WHO and international experts, and through the deployment of rapid response mobile laboratories.

One of the most important and transformative interventions was the rapid scaling-up and strengthening of national laboratory capacity for COVID-19 testing in Tajikistan. This study describes the actions taken by the Government of Tajikistan and the technical assistance provided by WHO at different stages of the pandemic to realize this achievement.

Proactive strengthening of pandemic preparedness: Measures were readied to tackle the COVID-19 pandemic before the first cases were
detected on April 30, 2020. WHO supported the development of the Prime Ministers COVID-19 Operational plan which was launched in March 2020, as well as the COVID-19 Country Preparedness and Response Plan (CPRP) drafted by the Ministry of Health and Social Protection of the Population (MoHSP). Support by WHO included technical support to all administrative levels of government, supporting training to build the capacity of frontline health workers for pandemic preparedness and response, quality assurance and procurement of medical supplies to meet critical needs for life-saving medicines, personal protective equipment (PPE), COVID-19 testing kits, and development of risk communication strategies.

The WHO Regional Office for Europe Better Labs for Better Health initiative (Better Labs) was of strategic significance to strengthening preparedness in Tajikistan. Launched in 2012, Better Labs aims to support countries capacities to detect infectious diseases in WHO Member states in Eastern Europe and Central Asia. Since 2016 three major laboratories in Tajikistan have been undergoing training and mentoring for quality management implementation based on international ISO standards and WHO's Laboratory Quality Stepwise Implementation tool and indicators. The national mentors trained through Better Labs have been building the capacity of health workers at the regional level for laboratory quality management. The commitment of the Government of Tajikistan to Better Labs meant that Tajikistan could readily deploy needed expertise to align the national testing strategy with well-planned surveillance and contact tracing strategy.

**Ensuring a rapid pandemic response through strengthened laboratory capacity**

Immediately after the first cases of COVID-19 were officially announced, pandemic response activities were set in motion by the Incident Management Support Team (IMST) of the WHO European Regional Office in early May 2020, at the request of the Tajikistan government. Working with national stakeholders, the deployment of the IMST gave rise to an active body of work that covered the following areas: formation of a national laboratory working group, conducting a laboratory situational analysis for COVID-19 response that included short-, mid and long-term recommendations, drafting of a national action plan for the laboratory response to COVID-19, and coordination of all partners during the implementation of the action plan.

Three main strategies were implemented to rapidly scale up national laboratory testing capacity, which was identified as a critical need during the situation analysis:

1. Ten regional-level laboratories were identified, upgraded, and activated to conduct COVID-19 testing. These sites are the SES laboratories in Bokhtar and Kulob, in Dangara Hospital, Blood Center in Bokhtat (Khatlon region), SES laboratories in Rasht, in Tursunzoda (DRS), in Medical Complex Istiklol, City SES laboratory (Dushanbe), SES laboratory in Khorog (GBAO) and SES laboratories in Khujand, Panjakent (Sughd Region). This was in addition to major upgrades to the national-level laboratories (National Public Health laboratory, Virology laboratory at the National SES, National Reference Laboratory and Tajik Research Institute of Preventive Medicine) that were already conducting COVID-19 testing.
2. Emergency Medical Teams and Rapid Response Mobile Laboratories were deployed with financial support from WHO Regional Office Europe, under the framework of WHO’s Global Outbreak Alert and Response Network (GOARN). GOARN laboratory experts also provided technical support to 8 laboratories (5 in Dushanbe, 1 Dushanbe city, and 2 regional laboratories) for quality assurance and improved workflow settings.

3. Nation-wide capacity building of all front-line workers on pandemic response, including on COVID-19 testing protocols and procedures. The capacity-building trainings drew from the country’s pool of domestic expert trainers whose capacity had been strengthened through the Better Labs initiative. Following an initial WHO-supported training-of-trainers (ToT) training, domestic experts conducted cascade trainings and provided supportive supervision to health workers at national and regional levels. Training modules developed included laboratory quality management, training on COVID-19 protocols and procedures, establishing critical SOPs, and staff technical competency assessments. A risk assessment training was also conducted for national laboratory biosafety experts to support regional-level laboratories in identifying and mitigating risks.

These interventions yielded important outcomes. From a national testing capacity estimated at 1,612 tests per day during the situation analysis, testing capacity was increased to 3,472 tests per day within 3 months. The increased testing contributed significantly to the detection of COVID-19 cases in Tajikistan.
Thailand generates evidence for sodium reduction

Hypertension is the second leading risk factor for mortality in Thailand accounting for nearly 70,000 deaths each year. One out of four adults have clinical hypertension requiring treatment. Excessive consumption of sodium is a major risk factor for hypertension.

To reduce sodium intake Thailand has developed a 5-pronged strategy; one of which is surveillance and monitoring. Nationally representative baseline data on sodium intake was unavailable. Leveraging a strong partnership including MoPH, Low salt network (NGO), Mahidol University, The Thai Health Promotion Foundation, Resolve to Save Lives and WHO, the first nation-wide-survey to estimate population sodium intake using 24-hour urine collections was conducted during 2019-2020.

WHO provided technical support to prepare the survey protocol, contributed to training of survey teams, supported data analyses and organized a workshop to prepare a scientific manuscript. A group of 22 young Thai researchers from four Provinces and Bangkok area were trained in survey methodology and scientific writing. Thailand’s capacity

Field investigator explaining 24-hour urine collection to a survey respondent. Photo credit: Payong Khunsaaard.
in measurement of population sodium intake is strengthened at central and provincial levels. WHO also supported the dissemination of survey findings to public through media and is continuously advocating to policy makers via multiple fora.

The findings of the survey indicate that the overall sodium intake is approximately 3.6 gm, twice the amount recommended by WHO. Higher sodium intake was associated with younger age, having hypertension and BMI>25 kg/m2. The study was peer-reviewed and published in the Journal of Clinical Hypertension.1 The paper will add momentum to public health efforts to reduce sodium consumption in Thailand and provide a baseline for monitoring progress.

Noncommunicable diseases (NCDs), primarily cardiovascular diseases, cancers, diabetes and chronic lung diseases, are the leading killers accounting for 74% of deaths in Thailand\(^1\). Prevention and control of NCDs is one of the six priorities under the WHO’s Country Cooperation Strategy with the Royal Thai Government. WHO catalyzed establishing a Strategic Technical Advisory Group on Hypertension and has raised the priority of hypertension control among the health policy makers. Working closely with key stakeholders\(^2\), WHO has helped to strengthen hypertension care in Thailand by ways of improving treatment practices, quality and use of data, capacity building and operations research.

Pakkred is a densely populated and semi-urban district near Bangkok. 18.2% of the population is over 60 years old. Most older individuals have

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2 Stakeholders include the Field Epidemiology Programme, Thai hypertension Society, Chiang Mai University and Provincial health offices, Centers for Disease Control and Prevention, and Resolve to Save Lives.
pre-existing chronic NCDs that require ongoing management. In early 2020, when COVID-19 was spreading rapidly, public health systems faced the dual challenge of containing the outbreak while protecting health care workers (HCW) and maintaining routine services for hypertension, diabetes, and other chronic NCDs. Routine services for NCDs were affected, and patients living with NCDs, especially the elderly, were unable or reluctant to visit health facilities for routine care.

The health leadership of Pakkred Hospital prioritized maintaining essential services for patients with chronic diseases. Several adaptations in delivery of NCD services including decentralized care from the hospital to the network of community health centers (CHCs), home blood pressure monitoring by Community Health Volunteers (CHVs), facility infrastructure changes to reduce COVID-19 exposure risk for patients and health staff, fast-track system for patients visiting health facilities, telemedicine to facilitate online consultation between HCWs.

Moreover, the LINE application was used for 24/7 communication between doctors, nurses, CHVs and home health care teams. A secure Facebook page was created for patient inquiries and to facilitate patient follow-up. Also, innovative ways to deliver medicines to patients were adopted, for example: pick-up of medications at district hospital and HPHs by healthier, younger relatives; a drive through facility at district hospital providing prescribed medications from a window; medication delivery through postal service by hospital staff; medication delivery by CHVs traveling via hospital van or motorcycle taxi.

Despite an initial decrease in the number of hospital visits, hypertension control rates were maintained through the COVID-19 epidemic. By September 2020, over 3000 patients had received care in hospital outpatient departments, a number similar to the same period in 2019. By September 2020, the hypertension control rate was 67% (3944/5881), compared to 64% (3838/6055) in September 2019. The fast-track system cut down NCD service times by 1-2 hours. No HCW and no NCD patient was diagnosed with COVID-19. Qualitative data revealed high overall patient satisfaction with the new interventions.
Figure 1- Registered hypertension patients on treatment and visiting OPD

The Pakkred initiative was part of a larger effort by the Thai MOPH to establish “new normal” health services designed to provide essential services while protecting staff and patients – during this and future epidemics.
TIMOR-LESTE

Health Financing Strategy for progressing towards the universal health coverage: overview of WHO’s support

The Democratic Republic of Timor-Leste has successfully launched its first national Health Financing Strategy (HFS) with the ongoing support of the World Health Organization (WHO), on 8 November 2019, reiterating its constitutional commitment in achieving Sustainable Development Goal 3.8 to provide Universal Health Coverage (UHC) that is free at the point of delivery for all. The series of activities that successfully led to the finalization of the national HFS were an integral part of WHO’s Biennial Plan 2018-2019, jointly agreed by the Ministry of Health (MoH) and the World Health Organization Country Office (WCO), Timor-Leste and supported through the UHC Partnership.

The launch of the first HFS is a remarkable achievement for Timor-Leste. Through strong country leadership and efforts to establish a sustainable economy, the Government has been working in close collaboration with WCO Timor-Leste to drive a major public health reform, despite the constraints faced over the last couple of years. The State budgets for 2018 and 2020 were not approved, which led to the introduction

1.2 Reduced number of people suffering financial hardship

A family being visited by health care providers during the second round of implementation of Saude na Familia – the flagship primary health care programme. Photo Credit: WHO SHOBHAN

DISCLAIMER: This image was taken during a time of no community transmission of COVID-19. Community transmission is defined as the inability to relate confirmed cases through chains of transmission for a large number of cases, or by increasing positive tests through sentinel samples (routine systematic testing of respiratory samples from established laboratories). Preventative measures such as mask wearing and physical distancing should be used to prevent the spread of COVID-19.
of duodecimal mechanisms where the system operates on monthly instalments of one twelfth of the previous year’s budget. This system hampered the broader planning and capital investments.

In Timor-Leste, WHO has been technically supporting MoH in health finance related policy and analytics including institutional capacity building activities. WHO Regional Office for South East Asia commissioned technical expertise to provide strategic support to MoH in carrying out a Health Financing Diagnostic study in 2017 and a National Health Accounts review in 2013-2017. These exercises were followed by analytical work on options for the health financing policy which provided significant input to MoH in the development of the HFS.

In the context of Timor-Leste, the political and institutional environment holds the key to UHC policy, systems development and reform processes. The need to engage with sectors beyond the health sector was paramount to UHC efforts. Hence devising a robust multisectoral coordination mechanism was essential to ensure alignment and harmonization of efforts. Support from all three levels of WHO was coordinated in the provision of technical advice, field visits, analytics and policy dialogue.

Engaging multisectoral actors to forge strategic partnerships was imperative but challenging in moving forward with the HFS, therefore innovative approaches were devised. The HFS matured through a series of consultations with a heterogenous range of stakeholders comprising of health workers, development partners, several Ministries, parliamentarians, nongovernmental organizations, civil society and other stakeholders. The UHC partnership which is partly funded by the WHO, sustained the development of the HFS through financial assistance along with their extended support towards strengthening the health policy and systems in general in Timor-Leste.

WHO’s advocacy efforts and discussions were also underway with parliamentarians namely Commission F the parliamentary Commission on Health and Social issues of the National Parliament, to champion for health and health financing issues. This initiative called for more informal engagement with relevant members of society including national influencers such as members of academia and religious institutions.

The Ministry of Finance’s (MoF) involvement and participation was fundamental to the development and finalization of the HFS. WHO facilitated the close collaboration and regular consultations between the Ministry of Health and the Ministry of Finance at all stages of the process.

This HFS will provide a strategic approach to sustainable health financing in Timor-Leste. It will not only help secure increased financial resources for health, but also strengthen mechanisms for revenue generation, pooling of resources and strategic purchasing in the health sector. It will enable transparent decision making in priority setting and resource allocation, and provide the strategic umbrella for the continuation of essential health services during the COVID-19 pandemic. This is in line with the priorities and vision identified within WHO’s Thirteenth General Programme of Work 2019-2023 and Regional Flagship priorities, in achieving Universal Health Coverage. It will also support the institutionalization of
health financing analytics and lays the foundation for several health financing initiatives such as pro-
Health taxes and the development of an Essential Services Package for primary health care including
regular publication of National Health Accounts.

The principle of UHC ‘to leave no one behind’, requires targeting resources to remove financial barriers
for the most vulnerable when they need access to health services. Successful implementation of this
first HFS will strengthen and facilitate this process.
Involvement of community stakeholders in monitoring travellers at unofficial entry point as part of the COVID-19 response

Togo, located in West Africa and surrounded by Burkina Faso, Benin and Ghana, has 26 official points of entry and exit (PoEs) that are relatively well controlled and allow for the tracking of travelers as part of the fight against COVID-19. However, unofficial points of entry exist along the land borders, which are missed by the country’s PoE surveillance system. Thus, travelers who cross fraudulently are not recorded or captured by control and tracking system. This constitutes a major risk of case explosion, as was the case in the district of Mô at the western border of the country, where the number of COVID-19 cases increased from 0 to 14 between week 17 and week 20 of 2020.1

In response to this situation, and in an effort to reduce risk of case explosions, community surveillance cells have been set up in the border areas. These cells are composed of Community Health Workers / Community Relays (CHWs/CRs) as well as other community actors (village and neighbourhood chiefs, religious leaders). These CHWs/CRs are under the authority of the village chiefs and are supervised by the managers of the health facilities. The watch committees identify

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1 Mô had a population of 46,497 inhabitants and a density of 47 inhabitants/km² in 2020.
any traveller who arrives in the village or neighbourhood and notify the health facility manager for follow-up.

WHO, with funding of approximately US$ 5 000, supported this initiative by training 6 160 CHWs/CRs as well as health facility managers and village leaders in all health districts. This initiative improved the surveillance system at unofficial PoEs by putting into place a tool for tracking travellers: census form (to notify the health facility manager) of travellers upon arrival in the village and of any traveller who is quarantined and followed-up for 14 days. This tool has allowed the detection and follow-up of all travellers entering Togo outside official PoEs. Community awareness activities focused on the respect of barrier measures have also been conducted.

This initiative, a collaboration between WHO, the Ministry of Health, Public Hygiene and Universal Access to Health Care, the Minister of Territorial Administration, the National Civil Protection Agency, UNICEF and UNFPA, is a successful multisectoral partnership built around community participation. It has strengthened the multisectoral response capacity to the pandemic, and had thus contributed to the achievement of Outcome 2.3. for the "rapid detection and management of health emergencies" of the second pillar of the WHO’s Thirteenth General Programme of Work to have “one billion more people better protected in health emergencies.”

This community-based surveillance work carried out by CHWs/CRs allowed for the notification and follow-up of 7 766 travellers placed in dedicated hotels, of whom 334 tested positive between April and mid-September 2020. This strong involvement of communities through CHWs/RCs has helped the system in the effective follow-up of all travellers (both official and unofficial) and contacts in villages and neighbourhoods, thus avoiding the explosion of clusters. Involving community stakeholders throughout the process allows for greater community buy-in at the grassroots level and early detection of cases in the community, leading to effective community participation in addressing health issues.

The involvement of CHWs/CRs has facilitated the monitoring of travellers, who trust them more. For their part, CHWs/CRs have benefited from the trust of their communities and the support of local authorities (village chiefs, prefects). Thus, they felt valued for their effective involvement in the management of the response in their communities. This has led to their motivation and commitment to continue to invest in the management of the pandemic and strengthen community participation. In addition to their main role, they have contributed to the identify of rumours about the disease and raising these to authorities, thus facilitating preventive management and development of an appropriate response.

The continuity of this initiative, including the motivations of CHWs/CRs and the financing of field visits, represents one of the main challenges, which is why WHO has advocated with other partners for the mobilization of resources for CHWs/CRs. WHO has also responded to the insufficient availability of communication tools for raising awareness among the population by producing and making available to CHWs/CRs communication tools. Through periodic supervision of CHWs/CRs, WHO also supports managers of the health facilities with planning the initiative.
To ensure the maintenance of the initiative, WHO will continue to advocate for the funding of community activities in the frame of the joint planning of the Ministry of Health, Public Hygiene and Universal Access to Health Care through the inclusion of a budget line for the strengthening of community-based surveillance through financial incentives for CHWs/CRs. This initiative demonstrates not only the benefits of community involvement in the response to COVID-19, but also the potential of multisectoral work with communities to protect and promote the health of the people of Togo.
Bolstering Mental Health and Psychosocial Service Delivery in Tunisia

Countries across the world were ill-prepared to adequately respond to the growing mental health crisis triggered by the COVID-19 outbreak. Global mental health statistics were already dire and mental health services had been grossly under-funded and under-resourced for decades. At the time of the COVID-19 outbreak, a large majority of countries were spending less than 2% of their national health budgets on mental health. COVID-19 exacerbated gaps within national mental health programs and disrupted essential mental health services in 93% of countries worldwide:

The pandemic not only strained fragile mental health service delivery systems, but also magnified the demand for mental health services. World-over, there was an alarming surge in mental health conditions, triggered by isolation, bereavement, loss of livelihood, uncertainty, and fear. Countries around the world reported increased levels of alcohol and drug use, insomnia, and anxiety—particularly among marginalized

and vulnerable communities. Essential mental health services buckled under the strain, and WHO immediately issued guidance to countries on maintaining essential mental health services and integrating mental health components within COVID-19 response and recovery plans.

WHO’s Country Office in Tunisia (WCO) worked closely with the Ministry of Health (MoH) to ensure that essential mental health services were included within the national COVID-19 response plan. MoH re-activated a national Psychological Support Unit that had been established in 2015 after a terrorist attack. The Unit was initially designed to provide mental health services to people suffering from trauma in crisis situations. At the beginning of the pandemic, it was re-activated to provide mental health services to vulnerable populations, health care workers, and COVID-19 patients, who were highly affected due to stigma, social isolation, fear of contagion, anxiety over loss of income and fear of unemployment. WCO provided initial financial support (over US$200 000) towards establishing the call centre of the Psychological Support Unit within a public hospital in Tunisia’s capital, as well as policy guidance regarding service delivery, monitoring patients and referral protocols.

The reactivated Unit provides mental health and psychosocial support via a national toll-free helpline that was staffed by around 300 trained volunteers and healthcare providers. Within the first month of re-activation, the Psychological Support Unit received over 10,000 calls (March 30, 2020—May 05, 2020). A staggering 62% of callers were women and over 75% of the callers reported anxiety-related symptoms.

During the initial months, the unit’s work was mainly based on volunteers’ contributions. Over 240 mental health professionals across the country—psychiatrists, child psychiatrists, and psychologists—volunteered to provide mental health services in response to the COVID-19 crisis. The call centre was provided for free by partners in the private sector. Additionally, CSOs, NGOs and private sector health professionals contributed.

During the second wave of the pandemic, one of the biggest challenges that MoH faced was retaining long-term volunteers, since MoH lacked capacity to recruit care providers and specialists for the Unit—impacting efforts to ensure continuity of the service. As an interim solution, medical students were recruited to work, as a part of their mandatory academic training. Those attending to calls at the Unit were trained to assess caller’s needs, address their concerns, provide essential information, and follow referral policy for more severe cases. Civil society played an important role during the pandemic: medical students and psychologist volunteers were recruited from an association of interns and medical students (AssociaMed) and the Red Crescent. They were trained on the effects of COVID-19 and the lockdown on mental health. An algorithm was implemented to sort out calls to be transferred to psychologists, psychiatrists, child psychiatrists or to NGOs when the request was of a social nature.

As a result of these efforts, Tunisia reported no disruption in the delivery of essential mental health services, despite lockdown restrictions. Potential mental health emergencies were promptly detected through the National Psychological Support Unit and redirected to appropriate mental health specialists.
across the country. Recognizing that the absence of a national multisectoral mental health strategy was a deterrent to long-term sustainability of these efforts, WCO strongly advocated for the implementation of the national multisectoral mental health strategy and provided support to strengthen capacities of primary healthcare services in the management of mental health conditions, in emergency situations. WCO’s initiatives strengthened Tunisia’s national mental health program, enabling the country to respond adequately in the event of future health emergencies.
Supporting Turkish mental health policy and service delivery

In the last years, the number of people in Turkey suffering from anxiety and depression has significantly increased due to the factors like repeated natural disasters, migration, economic downturn and COVID-19 pandemic. According to the data of the Ministry of Health of Turkey (MoH), 17 percent of the population face mental health issues, 3.2 million people suffer from depression, and antidepressant consumption has increased by 56 percent in five years. Of a population of about 83 million, some 9 million people seek mental health support in Turkey each year. Add to this the fact that Turkey hosts the highest number of refugees in the world, with over 3.6 million Syrian refugees, and we have a major social problem: mental health. 2020 was also the year when COVID-19 pandemic broke out, scaling up the challenges.

The Social Inclusion of Persons with Mental Disabilities, an EU-funded project, was aimed at addressing the above mentioned mental health challenges. Launched in 2018, the project received technical assistance from the WHO Country Office in Turkey (WCO), with the Ministry of Health and the Ministry of Family, Labour and Social Services.
(MoFLSS) as beneficiaries. The project aimed to enhance workforce skills in providing healthcare services to people with mental disabilities and to improve community-based healthcare services at a national scale. Another objective was to capacitate those who deliver health services for both refugee and host communities with a strong emphasis on people-centered care.

In line with the WHO Global Mental Health Action Plan, WHO’s Thirteenth General Programme of Work and the European Programme of Work “United Action for Better Health in Europe”, the revision of the National Mental Health Action Plan started. WCO developed technical guidelines for the functioning of local steering committees on mental health that enabled better supporting governance at the provincial level. In addition, WCO delivered training modules for MoH and MoFLSS staff operating in primary health care services, refugee health centres, Community Mental Health Centers (CMHC), and Residential Care institutions. As a result 500 healthcare workers were trained using local steering Committee Guidelines. Additionally, under the Mental Health Gap Action Programme (mhGAP), WCO provided training workshops for Syrian and Turkish general practitioners, community health workers and mental health staff, to equip them with improved knowledge and updated practices of diagnosis, referrals and treatment processes when addressing the mental well-being and psychosocial needs of refugees. Over 3,400 Syrian and Turkish health professionals were trained in dealing with several mental health and psychosocial support issues (mental health GAP, early childhood development, gender-based violence, psychosocial support, and others).

WHO scaled up its support in mental health with a specific focus on improving the quality of services to provide a timely response to COVID-19 related needs. WCO supported MoH and MoFLSS in efforts targeting on public awareness and advocacy, the development of guidelines and algorithms to support psychosocial hotlines, the development of guidelines for the transition period of CMHCs, online training for managers of social care centers of CMHCs. The webinars addressed issues like the provision of mental health services during the pandemic for 175 CMHC. The training sessions and webinars covered all residential care institutions managed by MoFLSS and 85% of CMHCs managed by MoH. The guidelines developed are in use for all psychosocial hotlines and CMHCs staff nationwide.

In order to meet the new restrictions on meetings imposed by the pandemic, WCO adapted and translated into Turkish the QualityRights e-training platform, WHO’s an online learning tool to improve the provision of mental health services and promote human rights of people with psychosocial, intellectual and cognitive disabilities around the world. 773 people enrolled and 90 completed the training on topics of human rights, mental health, disability and human rights, recovery and the right to health in mental health and social services, legal capacity and the right to decide in mental health and social services, mental health and social services free from coercion, violence and abuse, and others.

Online meetings, webinars and psychosocial support algorithms for COVID-19 hotline took place in 81 provinces of the country. The hotlines provided support to 236,000 people between April and December 2020, to help them cope with stress factors caused by changes stemming from the
COVID-19 pandemic. The hotlines also assisted individuals with chronic mental illnesses and provided a referral mechanism for people who require access to social services.

Another important project implemented by WHO is the Refugee Health Programme, that specifically addresses mental health issues of the refugees and migrants hosted in the country. WHO continues today to work closely with Turkey’s Ministry of Health to provide health services to Syrian refugees. The project offered a bridge to linguistic and cultural barriers to serve as patient guides at primary, secondary and tertiary levels of care. Furthermore, WCO coordinated the provision of continuing medical education to Turkish and Syrian health workers in diagnosing and treating mental health conditions like depression, anxiety, and post-traumatic disorders. In addition, WCO advised on guidelines and algorithms for psychosocial support hotlines, which provided 80,000 consultations annually in 7 Refugee Health Training Centers.

With the close relationship between WHO and MoH as a key factor for the successful design and implementation of planned activities, WHO worked closely with a range of Government actors, including related Ministries - specifically MoH and MoLFSS - academics, professional organizations, service user organizations as well as provincial health and social care directorates and staff of health and social care centres.

As part of a coherent, structured, and coordinated effort, these projects form the broadest training initiative related to mental health and psychosocial support in Turkey and in the region in the recent years. Overall, through these projects, Turkey has strengthened its health workforce through in-service training, and by responding rapidly to health emergencies.
Maintaining HIV services during the COVID-19 pandemic in Ukraine

Ukraine has consistently had one of the highest burdens of HIV in the WHO European Region over the last few years (recorded second highest recent HIV/AIDS Surveillance Reports for Europe), but with the help of international partners and the WHO, Ukraine’s ability to detect and manage HIV cases has gradually improved.\(^1\);\(^2\) Advances in HIV testing and HIV treatment, supported in part by the training and onsite mentoring provided by WHO experts over the years, has led to a significant expansion in the number of individuals on antiretroviral therapy (ART) from 4777 in 2006 to 136105 in 2019.\(^3\);\(^4\) Moreover, there is now regular and systematic HIV data collection and the use of that data to plan HIV services for the population.

When COVID-19 was declared an emergency, health facilities in Ukraine became preoccupied with addressing the direct impact of the

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\(^4\) https://data.theglobalfund.org/investments/results/UKR
pandemic while trying to maintain existing health services. Facilities faced the challenge of continuing services, such as those for HIV, under new restrictions aimed at preventing transmission of the virus (e.g., on public transportation and the gathering of individuals).

These limitations had a profound negative impact on HIV testing rates and capacity. Since the first quarter of 2020, HIV testing rates and yield across 12 of the 14 highest HIV burden areas (where data was available) decreased by a median of 24% and 11% (respectively), with no substantial recovery by the end of the year. Moreover, the availability of laboratory testing for HIV viral load was also severely impacted, with many treatment facilities reporting no access to such testing or wait times of up to one month.

Treatment for HIV, on the other hand, rapidly responded and mitigated the effects of the pandemic. Within the first half of 2020, the number of individuals initiating antiretroviral (ARV) treatment had decreased by a median of 15% across all 14 high HIV burden areas (from the first to second quarter). By the third quarter of 2020, however, ARV initiation increased by a median of 6% across these areas since the second quarter. This recovery in treatment capacity was partly due to most areas being able to rapidly implement WHO’s recommendations for HIV treatment during the pandemic (including the use of telemedicine, provision of multimonth prescriptions for ART, and community dispensing of ART), which reduced the need for patients to attend the ART sites and better-protected people living with HIV (PLHIV) and service providers from COVID-19.

Three notable HIV-related health regulations allowed Ukraine to implement WHO’s recommendations:

First, since infectious disease specialists are the only providers permitted to prescribe ART, regulations were relaxed to allow nurses at ART sites to arrange teleconferences with infectious disease specialists, who would then virtually authorize and initiate ART for individuals. Following initiation, ART site nurses, as well as staff from local medical and social services, would coordinate and assist individuals with follow-up care. This change greatly reduced the burden of HIV case management on infectious disease specialists, who are responsible for dealing with COVID-19. It was also crucial for rural ART sites, where there are often no infectious disease specialists available.

Second, regulations were also relaxed to allow for more HIV rapid diagnostic testing at ART sites. This supported faster ART initiation since results from regular testing were delayed by weeks.

Third, regulations were relaxed to allow for community dispensing (through mail, courier, and delivery) and multimonth prescriptions for ART. These measures eliminated or minimized the need to visit ART sites to acquire treatment for PLHIV during COVID-19.

The WHO Country Office (WCO) of Ukraine’s existing work with HIV service providers and scaling-up HIV care prior to the pandemic also played a major role in maintaining HIV treatment services. Experts had already been providing onsite guidance, strategic direction, and mentorship on scaling up HIV testing, treatment, identification, and linkage. When COVID-19 became a concern, the WHO
internal incident management system established at country level started to address matters related to essential services from early on. The WCO worked quickly with the Ukrainian Ministry of Health’s Centre for Public Health and the U.S. Centers for Disease Control and Prevention to assess and intervene on COVID-19’s impact on HIV and WHO provided rapid COVID-19 support (i.e., providing training in infection prevention and control, supporting the strengthening of laboratories and surveillance, and assisting in the procurement of PPE and other equipment).

Within the realm of HIV care, COVID-19 exposed Ukraine’s deficient HIV testing capacity but provided a distinctive opportunity to transform HIV treatment practices. The pandemic’s urgency and limitations on in-person care led to a rapid recognition that HIV treatment was challenged by existing regulations (that limited ARV initiation, community dispensing, and multimonth prescribing), and swift efforts to relax such regulations followed. These changes prevented a dramatic deterioration in treatment for PLHIV, and to ensure barriers to HIV care are minimized moving forward, it is likely that these changes will be solidified in legislative reforms championed by WHO. The maintenance of these new treatment practices, in addition to continued efforts to improve testing capacity, is hoped to further the success of HIV management in Ukraine during and following the pandemic, and progress towards Universal Health Coverage.
COVID-19 tested and demonstrated the resilience of Uruguay's healthcare system in 2020

The COVID-19 pandemic took the world by surprise and subjected many health systems to extreme pressures and challenges. Many countries showed incredible resilience in the face of the pandemic’s devastation, and Uruguay in 2020 stands out among them. By having a robust health system (with virtual care practices already in place), strong government leadership and public cooperation, Uruguay was able to keep the pandemic under control.

Uruguay’s long history of State institutions’ consolidation has allowed for a series of reforms and restructuring of the health system to take place, which generated significant increases in public spending on health (around 6.5% of GDP) and financial protection for individuals. The consolidation of the National Integrated Health System (SNIS),

the National Health Insurance (SNS) and the State Health Services Administration (ASSE) as a decentralized entity providing health services with more than 900 health care units throughout the country has been a contributing factor. Improvements have included increased coverage of health services, a comprehensive benefits plan, reductions in health care premiums and co-payments, and a greater breadth of social security through the SNS. Several health and social indicators were improved and the resilience of the system to successfully manage health crises (e.g., measles and visceral leishmaniasis outbreaks in 2019) has increased.\(^4\) In the face of the COVID-19 pandemic, this well-established system allowed Uruguay to offer free care services for people infected with COVID-19 and to implement measures to minimize infection. Since registering its first case in March 2020, Uruguay has maintained its COVID-19 test positivity rate below 2% and a mortality rate of 1.73 per 100,000 population (November 2020 data).\(^5\)

Telemedicine, a vital tool for the provision of medical care during the pandemic, was already in use in Uruguay prior to the pandemic but was further strengthened for the COVID-19 response. For example, regulatory protections for telemedicine needed to be added to ensure that face-to-face consultations continued taking place when necessary. Depending on the development of the first level of care and telemedicine, 96% of the 20,823 COVID-19 cases in Uruguay in 2020 were treated and contained at home.\(^6,7\) Telemedicine was further facilitated by the donation of technological equipment from PAHO, the existence of electronic medical records in Uruguay, widespread access to the Internet, and digital literacy in the population.

Another element of successful health care provision during COVID-19 was the emphasis on community-oriented care among health care units. This mindset was embraced by ASSE, which had made progress in ensuring that its health teams had a clear idea of where populations they care for work and live, as well as their usual activities and needs (beyond knowing about their health). For COVID-19, this meant that staff could quickly identify vulnerable groups and tailor services accordingly. For example, units serving older adults, pregnant women, or children were prepared to ensure medication delivery, remote care, and COVID-19 testing at home.\(^8\) Familiarity with community activities also enabled units to conduct active searches for COVID-19 cases and provide targeted education on COVID-19 protective measures for socially vulnerable groups.

The government’s leadership and timely decision-making—with the support of PAHO/WHO and a group of scientists and experts articulated in the Honorary Scientific Advisory Group (GACH)—were crucial in Uruguay’s overall response to COVID-19. The government partnered with public education and research institutions (in particular, the Faculty of Sciences of the University of the Republic and the Pasteur Institute in Montevideo) which led to the development and production of the COVID-19

\(^6\) https://www.gub.uy/ministerio-salud-publica/comunicacion/noticias/informe-epidemiologico-covid-19-actualizacion-3-enero
\(^7\) https://www.paho.org/es/historias/telemedicina-uruguay-estrategia-que-llego-para-quedarse
\(^8\) https://www.paho.org/es/historias/cercania-clave-uruguay-para-encarar-pandemia-poblacion-mas-vulnerable
diagnostic molecular test (RT-PCR) in Uruguay in early March (prior to the first case). With the full confidence of the government and technical guidance (e.g. recommendations for diagnostic protocols) and direct support (e.g. laboratory training) from PAHO/WHO, a team of scientists created a protocol that used available resources in the most efficient manner. The COVID-19 test allowed the Ministry of Public Health to proceed with intensive and immediate contact tracing and surveillance. For example, the government was able to garner support of public and private SNIS providers and order periodic testing for all residents in residential homes for the elderly.

In addition to laboratory support, WHO and PAHO’s Emergency Operations Center have mobilized regional and national experts to support the Ministry and have donated PPE, medical and diagnostic equipment, and funds. Moreover, recognizing that communication is a critical factor in mitigating the pandemic, PAHO/WHO also donated media equipment to the Ministry. More recently, PAHO/WHO has been helping to develop mechanisms for access to vaccines and strengthening treatment research.

Since the beginning of the pandemic, Uruguay never ordered quarantine with coercive mechanisms, but urged the population to do so voluntarily, obtaining during the initial months a good response to the “stay at home” call. This was made possible by the strength of institutions and the long-standing credibility of government authorities, which has been maintained during the pandemic (through clear and transparent public health messages to the public). Furthermore, the country’s past experiences and trajectories of health system strengthening and outbreak management provided a solid foundation on which to build the COVID-19 response. As such, the pandemic will undoubtedly leave Uruguay with a stronger integrated health system, comprised of proactive health care services tailored to the populations they serve.

10 https://www.bmj.com/content/370/bmj.m3575
UZBEKISTAN

Accelerating Universal Health Coverage through Health Financing and Service Delivery Reforms

In 2019, Uzbekistan embarked upon an ambitious transformation of its health system, including service delivery and health financing. Prior to this, the country’s healthcare system was largely financed through household out-of-pocket payments (46%), indicating inadequate financial protection. Compounding this issue of out-of-pocket expenditure was a heavy dependence on hospitals for healthcare services. This dependence was in part due to the ineffectiveness of primary health facilities in preventive treatment, as well as low uptake of outpatient treatment services. More than 40% of patients, receiving inpatient treatment at the district level, could receive outpatient treatment at home or in a day-time hospital—reducing costs. Furthermore, Uzbekistan has a large and fragmented network of hospitals and specialist clinics that complicates efforts to utilize health resources efficiently. Investing in primary health care—thereby prioritizing prevention—facilitates better care, at lower costs. Uzbekistan’s health system therefore required reforms in three areas: equity of healthcare financial protection, quality of primary healthcare services, and efficiency in healthcare resource allocation.
WHO supported the development of a legal foundation for this transformation, including a Presidential Resolution establishing mandatory health insurance and a strategy for piloting service delivery reforms in Sydarya Oblast—with the intent to scale reforms to the entire country by 2025. Highlights from these reforms include:

- **Establishing a State Health Insurance Fund (SHIF)** to address high out-of-pocket expenses and enhance financial protection. The MOH will introduce SHIF as the single purchaser of a state-guaranteed package of health services that contracts with health providers under a new model of payment. The Fund will establish a system for strategic purchasing of health services, with a view to providing all strata of the population with quality and essential health care within the scope of a guaranteed package.

- **Strengthening service delivery in primary care** to ensure that patients are treated more efficiently, at lower levels of care and closer to their communities. Proposed service delivery reforms promote evidence-based provision of primary care services, expand the role and functions of family physicians, nurses and GPs in early detection and preventive health services and change the current patient pathway. PHCs will be equipped with medical brigades comprising a family physician and midlevel health workers, nurses and midwives. To ensure quality of service delivery, primary-healthcare-worker performance will be monitored, with incentive payments made based on results. PHCs in Uzbekistan will also be equipped with multi-disciplinary teams to tackle NCDs or chronic diseases through evidence-based service delivery.

- **Restructuring service-delivery systems in public hospitals** to address high expenditure associated with tertiary hospitals. PHCs will share health resources and work tangentially with public hospitals to ensure optimal and efficient usage of resources—and avoid duplication of service delivery. Efficiency gains achieved in this health reform will also support establishment of stronger people-oriented PHCs, and support better equity and equality in service delivery.

It is expected that these reforms will contribute to intermediate outcomes in effectiveness, efficiency, equity, responsiveness and accountability and, in turn accelerate Universal Health Coverage (UHC).

Reforms were underway, when the COVID-19 health crisis emerged. To maintain momentum, WHO's Country Office continued to participate in high-level meetings, facilitate technical working groups, share guidelines and good practices, as well as review and revise draft legislation. To allay government concerns about implementing service delivery and health financing reforms in the midst of a pandemic, WHO provided additional evidence and facilitated several rounds of discussion. The process of re-building consensus within the Government of Uzbekistan provided an opportunity to further engage other health development partners in the proposed Sydarya pilot. WHO convened regular monthly meetings with all health development partners, as well as ad hoc meetings with key partners in health financing such as the World Bank, Asian Development Bank and German Development Bank. These partners joined WHO in expressing verbal support for the Presidential Resolution, pledging technical and financial support as well.
WHO continued to push for larger health reforms despite additional priorities related to COVID-19. **Significant outcomes in both health reforms and COVID-19 management, characterise WHO’s achievements in 2020.** In addition to sector reforms, WHO’s Country Office developed a strategic preparedness and response plan for COVID-19, delivered a 36-hour training program for postgraduate students of Intensive Care Units that was adopted by the MOH, and disseminated Uzbekistan’s first Weekly National Influenza Bulletin. WHO’s efforts in the region contributed towards building resilient health systems and accelerating UHC. These achievements will serve to protect Uzbekistan from epidemics and other health emergencies in the future.
Leveraging an Innovative Learning Platform to Enhance Health Workforce Preparedness in Viet Nam during COVID-19

Viet Nam has received global recognition for its COVID-19 response during the initial months of the outbreak, and continues to remain vigilant. Previous experience with public health emergencies and disease outbreaks, enabled an early, proactive response and contributed to Viet Nam’s effective management of COVID-19. Among the many interventions attributable to Viet Nam’s success are innovative approaches taken to train and prepare Viet Nam’s health workforce, in particular primary health workers.

Accelerating health workforce preparedness is a pivotal measure in effectively managing COVID-19. During the initial months of the outbreak, health practitioners were grappling with a novel disease and treatment was new, as well as rapidly changing. It was therefore crucial to build the capacity of health workers to respond to the outbreak, while simultaneously enabling uninterrupted provision of essential health services. Among the health workforce, primary care workers emerged as crucial first responders in preventing wider community transmission.

A Session underway at IBSA’s ‘e-Learning for Health’ Project Dissemination and Knowledge Sharing Workshop. Photo credit: WHO Viet Nam
Primary care workers play a significant role in gatekeeping: making an early diagnosis, responding to those most vulnerable and reducing the demand for hospital services. It was therefore vital to train this segment of the health workforce in disease management guidelines, IPC and treatment protocols.

Viet Nam was additionally challenged by a shortfall of trained primary care workers, particularly in remote regions. Challenges include how to raise the quality of healthcare services, including strengthening the skill sets of primary care workers given they have more limited qualifications and learning opportunities. Health statistics indicate that nurses, midwives, medical technicians and pharmacists in these remote regions have only secondary- or elementary-level training.

Prior to COVID-19, the WHO Viet Nam Country Office with support from the ‘India, Brazil and South Africa Facility for Poverty and Hunger Alleviation’ (IBSA) Fund, Hai Phong Medical and Pharmaceutical University (HPMU) and the Ministry of Health (MOH) of Viet Nam established the IBSA e-learning platform for health workers in 2015. The platform provides online lectures for medical students and primary care workers in northern coastal provinces of the country. It serves as an innovative approach to strengthen health workforce capacity through South-South cooperation.

In 2020, in light of the increasing demand to level-up knowledge among primary care workers, the WHO Country Office and HPMU leveraged the existing IBSA e-learning platform to disseminate additional training modules on COVID-19. Technical officers from the WHO country office translated COVID-19 courses developed by the OpenWHO into Vietnamese, enhanced the cultural-relevance of practices outlined in these courses and incorporated suggestions from health care workers during the pilot-testing phase. Further, WHO supported HPMU to develop COVID-19 training materials specifically for PHC workers and repackage these materials to match online learning formats. Given that NCDs are risk factors for severe COVID-19 cases, training courses on NCD management were also updated and disseminated via the same platform. WHO’s country office team relayed COVID-19 updates to the MOH on an ongoing basis to facilitate better preparedness across the country.

As a result of these efforts, the IBSA e-learning platform saw an increase in uptake by health care workers in Viet Nam. More than 4,200 health care workers have accessed the COVID-19 courses, including over 200 primary care workers serving at the community level. Results from assessments by conducted by HPMU for the formal e-learning courses on COVID-19 show a high pass rate of 96%.

Furthermore, the initiative stimulated a shift in the use of e-learning in Viet Nam. Prior to the COVID-19 pandemic, traditional learning approaches for health workers relied heavily on face-to-face training, and it was challenging to get buy-in for the e-learning platform. However, since the pandemic, there has been greater interest and willingness to utilize e-learning modalities for workforce training and peer-learning, as well as using e-health and telemedicine for service delivery. The WHO Country Office is

1 Also accessible through https://openwho.org/channels/covid-19-national-languages
working to promote these innovations to increase uptake of e-learning offered via the platform through, for example, proactive communication with District Health Centres to promote e-learning among health workers at Community Health Centres across the country. Other efforts include accreditation of training modules, which in turn will increase uptake from health workers. Given that the quality and format of training material also influences uptake, efforts are being made to make lectures available in video format and accessible via smartphones. Building on the success of this initiative, the WHO Country Office is now planning to support the MOH and other medical universities to introduce tele-health/telemedicine within the primary health care system.

Well-trained and motivated health workers are foundational to accelerating Universal Health Coverage and achieving the goals of the GPW 13 and the SDGs. This requires rethinking traditional models of education and service delivery, to utilize innovative approaches that can help build the workforce in underserved areas or specialties, thus strengthening health service delivery. E-learning proved effective in training health workers across Viet Nam during the pandemic, particularly primary health workers. COVID-19 worked as a stimulus for the Vietnamese government to accelerate digitalization and IT applications within the health sector; WHO’s long-term investment in e-learning prior to the pandemic paid off. Further efforts are now needed to monitor and improve effectiveness of e-learning innovations aimed at enhancing health service delivery.
New chapter in trauma and emergency care

In November 2019, a Limb Reconstruction Centre (LRC) begun its work at Nasser Medical Complex in Gaza Strip. The Centre provides treatment and care for patients requiring limb reconstruction surgery. And it does so in a novel way: by centralizing all necessary steps in one place, from the point of injury, over hospital care and surgery, to rehabilitation and recovery. In this way, the Centre covers a wide spectrum of health services ranging from reconstructive and plastic surgery, wound care, medical treatment, infection prevention and nutrition; to physiotherapy, mental health support; and health promotion and awareness.

By providing services in one location, the LRC makes the optimal use of human resources, time and equipment, which is important in fragile settings like the Gaza Strip. Additionally, visiting international medical teams can now focus their work in one place and this in turn enables young resident staff to learn from them.

Sadi Abdurahman Ghanaim’s leg injury was highly advanced and he considered amputation. His family kept the hope and convinced Sadi to change his mind. He underwent 12 surgeries to preserve the leg. Photo credit: WHO office for the West Bank and Gaza
Why is this important?
The occupied Palestinian territory including east Jerusalem has been vulnerable to numerous conflicts, demonstrations and civil unrest. They often result in injuries requiring urgent medical treatment, like gunshot wounds or limb reconstruction treatments. This was the case during the Great March of Return demonstrations in Gaza. The protests lasted from March 2018 to December 2019, and left 33,141 people injured, while 322 died. More than 7,950 people suffered from gunshot wounds, out of which 88% were limb wounds.1 In response to the ensuing humanitarian health needs, the Palestinian Ministry of Health and WHO joined forces to launch the LRC.

Benefits of cooperation
And they were not alone in these efforts. Support also came from other partner organizations and WHO coordinated their actions to best respond to peoples’ needs. Firstly, Swiss Development Cooperation and United Nations Development Programme provided the income for 36 health workers for nine months. Moreover, Première Urgence Internationale improved nutrition of patients in the LRC by ensuring high-protein meals that are important for optimal treatment. They also offered unconditional cash assistance to families of the most vulnerable patients. Finally, Médecins Sans Frontières supported the treatment of patients with bone infections – Osteomyelitis, a condition that occurs frequently and patients are increasingly showing signs of antibiotic resistance.

Although the COVID-19 outbreak relocated some health workers from the LRC to the pandemic response, emergency surgeries and limb-saving interventions remained in place. To support health workers in treating injuries amidst the global pandemic, WHO organized psychosocial support for all clinical personnel at the LRC. And to equip and protect them while caring for patients, the Organization procured infection prevention equipment, surgical and anesthesia equipment, orthopaedic instruments, implants, physiotherapy materials and medications.

While ensuring operational capacities of the LRC, WHO thought about its development and sustainability, too. So, it established bridges between the LRC and international treatment centres in Greece and Jordan to support learning among health workers. And to assist the Ministry of Health in managing the new Centre, WHO mobilized international experts to provide technical guidance. The commitment of the Ministry of Health and WHO to this exchange did not weaken with the outbreak of COVID-19. The partners were quick to find an alternative and move to “Virtual Class Through Glass” training sessions. Lastly, with WHO support, two steering and coordination bodies were formed: Steering Committee for Limb Reconstruction Service that provides strategic guidance, and Trauma Working Group, whose members address challenges in trauma care.

The continuum of care
The Limb Reconstruction Centre treated 1,058 people with limb and trauma injuries from the border demonstrations, but also non-conflict related injuries like car accidents. It supported patients’ recovery by nearly 8,400 rehabilitations and more than 6,000 psychotherapy sessions. The Centre’s impact

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1 WHO EMRO | Limb Reconstruction Centre launched to assist patients with gunshot injuries in Gaza | 2020 | Palestine press releases, retrieved 17 February, 2021.
goes, however, far beyond numbers. It widened the treatment to support patients suffering from social pressures, mental health conditions and financial burdens. By offering these services at the LRC, patients no longer have to be referred outside of Gaza – a process that was demanding both individually and institutionally.

**LRC services provided from November 2019 to October 2020**

- 1,058 people screened
- 200 limb reconstruction surgeries
- 8,408 rehabilitation sessions
- 1,913 physiotherapy sessions
- 6,491 psychotherapy sessions

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2. Project indicators data, WHO office for the West Bank and Gaza
“Polio anywhere is a threat to children everywhere”

With the world’s attention focused on COVID-19 in 2020, other infectious diseases continued to evolve and threaten the lives of children in Yemen. Six years into the armed conflict, the humanitarian crisis remains unparalleled with 20.7 million people in need of aid. The country’s health system operates at half capacity, while facilities that remain open lack qualified health workers, essential medicines and medical equipment. Such circumstances make it difficult to reach children with life-saving vaccines and other health services, creating the conditions for outbreaks that can undo decades of progress achieved by immunization programmes. This fear was realized in August 2020, when polio was detected in Yemen for the first time since 2005.

Minivan with a loudspeaker announces polio campaign

Yemen is experiencing an outbreak of vaccine-derived poliovirus type 1, a strain of poliovirus that occurs in areas where routine immunization or door-to-door campaigns have failed to reach many children for many

years, resulting in dangerously low immunity levels. To date, 33 children in Yemen have developed paralytic polio: one in 2019, 31 in 2020 and one in 2021.

To respond to the outbreak, Yemen’s health authorities, together with WHO and UNICEF, initiated a national polio immunization campaign. In late November and early December 2020, the first round of the campaign rolled out. Vaccinators and social mobilizers moved door to door, accompanied by loudspeakers blaring from minivans and equipped with cool boxes of oral polio vaccine (OPV), in an effort to vaccinate every child under age five. In Sa’adah governorate, which concurrently is affected by outbreaks of measles and diphtheria, an integrated health outreach campaign bundled additional health services with polio: other childhood vaccines, safe drinking water, and nutritional, sanitation and hygiene support. Not only was the response rate high, but people also expressed a need for vaccines against other diseases, like measles and diphtheria and for protection from cholera and related waterborne diseases.

Following the first round of vaccination, no new polio cases have been reported. It is too early to tell definitively, but the polio programme believes this is a step in the desired direction. Plans are proceeding for a second round, including a second round of an integrated health outreach campaign in Sa’adah.

Navigating multiple epidemics
Meanwhile, another health emergency was looming. As COVID-19 spread throughout the country, it put additional pressure on an already fragile health system. Aware of the threat the virus poses to the people in Yemen, WHO in collaboration with public and private sector partners prepared in advance.

Building on Yemen’s national strategy to counter COVID-19, WHO and the Islamic Development Bank equipped 32 treatment centres with medical devices like portable pulse oximeters, oxygen cylinders and ultrasound.1 And together with the Hayel Saeed Anam Foundation, WHO supported hospitals and laboratories with more than 400 ventilators, around 1 million pieces of personal protective equipment, 34 000 test kits and other essential equipment. Yemeni health authorities and WHO set up nearly 60 isolation units with 675 beds for intensive care, too.2 Vital support from other donors including the King Salman Humanitarian Aid and Relief Center has enabled and continues to enable the delivery of life-saving immunizations and medical care to millions of Yemeni children.

From the onset of the pandemic, a network of surveillance officers and more than 300 rapid response teams have conducted surveillance for COVID, have investigated contacts and referred people to

designated health centres.\textsuperscript{3} In health centres of Sa’adah governorate, WHO supported trainings in clinical case management for doctors, nurses and medical assistants.\textsuperscript{4}

And it is these Yemeni doctors, nurses and medical assistants who are themselves vulnerable. Recent estimates indicate that most health personnel have not received salaries for at least two years. To support them and their families, the United Nations has been providing living wages to 9000 frontline health workers.\textsuperscript{5}

The outbreaks of polio and COVID-19 add a new battle to the existing ones the people in Yemen have had to face. With international support and national commitment, the country continues to make the most with available resources.


