

# KYRGYZ REPUBLIC End of Activity Report 2020-2022



LOCAL HEALTH SYSTEM SUSTAINABILITY PROJECT

#### Local Health System Sustainability Project

The Local Health System Sustainability Project (LHSS) under the USAID Integrated Health Systems IDIQ helps low- and middle-income countries transition to sustainable, self-financed health systems as a means to support access to universal health coverage. The project works with partner countries and local stakeholders to reduce financial barriers to care and treatment, ensure equitable access to essential health services for all people, and improve the quality of health services. Led by Abt Global, the five-year project will build local capacity to sustain strong health system performance, supporting countries on their journey to self-reliance and prosperity.

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#### Submitted to:

Scott Stewart, Contracting Officer's Representative Office of Health Systems Bureau for Global Health

Chynara Kamarli Health Project Management Specialist, TB Lead USAID/Kyrgyz Republic

#### Submitted by:

Local Health System Sustainability Project Abt Global 6130 Executive Blvd. Rockville, MD 20852 (301) 347-5000

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# ACRONYMS

ARPA	American Rescue Plan Act
CDC	U.S. Centers for Disease Control and Prevention
DDP&SSES	Department for Disease Prevention and State Sanitary and Epidemiological Surveillance
EpiC Project	Global initiative that provides strategic technical assistance and direct service delivery - "Meeting Targets and Maintaining Epidemic Control"
ERIC	Emergency Response in COVID-19 project, funded by the World Bank
ICU	Intensive Care Unit
IEC	Information Education Communication
IPC	Infection Prevention and Control
ІТ	Information Technology
HIV	Human Immunodeficiency Virus
KSMIRCE	Kyrgyz State Medical Institute for Retraining and Continuing Education
KFPA	Kyrgyz Family Planning Alliance
LCD	Liquid-Crystal Display
LHSS	Local Health System Sustainability Project
LMIS	Logistics Management Information System
MDT(s)	Multidisciplinary Team(s)
МОН	Ministry of Health
MSCF	Media Support Center Foundation
M-RITE	MOMENTUM Routine Immunization Transformation and Equity
NDVP	National Deployment and Vaccination Plan
РНС	Primary Health Care
PHEOC	Public Health Emergency Operation Centre
PPE	Personal Protective Equipment
RCI	Republican Center of Immunoprophylaxis
RCCE	Risk Communication and Community Engagement
RCHPMC	Republican Center for Health Promotion and Mass Communication
RT-PCR	Reverse Transcription Polymerase Chain Reaction
SOP	Standard Operating Procedures
ТВ	Tuberculosis
UNICEF	United Nations Children's Fund
USAID	U.S. Agency for International Development
WHO	World Health Organization

## ACTIVITY OVERVIEW

From April I, 2020, to November 30, 2022, the USAID Local Health System Sustainability Project's (LHSS's) Kyrgyz Republic Activity worked with development partners and key government stakeholders to support the country's COVID-19 response and vaccine technical assistance activities. Tasks carried out under this Activity included:

- Procurement of priority case detection and case management equipment and commodities
- Technical assistance to improve infection prevention and control (IPC) practices
- Capacity strengthening to enable laboratories to identify SARS-nCoV-2 and other pathogens correctly and safely
- Support for surveillance and rapid response through the development of digital tools
- Strengthening the country's epidemiological and lab information reporting systems
- Support for the Ministry of Health's (MOH's) efforts to share information about the risks associated with COVID-19 and the benefits of vaccination

The LHSS in-country Activity team was led by a Chief of Party, with support from a Deputy Chief of Party, a Technical Specialist in Data and Surveillance, a Monitoring and Evaluation Officer, and a Knowledge Management and Communications Specialist. Administrative and operational support was provided by a Finance and Administration Manager, Finance and Administrative Assistant, and Logistics and Procurement Specialist. Consultants and local nongovernmental organizations (NGOs) supported activities related to distance learning, vaccine promotion and demand generation, and social and behavior change communications (SBCC). An LHSS home office team provided technical, administrative, financial, and operational support.

## BACKGROUND AND COVID-19 EMERGENCY RESPONSE

The Kyrgyz Republic is a nation of just over 7 million, with a relatively young population: 34 percent of the total population is under the age of 15, 62 percent is between ages 15 and 64, and 4 percent is above 65 years<sup>1</sup>. Life expectancy is 70 for women and 62 for men. The health care system has undergone several wide-ranging reforms, some successful, over the past several decades with support from bilateral and multilateral donors and partners. The country currently spends four and a half percent of its GDP on health.<sup>2</sup>

The first case of COVID-19 in the Kyrgyz Republic was confirmed on March 1, 2020, with the first death reported on April 3, 2020. Shortly after the first case was confirmed, the government enacted a series of measures to attempt to mitigate the spread of COVID-19, including a 47-day lockdown. As of December 15, 2022, there have been over 200,000 confirmed cases and almost 3,000 deaths reported<sup>3</sup>. The COVID-19 pandemic revealed significant and systemic gaps and challenges in the health sector. At the start of the pandemic, hospital capacity was quickly reached due to the rapidly increasing number of COVID-19 cases. The lack of infrastructure and supplies (such as personal protective equipment) and appropriately trained health workers meant the health system was unable to launch a robust response. This was further complicated by political instability, including changes in MOH leadership and personnel,

Available at Kyrgyzstan Population 2022 - population stat (chislennost.com)

<sup>&</sup>lt;sup>2</sup> Available at: <u>https://data.worldbank.org/indicator/SH.XPD.CHEX.GD.ZS?locations=KG</u>

<sup>&</sup>lt;sup>3</sup> <u>https://covid19.who.int/region/euro/country/kg</u>

which delayed key decisions related to the pandemic and other primary health care service needs and stymied the ability of international partners to support the emergency response.

The country's health sector response to COVID-19 is organized under two coordination platforms: 1) the Disaster Response Coordination Unit, led by the MOH and WHO, and 2) the Development Partners Coordination Council (DPCC), led by WHO and the World Bank. WHO provided technical support to DPCC to create the COVID-19 Strategic Preparedness and Response Plan. The WHO and USAID are all key partners in implementing the plan. LHSS interventions aligned with the nine priority areas identified in the plan:

- I. Country-level coordination
- 2. Surveillance, case investigation, and rapid response
- 3. Risk communications and community engagement
- 4. National laboratory system
- 5. Case management
- 6. Infection prevention and control
- 7. Points of entry
- 8. Maintenance of essential health services and systems
- 9. Logistics and supply management

### WORK PLANS

LHSS interventions were implemented from April 1, 2020, to November 30, 2022, with a total funding envelope of \$6,050,000, delivered through tranches that spanned the three work plans described below. These were developed in response to evolving in-country needs and new funding from USAID.

## LHSS COVID-19 EMERGENCY RESPONSE ACTIVITY WORK PLAN (\$2,900,000)

In April 2020, LHSS responded to a Central Asia regional request for COVID-19 surge support and prepared a work plan for the Kyrgyz Republic. LHSS worked closely with the USAID Mission, implementing partners and government counterparts to ensure that activities conducted under this work plan were well coordinated with other partners to avoid duplication of efforts and ensure alignment with the country's emergency response plan. Through extensive discussions with these partners, the Activity identified key interventions, including: 1) procurement of priority case detection and case management materials for COVID-19, 2) technical assistance to advance infection prevention and control, 3) support of laboratory case detection capacities for COVID-19 and other pathogens, 4) strengthening surveillance and rapid response capacity, and 5) risk communication and community engagement.

#### LHSS KYRGYZ REPUBLIC VACCINE TECHNICAL ASSISTANCE (\$850,000)

In March 2021, USAID Kyrgyz Republic notified LHSS that the Mission would provide additional funding to advance and strengthen the country's COVID-19 vaccine roll-out plan through focused technical assistance and operational support. The Activity's period of performance was extended through April 6, 2022. Interventions under this work plan aimed to address gaps and weaknesses in the country's vaccine supply chain, improve operational information on approved vaccine availability, strengthen health workforce competencies in interpersonal communication for vaccine administration, and enhance demand-related activities to promote acceptance of WHO-approved vaccines. LHSS coordinated

interventions with key government and international partners including the MOH, the Republican Center of Immunoprophylaxis (RCI), the Republican Center for Health Promotion and Mass Communication (RCHPMC), the E-Health Center, the World Bank and WHO.

#### AMERICAN RESCUE PLAN ACT (ARPA) (\$2,300,000)

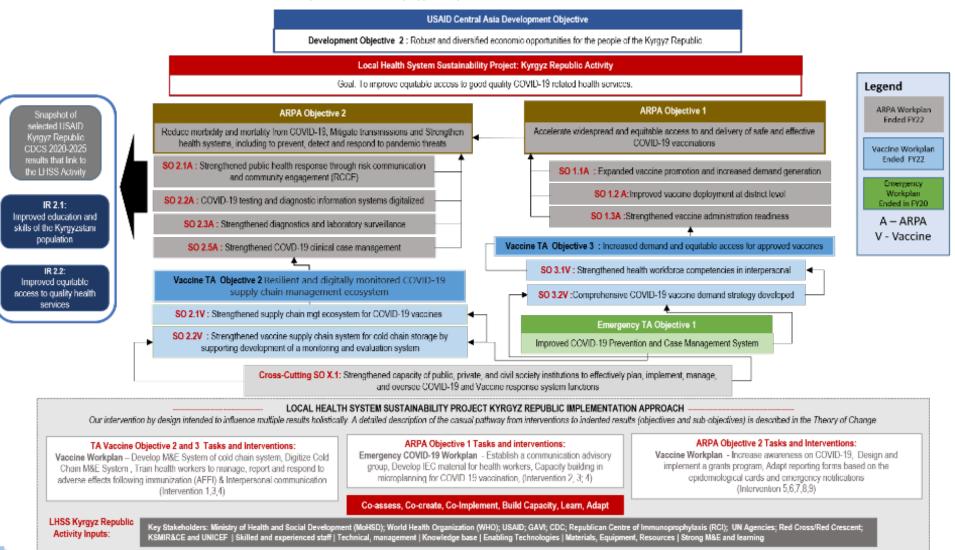
In August 2021, the USAID Kyrgyz Republic mission notified LHSS that additional funding was available for the Kyrgyz Republic through the American Rescue Plan Act (ARPA). This funding expanded LHSS's COVID-19 Response and Vaccine Technical Assistance scope and extended the Activity's period of performance through November 30, 2022. ARPA interventions aimed to: 1) accelerate widespread and equitable access to and delivery of safe and effective COVID-19 vaccinations and reduce morbidity and mortality from COVID-19.

### **RESULTS FRAMEWORK**

The LHSS Kyrgyz Republic Activity's Results Framework (Figure 1) demonstrates how the activity contributed to USAID Kyrgyz Republic's development objectives, specifically IR 2.1 (Improved education and skills of the Kyrgyzstani population) and IR 2.2 (Improved equitable access to quality health services). The framework was used to demonstrate and depict causal pathways from tasks to outputs to sub-objectives and objectives' desired outcomes and ultimate impact.

Reflecting LHSS's systems approach to supporting the Government of Kyrgyz Republic's COVID-19 emergency response and vaccine roll-out, the results framework identified sub-objectives that contributed to more than one higher-level objective. This is because interventions were intentionally designed to influence multiple results holistically and simultaneously. These sub-objectives also served as an important pathway (and condition) to achieve the overall objective. The framework, which also represents the Theory of Change, highlights some of the inputs, processes, and interventions that contributed to the intended results. Additional information on performance indicators is available in Annex 1.

#### Figure 1: LHSS Kyrgyz Republic Results Framework



## RESULTS AND KEY ACHIEVEMENTS LABORATORY DIAGNOSTICS, SURVEILLANCE, AND RAPID RESPONSE

#### STRENGTHENED DIAGNOSTICS AND LABORATORY SURVEILLANCE

The Kyrgyz Republic's Country Contingency Plan identified priority areas for strengthening the country's prevention, containment, and overall response to COVID-19, which included strengthening the country's national laboratory system; IPC; case management protocols; multi-sectoral action to mitigate social and economic consequences; and logistics and supply management.

One of the most critical steps in tracking new infections is building up surveillance capacity to help the country monitor disease outbreaks. The USAID Cure TB Project developed the Laboratory Information System to track TB test results at the national level. This system has been adapted to track COVID-19 test results for patients across the country. The COVID-19 laboratory information system modification saved the government time and resources by allowing patients to receive their test results electronically. The modified system was installed in all 12 government laboratories nationwide. Building on this system, LHSS supported the introduction of text message notifications for PCR test results for those using the state laboratory system. The text messages, however, were sent on a paid basis, and it became difficult to ensure long-term sustainability of such a service.

As a result, there was a need to develop a free service for remote access to PCR test results. At the MOH's request and in partnership with the E-Health Center, LHSS supported the development of digital tools aimed at providing free access to PCR test results, optimization of laboratory services and data analysis. As a result, the service for remote access to PCR test results was developed in three languages for use by both Kyrgyz and foreign citizens. Additionally, LHSS and the E-Health Center set up an application programming interface to transfer data from the laboratory information system iLab to the laboratory data repository of the E-Health Center. From March 2022 to September 2022, roughly 87,000 records were transferred to this repository. Dashboards on the laboratory data repository are also able to display a broad variety of data, such as number of PCR assays by private labs.



A laboratory specialist uses GeneXpert. (Photo: LHSS Project - Kyrgyz Republic)

From the outset of the pandemic in the Kyrgyz Republic, LHSS provided technical assistance to laboratories in Bishkek and Osh. As a part of this technical assistance, LHSS and the Department for Disease Prevention and State Sanitary and Epidemiological Surveillance (DDP&SSES) led lab specialist trainings on PCR diagnostics and the basic principles of laboratory biosafety, biosecurity, and bioethics. LHSS complemented this technical assistance with procurement of laboratory supplies and equipment, including state-of-the-art GeneXpert diagnostic technology that reduces COVID-19 testing time from five hours to 40 minutes. Given to the national virology

lab in Bishkek, which coordinates with regional labs, the GeneXpert technology can also accurately detect and diagnose other infections, such as tuberculosis. This technology strengthens the country's capacity to identify and monitor a broader range of illnesses. For additional details on procurements, please see the Procurements section of this report.

LHSS supported the revision of SOPs and protocols for COVID-19 detection, specimen collection, handling, transport, and storage to ensure timely, safe, and high-quality detection of SARS-nCoV-2. In close coordination with WHO, LHSS also supported the MOH in developing quality management system SOPs focused on personnel management, one of twelve components of quality management<sup>4</sup>. The MOH had identified personnel management as an essential element for maintaining the quality of diagnostic studies.

In response to an MOH request, LHSS joined WHO's Good Laboratories for Good Health initiative to support three rounds of quality management mentoring visits in nine virology laboratories in the Osh, Jalal-Abad, Batken, Issyk-Kul, Naryn, Talas and Chui regions. The purpose of this mentoring program was to assist laboratories in implementing quality management system modules to increase the precision, reliability, and timeliness of test results. National mentors visited nine selected virology laboratories every three to four weeks, beginning in June 2022, to provide on-the-job training on establishing, monitoring, and auditing quality management standards and systems.

#### Results

- Thirty-six laboratory specialists trained on specimen sampling, handling, transport, and storage.
- The Osh regional virology lab was fully equipped with testing equipment and supplies for PCR diagnostic testing.
- The national virology laboratory in Bishkek was equipped with GeneXpert technology, complemented by in-person training for laboratory specialists on how to use and maintain the equipment. At the end of Activity, almost 7,000 tests had been run using this equipment.
- Twelve laboratory specialists from nine virology laboratories received mentoring visits to support their ability to improve quality measures in laboratories for precise, reliable, and timely test results.

#### IMPROVED EPIDEMIOLOGICAL SURVEILLANCE AND RAPID RESPONSE

The COVID-19 pandemic has shown how important operational readiness is for prevention, detection, and effective response to public health emergencies. LHSS coordinated with the MOH, the DDP&SSES, and WHO to establish the Public Health Emergency Operations Center (PHEOC). The PHEOC's primary goal is to strategically coordinate public health emergency responses. The PHEOC also aims to accelerate information exchange through digital means and to harmonize health emergency response communication with the public. This center is necessary for emergency preparedness and response and brings together epidemiological experts from across the country, offering digital solutions to share information and protect against future health crises. With WHO support, the PHEOC improved the capacity of hospitals, primary care facilities, and the laboratory information system to securely register and track data.

Health care facilities previously used an automated disease surveillance information system to detect infectious diseases. However, technical support for this system ended several years ago. As a result, the system periodically failed to work, resulting in health care providers reporting information about infectious diseases to epidemiologists over the phone, which was then recorded using paper-based records. The system only had functionality for emergency notifications, not epidemiological cards, which epidemiologists use when investigating suspected infectious diseases.

LHSS supported the development of the emergency notification subsystem, which allows health care facilities to send information regarding infectious disease cases to epidemiologists within 24 hours, and the epidemiological card subsystem, which allows epidemiologists to enter the results of an epidemiological investigation based on the emergency notifications. Epidemiological cards were

<sup>&</sup>lt;sup>4</sup> Laboratory quality management system: handbook, https://www.who.int/publications/i/item/9789241548274

developed and launched for five infectious disease categories: 1) COVID-19, 2) acute parenteral viral hepatitis, 3) meningitis, 4) acute intestinal infections, and 5) rabies.

LHSS prepared training materials for facility-based health care providers, PHEOC specialists, and regional epidemiologists — 89 providers participated in in-person training. Topics covered included how to use digital epidemiological investigation cards and emergency notifications forms. Additional training materials were developed for regional-level epidemiologists who verify emergency notifications, conduct epidemiological surveillance, and confirm cases.

#### Results

- Over 21,500 emergency notifications for highly contagious infections and COVID-19 were reported by the PHEOC as of September 30, 2022.
- More than 800 epidemiological cards were registered on the PHEOC epidemiological platform as of September 30, 2022.
- Six hundred and seventy-four health care providers, PHEOC specialists, and regional epidemiologists received training on how to use the digital epidemiological investigation cards and emergency notification reporting forms.

## CLINICAL GUIDELINES AND CASE MANAGEMENT

#### IMPROVED INFECTION PREVENTION AND CONTROL AT THE PHC LEVEL

Globally, primary health care (PHC) facilities have played a critical role in responding to the COVID-19 pandemic, conducting early detection, first aid, and referral of patients while ensuring the continuity of essential health services. At the same time, the pandemic has highlighted existing gaps in IPC at this level, including in the organization of isolation rooms and restrictions, hygiene, and the management of medical waste. PHC facilities in the Kyrgyz Republic were not sufficiently prepared to screen, triage, isolate, treat, or refer cases of COVID-19. PHC facilities' infrastructure is lacking in most parts of the country, especially in rural areas. Facilities are often overcrowded and under-resourced, making adherence to IPC measures challenging. Because the country lacks a unified approach to IPC, LHSS supported the development of the IPC manual for the PHC facilities as an important first step in standardizing IPC, the need for which has grown more urgent due to the COVID-19 pandemic.

LHSS also helped strengthen the IPC quality assessment process by developing monitoring and evaluation (M&E) guidelines and self-assessment tools for PHC facilities in COVID-19 settings. The IPC M&E guidelines, which included guidance on proper waste management and personal protective equipment, were piloted during a four-day, in-person training for 45 IPC specialists at three PHC facilities in Osh and Bishkek cities and a family medical center in the Chui region. The IPC assessment guidelines were approved by the MOH on April 16, 2021 and disseminated to all PHC facilities in the country.

The manual was drafted based on recommendations from WHO, the U.S. Centers for Disease Control and Prevention (CDC), and regulatory documents from the MOH, including preexisting orders, SOPs, and guidelines. The manual is intended primarily for PHC staff, but it can also serve as a reference document for health workers at other levels and settings, such as medical workers and health care providers at secondary and tertiary facilities and administrative staff in health facilities. It can also be used as a resource in undergraduate and postgraduate education settings. The manual is currently being used in a specialized IPC continuing medical education course at the Kyrgyz State Medical Institute for Retraining and Continuing Education (KSMIRCE).

#### Results

Five practical manuals on:

- I. IPC.
- 2. Management of patients with post COVID-19 syndrome, including rehabilitation and follow-up.
- 3. High flow nasal oxygen therapy for critically ill patients.
- 4. Non-invasive ventilation.



A Universal Nurse takes a patient's temperature. (Photo: LHSS Project -Kyrgyz Republic)

5. Respiratory support for patients with COVID-19 viral pneumonia were developed and introduced through the distance and practical trainings for health care workers.

#### STRENGTHENED COVID-19 CLINICAL CASE MANAGEMENT

LHSS also provided technical inputs for the national guidelines and clinical protocols on the diagnosis, treatment, and management of COVID-19. The guidelines provide health care workers with the knowledge and skills to provide high-quality medical care to patients with COVID-19 and are based on international clinical guidelines. Via online training sessions supported by LHSS and KSMIRCE, 754 PHC health care workers were introduced to the guidelines. KSMIRCE is responsible for conducting pre- and posttests and continuing medical education credits are granted to trainees who obtain a passing score or higher. In addition to the curriculum, LHSS provided inputs for a user-friendly pocket handbook containing key steps and algorithms for diagnosing and treating COVID-19. This handbook is designed for use by PHC providers. LHSS printed and distributed 2,700 copies

(1,500 in Kyrgyz and 1,200 in Russian) to all PHC facilities across the country, as well as to KSMIRCE in Bishkek and Osh. The e-version of the pocket guide is housed on the KSMIRCE website and can be easily accessed by health care workers.

To strengthen health care workers' access to training and provide a flexible education process, especially for those in remote regions, LHSS purchased \$20,000 worth of distance learning training equipment for KSMIRCE and its southern branch as well as for the DDP&SSES.

In 2020, LHSS introduced two new approaches—the Universal Nurse model and multidisciplinary teams (MDTs) —to address the immediate human resource needs brought on by the pandemic and contribute to the country's long-term health system resilience.

In the Kyrgyz Republic, nursing duties are typically divided into three categories related to specific tasks: ward, dressing, and procedure. Nurses in each category have separate responsibilities in the care of a single patient. The reporting structure tends to be hierarchical and strict, resulting in many nurses lacking the ability to independently make decisions such as nursing diagnoses, even if they possess the clinical knowledge to do so. A Universal Nurse is fully trained to observe patients' well-being, diagnose their condition, record changes, identify problems, and refer them to a physician or specialist if needed. The Universal Nurse model empowers nurses to practice more autonomously, which contributes to more efficient, patient-centered care. This model was introduced in hospitals with high COVID-19 patient caseloads. In hospitals where the Universal Nurse model is used, patient to nurse ratios have decreased from a high of 40 or more patients per nurse at the height of the pandemic to 8 to 12 patients per nurse. As of September 2022, there were 454 Universal Nurses in four hospitals.

The MOH is promoting the full adoption of this model to improve patient-centered health care and ensure that the Kyrgyz health system is prepared to absorb the impact of future emergency situations. LHSS highlighted this activity in an episode of The Health Systems Podcast<sup>5</sup> and presented a poster on the model at the Global Health Security Conference in Singapore,<sup>6</sup> sharing best practices and lessons learned, such as how the model improves the quality of care.

With the Universal Nurse model, the reduced number of patients per nurse allows nurses to spend more time with their patients, pay more attention to their health needs, and communicate with them on a more regular basis, which contributes to provision of more personalized care. The model also gives nurses an opportunity to speak with patients and/or their relatives about self-care, nutrition, lifestyle, and hygiene and provide preventive care and psychological support.

During the initial stages of the pandemic, infectious disease specialists struggled to manage the increased number of patients, and doctors and nurses without specialized knowledge were attempting to treat COVID-19 patients. The MOH identified the need to create MDTs to respond to increased caseloads, manage demands placed on health care providers, and address the shortage in medical specialists with knowledge of how to treat COVID-19. Multidisciplinary teams (MDTs) are comprised of health care providers with distinct professional roles, such as nurses and primary, secondary, and tertiary-level physicians, who work as a unit to provide comprehensive, quality care to patients. The foundation of this approach rests on team members working together in a coordinated way to improve patient outcomes. LHSS and the MOH coordinated with KSMIRCE and national consultants to develop an MDT training manual. This was followed by an initial training of trainers with 20 doctors and 14 nurses from Bishkek

city in February 2021. These trainees, in turn, served as cascade trainers in their respective regions and have since trained almost 300 doctors and nurses from seven oblasts and Bishkek city.

The training included information on COVID-19 epidemiology, infection prevention and control, diagnosis, and treatment, including respiratory therapy. The training manual also included recommendations for incentivizing and retaining MDT members, such as providing financial incentives (e.g., bonuses) for participation in an MDT. Training materials were based on current clinical guidelines and practices. MDT trainees also learned about how



An MDT trainer discusses the course curriculum with trainees. (Photo: LHSS Project - Kyrgyz Republic)

<sup>&</sup>lt;sup>5</sup> Local Health System Sustainability Project. *Podcast Episode 3 - Powering Resource Optimization and Quality Improvement Through Workforce Reforms.* https://www.lhssproject.org/resource/podcast-episode-3-powering-resource-optimization-and-quality-improvement-through-workforce

<sup>&</sup>lt;sup>6</sup> Abt Associates. *Global Health Security 2022*. https://www.abtassociates.com/insights/events/global-health-security-2022

to work in a multidisciplinary environment and leverage their respective knowledge and experience to improve service delivery and quality of care. MDTs also participated in a refresher training on the seventh version of clinical guidelines, which were adapted from WHO guidelines, on the diagnosis and treatment of COVID-19 patients, and rehabilitation of patients with post-COVID-19 conditions. Monitoring, which was co-led by LHSS and the MOH, showed that MDT members were actively using knowledge and skills gained during training sessions and were training other health care providers. MDTs were established in all regions of the Kyrgyz Republic.

#### Results

- Two MOH clinical protocols on COVID-19 management, including IPC and MDTs, were developed using WHO clinical guidelines and introduced by distance learning courses and practical training for health care workers.
- Seven hundred fifty-four primary health care workers participated in distance learning training on IPC and case management through KSMIRCE.
- Six hundred health care providers were trained at the national level on COVID-19 case management through the MDT network. Oblast and district-level MDTs have increased the number of health care providers appropriately trained to manage COVID-19 cases.
- Over 2,600 consultations were held by MDTs regarding appropriate care for critically ill COVID-19 patients.
- Four hundred and fifty-four Universal Nurses were trained and are active in four hospitals in Bishkek and Osh cities.

## ASSESSED IN-COUNTRY OXYGEN THERAPY NETWORK AND BUILT CAPACITY OF ICU CLINICIANS

As COVID-19 surged in July 2020, the Kyrgyz Republic recognized the need to upgrade the country's medical infrastructure, including the medical oxygen supply. As the numbers of moderate to severe cases requiring oxygenation interventions increased, health facilities throughout the country experienced critical shortages of medical-grade oxygen. There were severe gaps in oxygen use forecasting, production, and procurement, along with supply chain security issues at the health facility level.

To address these gaps and improve national oxygen supply and provision, LHSS supported the MOH in evaluating the national medical oxygen ecosystem, with an emphasis on identifying strengths, weaknesses, and areas for scalability of the liquid oxygen supply chain. LHSS led a mixed methods assessment at 35 public hospitals equipped with liquid oxygen. This assessment was based on the USAID-supported EpiC project tool "Oxygen and COVID-19 Response Rapid Assessment Tool: Hospital Facilities." In addition to evaluating hospitals, LHSS interviewed government officials, liquid oxygen supply and transport companies, and private health sector representatives to gain a more comprehensive understanding of the national oxygen ecosystem. The legislative and regulatory landscape was also assessed to understand regulations relating to liquid oxygen and identify opportunities to strengthen national regulations.

The assessment found insufficient regulatory oversight and national controls, monopoly by two liquid and gaseous oxygen supply companies, and variations and fluctuations in price for liquid oxygen supply by region, all of which posed challenges to the scale-up of liquid oxygen use throughout the country. The assessment also found that liquid oxygen was more cost-effective and easier to transport and required less technical oversight than the traditional gaseous options. The assessment and recommendations were compiled in a report that included suggestions on how to locate liquid oxygen supply, better quantify needs, improve procurement and supply processes, stream liquid oxygen into existing medical networks, and improve the country's oxygen ecosystem for the reliable provision of oxygen in routine care. Once translated, this



National Hospital staff review a critically ill patient's chart. (Photo: LHSS Project - Kyrgyz

report will be shared with government counterparts, USAID, and other donors.

LHSS also partnered with the World Bank's Emergency Response in COVID-19 project (ERIC), which provided significant donations of intensive care equipment and single-use consumables to focal hospitals, to lead practical trainings on COVID-19 intensive care case management for 150 intensive care unit (ICU) physicians and nurses. The program focused on management of COVID-19 comorbidities, foundational principles of oxygen therapy in emergency case management, monitoring of the intensive care patient and transfer protocols, and practical recommendations for resuscitation teams and anesthesiologists. To address the need for emergency surge capacity in the oxygen ecosystem, LHSS also supported the procurement of several high-capacity oxygen concentrators, which were delivered and are successfully operating in the ICUs of hospitals serving the patients with COVID-19.

Building on this foundation, LHSS partnered with the World Bank to support the MOH in revising the existing training program and conducting training of trainers for 37 leading intensive case clinicians, who are also MDT members, on ICU protocols and best practices. Participants in the training of trainers are also able to act as mentors. Two rounds of training for ICU clinicians were conducted with the World Bank's financial support. The training manual, developed by LHSS, was approved by KSMIRCE and integrated into their training programs and curriculum for intensive care doctors.

#### Results

- Enhanced knowledge and skills of 187 ICU clinicians on foundational oxygen therapies and intensive care case management.
- Training on respiratory support for COVID-19 patients with viral pneumonia integrated into the KSMIRCE continuing education system.
- Gaps in the Kyrgyz Republic's national medical oxygen ecosystem identified and recommendations for the government, donors, and implementing partners provided.

### PROCUREMENT

Between April 2020 and October 2022, LHSS procured \$1,490,605 worth of equipment and commodities that met both emergency response needs and contributed to the country's health system

resilience. Procurements evolved with the pandemic and were conducted over several "rounds" in response to the Kyrgyz Republic's Strategic Preparedness and Response Plan and national response gaps.

To respond to critical oxygen shortages during the initial phase of the pandemic, **Round I** (delivered September 2020) prioritized the purchase of high-volume oxygen concentrators. These were placed in hospitals with critical care units, including the Republican Infectious Diseases Hospital, the National Hospital (including the Hospital for Veterans), Chui Regional Hospital, and Osh City Clinical Hospital. These state-of-the-art, lifesaving devices supplied the hospitals' intensive care units with purified oxygen, which was critical for COVID-19 patients



Equipment provided to the Ministry of Health by USAID. (Photo: LHSS Project - Kyrgyz Republic)

with severe symptoms. The equipment was handed over as part of USAID assistance to the Kyrgyz Republic in the fight against the COVID-19 pandemic at a virtual ceremony in November 2020, hosted by U.S. Ambassador Donald Lu.

**Round 2** (delivered December 2020) focused on providing the WHO and MOH with single-use consumables and reagents for training on real-time polymerase chain reaction (RT-PCR) techniques and personal protective equipment (PPE) to protect laboratory personnel being trained in detection techniques.

**Round 3** (delivered in tranches June through September 2021) focused on several key response needs that emerged in the second year of the national response. Round 3.1 included additional oxygen ecosystem investments and critical care equipment such as laryngoscopes and a digital X-ray machine for critical care units at pilot hospitals (Republican Infectious Diseases Hospital, the National Hospital, Bishkek city Hospital NºI, Osh city Hospital and Chuy Regional Hospital); Round 3.2 included laboratory equipment for detection of COVID-19, such as RotorGene priority packages, centrifuges, thermoshakers, and other equipment for long-term use for Virology laboratory at Osh Centre for Disease Prevention and State Sanitary and Epidemiological Surveillance. All equipment procured by LHSS was covered by additional warranty years and connected to local suppliers for maintenance needs. Round 3.3 focused on providing IPC equipment to subnational pilot PHC facilities in Chuy region and Osh city, including autoclaves, drying ovens, bactericidal chambers for instrument sterilization, and sealing machines for packaging medical instruments. Round 3.4 provided medical grade refrigerators and freezers to Bishkek and Osh cities laboratories for specimen storage. To advance COVID-19 detection capacities across the country without interrupting existing HIV and TB detection programs, the project invested in a GeneXpert system (Round 3.5) for the National Virology Lab under the DDP&SSES to expand overall microbiological detection capacities.

**Round 4** (delivered in tranches throughout February and March 2022) focused on bolstering the country's epi-surveillance capacities, including the purchase of computers, projectors, LCD screens, and other IT equipment for the PHEOC.

**Round 5** (delivered in tranches throughout May and June 2022) focused on addressing gaps which had been identified in close consultation with the MOH and other donors supporting procurement. With the support of LHSS, the following equipment and consumables were procured:

- Video bronchoscope for the National Hospital
- Mobile X-ray machine for the Chui Regional Hospital
- Disinfection chambers for the Osh city clinical hospital
- Computer software for the DDP&SSES
- Furniture for KSMIRCE distance learning training rooms
- Air conditioners, high-speed scanners, and interactive whiteboards for the KSMIRCE
- Servers and hard drives for the e-Health Center
- Equipment for distance learning in KSMIRCE headquarters and its Osh branch
- Equipment for photo studio for RCI

#### Results

- Successfully coordinated with MOH and other donors to identify urgent and emerging needs to support the Kyrgyz Republic's emergency response.
- Procured and distributed over \$1.49 million in equipment and consumables.

# VACCINE PROMOTION, DEPLOYMENT, AND ADMINISTRATION

#### INCREASED AWARENESS AND DEMAND GENERATION

The COVID-19 pandemic exposed weaknesses in people's understanding of infectious disease transmission, prevention, and risks in several areas— from insufficient public health education to people's attitudes and awareness about COVID-19 and vaccinations. The Government of Kyrgyz Republic lifted most quarantine restrictions in early June 2020, and by the end of June 2020, the number of daily incident cases had tripled. In July 2020, the country had the highest COVID-19 mortality rate<sup>7</sup> in the world.

LHSS partnered with Internews, which created communications products (TV series, videos, and social media posts) that focused on key populations, including young adults, those living in rural areas, and ethnic minorities. The messages touched on a range of preventative measures, including wearing masks and maintaining social distancing, as well as the importance of mental health support. The media campaign reached 4,669,418 people.

When vaccines became available in the Kyrgyz Republic in March 2021, LHSS and the MOH conducted focus group discussions with 378 health care providers from two Bishkek city family medicine centers to better understand health care providers' attitudes towards vaccination. The rapid assessment produced the following key findings:

- Only 27.3 percent of physicians and 16.3 percent of nurses were convinced that the vaccine would reduce the risk of death from the disease. Moreover, 38.6 percent of physicians and 53 percent of nurses believed that receiving the COVID-19 vaccine would make them sick with COVID-19.
- The Ministry of Health was the main source of up-to-date information about COVID-19 vaccinations.
- Health care providers cited the following reasons for people's reluctance to get vaccinated: 1)

<sup>7</sup> Available at <u>https://24.kg/english/160332 Kyrgyzstan takes 1st place in world with highest number of deaths from COVID-19/</u> LHSS KYRGYZ REPUBLIC ACTIVITY: END-OF-ACTIVITY REPORT | 13 distrust (42.2 percent), 2) misinformation (19.4 percent), and 3) fear of side effects (16.1 percent).

Based on the results of the study, LHSS created a communication strategy and a media plan to encourage COVID-19 vaccinations and counteract public apprehension about COVID-19 vaccines and proliferation of misinformation.

LHSS co-hosted several public events during holidays and major public events, including Nooruz and the Kuz-Demi marathon, reaching about 5,000 members of the public during these events. LHSS created a series of videos with MOH officials speaking first-hand about the benefits of vaccines. These videos were disseminated via targeted advertisements on social media and TV channels, which enabled LHSS to reach over 7 million people (non-unique viewers). LHSS also hosted a press cafe to talk about digital solutions in vaccination against COVID-19, involving key stakeholders from WHO, GIZ, the Ministry of Health, and the media.

LHSS also collaborated with two key government partners, RCHPMC and the Ministry of Culture, to create a series of key messages, animations, and videos, tailored to different audiences, on the importance of vaccination. From July to October 2022, LHSS published them on a variety of online media platforms including Kaktus.kg, 24.kg, and Akipress.org. LHSS also launched targeted advertisements on Google AdSense, Yandex, and social media.

Starting in May 2022, LHSS identified three cadres of specialists to address the needs of COVID-19 patients with chronic diseases. who are at higher risk of poor outcomes from a COVID-19 infection. To complement this work, LHSS provided job aids based on WHO guidelines to help clinicians counsel their patients on vaccination against COVID-19. As an extension of the discussion clubs, LHSS and RCHPMC held a Quiz Event with roughly 100 health care providers to increase their knowledge about COVID-19 (Annex E).

#### Results

• In 2021, LHSS produced and disseminated public service announcements and conducted information campaigns across different platforms and segments of the Kyrgyz population,

engaging 2,339,419 through websites, and 2,441,830 via social media channels.

In 2022, LHSS developed information and communication materials for online platforms. Through social media 1,941,496 people were engaged and 2,42,514 people were reached via advertising services (Yandex Direct, Google ads) and websites (akipress.kg, 24.kg, super.kg), and306,000 were engaged via national and local television.



Health care providers participate in LHSS-sponsored discussion clubs. (Photo: LHSS Project - Kyrgyz Republic)

#### INTERPERSONAL COMMUNICATIONS SKILLS TRAINING

Once COVID-19 vaccines were available in March 2021, health care workers were mandated to receive the vaccines. Per the MOH, by March 2022, at least 73 percent of health care workers were vaccinated, the highest rate of any group in the country. While the drive to get health care workers vaccinated was successful, it was not accompanied by sufficient information about the safety and efficacy data of the vaccines, meaning many health workers had concerns about vaccines despite their vaccination status. Additionally, general vaccine skepticism was on the rise. A WHO study in February 2022 found that a lack of credible information or insufficient knowledge on COVID-19 vaccination paired with mistrust of official information, leading to dependence on information from friends, family, and television, was driving suspicion of vaccines. To increase public confidence in COVID-19 vaccines and improve health care worker interpersonal communication skills and counseling, the MOH identified a need to conduct trainings for PHC medical workers.

LHSS developed a guide on COVID-19 vaccine interpersonal communication skills based on guidelines for interpersonal communication on routine vaccination and WHO recommendations. The guide was used to build the capacity of health care workers and equip them with high-quality and comprehensive information on COVID-19 vaccination, including its safety and efficacy in preventing serious illness and hospitalization. LHSS and the

#### Box I. Participant's training feedback

"The training was really eye-opening for me, because I did not know the differences between the kinds of vaccines, and, more importantly, I did not know how to properly convey all this information to the public," said Ms. Abizova, a participant in the interpersonal communication skills training. "Not only did we gain technical knowledge on vaccines, but we also learned how to communicate with our patients to effectively

RCHPMC led a training of trainers for 125 specialists from local health promotion centers and immunologists in Bishkek city and Osh, Jalal-Abad, Batken, Issyk-Kul and Naryn oblasts. Training for 179 PHC workers was piloted in Chui oblast, which at the time had the lowest vaccination rates in the country. LHSS also subcontracted a nonprofit organization, Health Promotion Alliance, which trained 460 family doctors and nurses and 35 immunologists in the northern regions of the country on how to provide accurate COVID-19 vaccine information to their patients. After the training, participants reported increased confidence in vaccine effectiveness and ability to properly counsel on vaccine side effects, identify and address vaccine hesitancy, and encourage vaccination. Crucially, they also reported increased competencies in the areas of interpersonal communication and confidence to engage patients (Box 1).

#### Results

- One hundred and twenty-five specialists from local health promotion centers and over 600 primary health care workers and family doctors trained on how to provide high-quality and comprehensive information on COVID-19 vaccination.
- Increase of almost 40 percentage points (49 percent to 88 percent) between pre- and post-test scores for training of trainers' participants, indicating a significant increase in interpersonal communication skills to engage with patients and other health care workers about the importance of COVID-19 vaccination.

## ENHANCED RISK COMMUNICATION AND INCREASED COMMUNITY ENGAGEMENT

As of May 31, 2022, there were seven COVID-19 vaccines available in country through the COVAX mechanism and other sources, such as international organizations, including Sinopharm, Sputnik, Sputnik Light, QazVac, Moderna, AstraZeneca and Pfizer-BioNTech. Vaccination continued to be low in certain parts of the country due to vaccine mistrust and misinformation. To increase vaccine uptake, it is essential to deploy community outreach and engagement activists and engage local leaders and influencers to help build trust and combat misinformation about COVID-19 and COVID-19 vaccines. In

addition to the interventions related to interpersonal communication and demand generation described in previous sections of this report, LHSS designed a grants program to engage community outreach activists and local leaders and influencers in the COVID-19 vaccination effort. The project worked in partnership with the Kyrgyz Family Planning Alliance (KFPA) and the Media Support Center Foundation (MSCF), two nongovernmental organizations working on public health, gender, social development, and conflict resolution. The purpose of the \$115,000 grants program was



Grantee organizations discuss their activities during the end-of-project event. (Photo: LHSS Project - Kyrgyz Republic)

to reach communities with reliable, accurate, and up-to-date information about COVID-19, building on products and initiatives developed under previous health emergency response activities. Target populations included women, religious leaders, and low-income and rural populations.

From May 20 to August 15, 2022, the two grantees adapted and disseminated information, education, and communication materials, aiming to increase knowledge about COVID-19 vaccines and boost vaccination coverage by 10 percent in Moskva, Sokuluk, and Ysyk-Ata districts.

Lack of accurate information combined with misconceptions about vaccinations were the main reasons target populations were not getting vaccinated. The grantees partnered with the Republican Center for Health Promotion and Mass Communication and KSMIRCE to review and adapt existing educational and communication materials on COVID-19 prevention and the benefits of COVID-19 vaccination. Together they developed the Educational and Methodical Guide on COVID-19 Prevention, a flip calendar, and posters in Kyrgyz and Russian for community mobilization.

KFPA helped coordinate vaccinations; established a referral system of mobilizers, community activists, and religious representatives; and initiated a vaccine voucher system. Complementing these activities, MSCF designed and led an information campaign to encourage residents to get vaccinated against COVID-19.

Seventy community activists used the guide in the three pilot districts. The activists reported that the information, education, and communication materials improved their understanding of COVID-19 prevention and vaccination and enhanced their interpersonal communication skills to help build people's trust in the vaccines. In June and July 2022, the activists helped mobilize their communities and promote

COVID-19 vaccination through a series of home visits, community meetings, and health messages shared at public events.

During home visits and meetings with residents, community activists distributed flip calendars containing information on COVID-19 prevention measures, vaccine types and manufacturers, the effectiveness of each vaccine, side effects, vaccination recommendations, the importance of getting booster doses, and myths related to COVID-19 vaccination.

To further engage with religious communities, LHSS—in partnership with the State Commission on Religious Affairs, the Muslim Spiritual Directorate, and local religious leaders—co-facilitated trainings for 300 religious men and women and engaged religious groups in sessions on Islam and vaccination, vaccine composition, and the benefits of vaccination to increase awareness about the importance of vaccination.

#### Results

- Following the KFPA and MSCF activities, vaccination in the three districts of the Chui region rose by an average of 3.4 percent. The 10 percent target was not met due to an abbreviated implementation timeframe (one and half months) and the lack of availability of the Pfizer vaccine, which residents of these districts reported a strong preference for.
- Nontraditional partners, including religious entities and leaders, successfully engaged to encourage vaccination in their respective communities.
- Ten training sessions for religious communities held in each district, with the content customized for their needs, norms, and concerns regarding vaccination.
- Over 300 religious representatives, activists, and mobilizers, including women, community elders, and deputies of local councils, trained on COVID-19 prevention and vaccination, using LHSS-developed materials.

#### IMMUNIZATION SYSTEM AND ENHANCED COLD CHAIN SYSTEM

In February 2021, the MOH developed the National Deployment and Vaccination Plan (NDVP) for COVID-19 vaccines. As a part of the NDVP, the MOH prepared a three-phase vaccination rollout that prioritized70 percent of essential workers and groups at high risk of poor outcomes from COVID-19. To ensure timely rollout, there needed to be a well-designed, well-managed vaccine supply chain management system that ensured that vaccines were available and kept at the appropriate temperatures.

Considering the scale of the national COVID-19 vaccination campaign and the number of vaccines that needed to be procured, transported, and stored appropriately, the MOH, RCI and E-Health Center initiated a more holistic, web-based unified immunization information system on COVID-19 and other vaccines in accordance with the country's national immunization schedule.

To support this goal, LHSS created modules on four components of the immunization information system: warehouse accounting, inventory of refrigeration equipment, the sizing tool, and the tracking system. Additionally, LHSS co-created dashboards with the E-Health Center for data visualization to improve reporting. These modules were incorporated into the broader health information system, as were the data visualization dashboards.

LHSS also helped develop training materials for the modules and piloted online training for health care workers from Bishkek. The immunization information system was successfully piloted and presented to stakeholders and is expected to be used longer-term for routine immunization.

LHSS coordinated with WHO, UNICEF, RCI and the MOH to update six of nine SOPs for vaccine cold chain management, including SOPs on how to use automated stock management systems; how to store vaccines in cold chain storage units; monitoring temperature during transportation; proper vaccine storage in cold boxes; loading and operating refrigerator trucks; and using vaccine vial monitors. These SOPs were part of a larger set updated by RCI.

In coordination with RCI, LHSS led six online trainings to introduce the updated SOPs to 160 health care workers and IT specialists responsible for vaccine management and the immunization information system, respectively.

#### Results

- Four hundred and fifty-nine health care workers from 18 primary health care facilities in Bishkek trained on how to use the immunization information system modules and dashboards.
- Improved communication between the pilot vaccination sites, the E-Health Center, and RCI.
- Cold chain management system successfully piloted in 18 health facilities and approved by key stakeholders.

# SUSTAINABILITY, LOCAL CAPACITY STRENGTHENING, AND TRANSITION

LHSS's approach was to work and coordinate closely with the MOH, other government partners, and implementing partners to ensure the Activity's interventions supported the Kyrgyz Republic's emergency response, while contributing to overall health system strengthening and resilience. By participating in national health Strategic Preparedness and Response Plan coordination efforts, regularly liaising with government counterparts, and working with local institutions, LHSS sought to promote country ownership of interventions and deliverables from the outset and during program implementation.



LHSS Kyrgyz Republic staff members at the end-of-project event. (Photo: LHSS Project - Kyrgyz Republic)

Materials and deliverables developed by LHSS are available for implementing partners and government counterparts to use as they continue to mitigate the effects of the COVID-19 pandemic and encourage uptake of COVID-19 vaccination in the country. These products and deliverables include job aids, manuals, SOPs, and communications products such as videos.

On November 10, 2022, LHSS held an event to showcase USAID's contribution to the COVID-19 response in the Kyrgyz Republic (Annex F). The event was primarily in person and included more than 100 attendees from the Kyrgyz government, MOH, implementing partners, USAID, and other donors. Sessions highlighted the breadth and depth of LHSS's work and its achievements and lessons learned. Attendees were introduced to the newly launched, USAID-funded MOMENTUM Routine Immunization Transformation and Equity (M-RITE) project, which will continue USAID's support to increase COVID-19 vaccine uptake and strengthen immunization systems in the country. LHSS's contributions were acknowledged by the Minister of Health, national partners, and the USAID Mission.

Based on implementation experience in the Kyrgyz Republic, LHSS has identified the following challenges and successes that could be applicable in other emergency response interventions and settings:

#### **Sustainability Challenges**

Mounting a robust COVID-19 response was met with multiple, concurrent challenges, including political instability, lack of sufficiently trained health care providers and workers, and lack of coordination between state agencies and local institutions. These challenges impacted the ability to respond to the pandemic in a sustainable manner.

- Political instability impacted LHSS's ability to build lasting relationships with key government stakeholders due to turnover and frequent reorganization of MOH departments. In early summer 2022, all MOH deputy ministers with whom LHSS had built partnerships were dismissed from their positions. This slowed certain interventions, including those that involved providing technical assistance to the E-Health Center and RCI. This delayed Activity implementation and affected the ability of LHSS to transition ownership to counterparts. To overcome this, LHSS identified how to build relationships with new MOH authorities by regularly meeting with counterparts and inviting newly appointed MOH staff to meetings and events, such as equipment handovers.
- Like other countries, at the beginning of the pandemic, the Kyrgyz Republic struggled to fully respond to challenges due to a lack of expertise and skills, which made for a difficult operational environment. LHSS supported the government's COVID-19 response efforts by helping build the institutional capacity of government institutions and civil society, with the aim of enabling them to share new knowledge and expertise with other institutions within the country.
- In 2022, interest in COVID-19 appeared to diminish and interest in vaccinations was low. LHSS addressed this challenge by designing demand strategies for vaccination in collaboration with government counterparts, NGOs and media organizations, which strengthened risk communications and community engagement to increase vaccine uptake.

#### **Sustainability Successes**

While the COVID-19 pandemic created a challenging operational environment, LHSS was able to identify and use approaches that both met immediate needs brought on by the pandemic while simultaneously contributing to the long-term resilience of the Kyrgyz Republic's health system.

- Procurements focused on meeting short-term needs (i.e., mobile X-rays, oxygen concentrators, video bronchoscopes, RT-PCR systems, IT equipment), but also emphasized the placement and long-term warranty protection of RT-PCR, laboratory, and medical equipment. Procurements were also complemented by trainings led either by local suppliers or LHSS and counterparts. Much of the investment USAID made in emergency procurements will serve the health system in the long run.
- To ensure the MDT approach has an impact beyond treating patients with COVID-19, LHSS supported the establishment of MDTs at the national level, which institutionalizes the approach through the availability of national-level trainers, inclusion of MDT training curriculum in KSMIRCE's continuing medical education offerings, and MDT guidelines and manuals. MOH acknowledged the effectiveness of the MDT approach and committed additional technical support going forward. The MOH is also exploring using the MDT approach at the primary health care level for the management of noncommunicable diseases.
- Adoption of the Universal Nurse model demonstrates how consolidating roles and increasing nurses' autonomy can help a health system better manage health emergencies in resource constrained environments. Based on the success of the pilot, the MOH plans to include the Universal Nurse in its registry of positions. It also plans to discuss additional pay for nurses serving in this role. In 2022, the MOH expanded the Universal Nurse model to three children's hospitals.
- LHSS co-created and generated a broad range of clinical guidelines; practical guides; learning LHSS KYRGYZ REPUBLIC ACTIVITY: END-OF-ACTIVITY REPORT | 19

modules; information, education and communication materials; and training videos on different topics (e.g., epidemiological surveillance, digitalization of supply chain management, interpersonal communication, and more). All of these products are uploaded onto the relevant national partners' web platforms for their continued use and dissemination. For example, LHSS partnered with the RCHPMC in the creation of animated videos on topics such as herd immunity and the immune system, how vaccines work, and possible side effects, including scientifically proven information provided in layman's terms. The videos were published on the RCHPMC's social media accounts as well as provided to the RCHPMC and the Ministry of Culture for further dissemination via TV channels, which are mostly watched in the rural areas of the country. According to the RHPMCC, they will provide these videos to health care providers during training sessions within the partnership with M-RITE.

- LHSS ensured activities received buy-in from local authorities, where possible. For example, during implementation of the grant program activities, local authorities in the three pilot districts issued normative documents (orders and directives) about COVID-19 prevention measures.
- LHSS handed over numerous resources to the M-RITE project to support continuation of vaccination promotion efforts. Materials developed under LHSS and provided to M-RITE included counseling job aids for primary health care providers, COVID-19 training packages for health specialists, flipcharts to facilitate effective communication between health care workers and their patients, and several modules that guide health care workers through interactions with patients on topics such as the SARS-CoV-2 life cycle, the immune system and disease, symptoms of COVID-19, and different COVID-19 vaccines.

#### **Gender Equality and Social Inclusion**

LHSS applied a gender lens, where applicable, in its interventions. This approach was woven throughout LHSS's programming. Some examples include:

- Addressing the specific risk factors from exposure to COVID-19 and constraints on health care
  access faced by women, men, and other key groups such as rural or disabled populations by
  increasing awareness through developed information and education materials. Communications
  products considered demographic characteristics and tailored messaging accordingly. This
  included messaging that highlighted the importance of vaccinations.
- Gender, equality, and social inclusion elements were addressed in training with health care workers, when feasible and appropriate.
- The AMELP indicators captured disaggregated training data, counting male and female health care workers.

## **RECOMMENDATIONS FOR FUTURE PROGRAMMING**

**Ensure intervention scope is informed and led by counterparts.** Government counterparts are best positioned to direct interventions. Many of LHSS's government counterparts had worked extensively with other implementing partners and donors and were seeking support and technical assistance that would help address gaps that the government knew existed. For example, RCHPMC sought to identify how they could reach populations who are at high risk of poor outcomes from COVID-19. Working with LHSS, they identified that they could target health care specialists who serve populations with chronic illnesses; as these providers often have a narrow scope of practice, they could be deployed to better reach their patients with messaging about COVID-19 risks and the benefits of vaccination.

**Create and coordinate partnerships between key government institutions and implementing partners.** The Ministry of Culture and the RCHPMC were two counterparts responsible for awareness-raising about COVID-19 and COVID-19 vaccine demand, but their interactions with each other and with implementing partners and donors were not coordinated in a manner that avoided duplication of efforts and built on their respective strengths and scopes. LHSS worked to open and solidify lines of communication.

**Coordinate closely with MOH and other international donors in determining a rationalized response procurement strategy.** LHSS was one of several actors supporting the MOH throughout prevention, detection, and response scale-up at the outset of the pandemic and throughout its evolution. At each stage, it was essential to meet regularly with the MOH and other procurement partners to ensure non-duplicative purchases, to align brands and equipment specifications, and to rationalize needs across technical areas and geography. In doing so, LHSS was able to focus on strategic procurements that addressed assigned areas of the national response plan, while adding additional procurements to supplement or fill gaps in the national procurement strategy as the pandemic evolved.

Use versatile and appropriate outlets to disseminate information. To ensure that information is conveyed efficiently and targeted appropriately, it is important to carefully select media outlets and target advertising. For example, if the target population is middle-aged residents of rural areas, it would be appropriate to primarily use "offline channels" such as post materials in buses, post offices, and other public places, and in local television and radio, as opposed to placing ads on social media, where this population is less likely to see the messages.

To appropriately position COVID-19 vaccinations, be aware of misinformation and emphasize COVID-19 is one of many vaccines. Misinformation and disinformation about COVID-19 and vaccines can spread quickly, which can result in rapid changes in public opinion about vaccines and COVID-19 risks. This can make it challenging to appropriately target public messaging. Messaging should be short and impactful, for example, a call to action. The impact of COVID-19 social and behavior change campaigns should also be assessed to help guide the evolution of messaging. While there was messaging around the importance of vaccines, there was often not complementary information about how vaccines work, why they are important, and how they interact with the immune system. Additionally, there is risk in siloing COVID-19 vaccines and government counterparts responsible for vaccine messaging would potentially benefit from broadening messaging to include the importance and benefits of vaccines in general. Engaging trusted community institutions and leaders to build partnerships among local authorities, religious communities, and medical workers is a promising practice for improving vaccine uptake. This approach is anchored in communities and will increase the sustainability of their efforts. For example, LHSS developed two specialized videos targeted at religious community members. The videos were developed jointly with specialists from the Muslim Spiritual Directorate and professors at Kyrgyz Islamic University. These specialists were invited to address religious, academic, and spiritual issues related to COVID-19. Local authorities also took part in the creation of the video. Distributing the videos through religious communities' internal channels meant information was available via a trusted source.

## ANNEX A: PROGRESS ON PERFORMANCE INDICATORS

The indicator table below is inclusive of the three work plans that spanned LHSS Kyrgyz Republic. These work plans are referenced on pages 2 and 3 of this document.

ID	Indicator	Туре	Baseline (2020)	Targe t FY20	Target FY2I	Target FY22	Actual FY20	Actual FY21	Actual FY22	Cumulative Activity Achieveme nt	Data Source	Comments and Brief Description of Achievements
CV.I.I-I	Number of people reached through USG- supported mass media and social media with COVID-19 vaccine- related messaging	Output	0	N/A	1,000,000	350,000	N/A	<b>Total:</b> <b>4,781,249</b> Television: 0 Websites: 2,339,419 Hard copy print: 0 Social media: 2,441,830	<b>Total:</b> <b>4,669,418</b> Television: 306,000 Websites: 2,421,514 Hard copy print: 408 Social media: 1,941,496	<b>Total:</b> 9,450,667 Television: 306,000 Websites: 4,760,933 Hard copy print: 408 Social media: 4,383,326	LHSS Activity records	In 2021, LHSS produced and disseminated public service announcements and information campaigns across different platforms and segments of the Kyrgyz population, engaging 2,339,419 through websites, and 2,441,830 via social media channels. In 2022, LHSS developed materials specifically for online spaces. For social media 1,941,496 people were engaged and 2,42,514 people were reached via websites (Yandex Direct, Google ads, Akipress.kg, 24.kg, super.kg), and 306,000 were engaged via national and local television.

ID	Indicator	Туре	Baseline (2020)	Targe t FY20	Target FY21	Target FY22	Actual FY20	Actual FY2I	Actual FY22	Cumulative Activity Achieveme nt	Data Source	Comments and Brief Description of Achievements
												Challenges with setting targets for mass media and social media outreach indicators meant many were over target. Initially targets were set with the assumption that LHSS would use only a few communication channels to reach people with COVID- 19 related messaging. As a result of partnering with the RCHPMC, LHSS also disseminated communications materials through channels provided by government counterparts, including the Ministry of Culture and COVID-19 Shtab. Additional means of communication included local and national television stations, social media outlets, websites, and in person public events (for example, discussion clubs) where participants

ID	Indicator	Туре	Baseline (2020)	Targe t FY20	Target FY21	Target FY22	Actual FY20	Actual FY2I	Actual FY22	Cumulative Activity Achieveme nt	Data Source	Comments and Brief Description of Achievements
CV.1.3-3	Number of staff and volunteers trained on COVID-19 vaccine– related topics with USG support	Output	0	N/A	N/A	1,000	<b>Total:</b> 0 Male: 0 Female: 0		Total: 833 Male: 36 Female: 797	<b>Total: 833</b> Male: 36 Female: 797	LHSS Activity records and training register	received hardcopy materials. LHSS and Health Promotion Alliance (HPA) conducted training and refresher sessions for 833 primary healthcare specialists on interpersonal communication skills in seven regions of Kyrgyz Republic. LHSS reached 83% of the target, since HPA conducted the training in July and August which is summer vacation season. As a result, many health care workers were on leave.
CV.2.2- 13	Number of people trained in surveillance and rapid response (case investigation, contact tracing, and	Output	0	N/A	N/A	150	<b>Total:</b> 0 Male: 0 Female: 0		<b>Total:</b> 1 <b>45</b> Male: 20 Female: 125	<b>Total: 145</b> Male: 20 Female: 125	LHSS Activity records and training register	As a part of the piloting of the epidemiological platform of the DDP&SSES, LHSS supported the development of video instructions and user guides. One hundred forty-five health care

ID	Indicator	Туре	Baseline (2020)	Targe t FY20	Target FY21	Target FY22		Actual FY2I	Actual FY22	Cumulative Activity Achieveme nt	Data Source	Comments and Brief Description of Achievements
	case finding) for COVID- 19											providers were trained using these materials in 2022. Like the reason cited above, the trainings took place at the end of August, which impacted the Activity's ability to reach the target of 150.
CV.2.1- 11	Number of people reached through USG- supported mass and social media with COVID- 19– related risk communicati on messaging	Output	0	N/A	N/A	200,000	<b>Total: 0</b> Television:0 Websites: 0 Hard copy prir Social media: 0	3, T 2, V 31 nt: 0 H 0 pr 2 So m	<b>Fotal:</b> , <b>290,586</b> Felevision: ,210,000 Vebsites: 00 fard copy rint: 15,713 ocial media: 64,573	<b>Total:</b> <b>3,290,586</b> Television: 2,210,000 Websites: 300 Hard copy print: 215,713 Social media: 864,573	LHSS Activity records and training register	From June until August 15, 2022, LHSS reached over 3 million people with COVID- 19 related information, education and communication (IEC) materials. An example of these materials is awareness and education videos in Russian and Kyrgyz languages were aired on TV and are available on YouTube. In August and September, educational videos with vaccination messages reached 2,210,000 people through national and local television. IEC articles, influencers,

ID	Indicator	Туре	Baseline (2020)	Targe t FY20	Target FY21	Target FY22	Actual FY20	Actual FY21	Actual FY22	Cumulative Activity Achieveme nt	Data Source	Comments and Brief Description of Achievements
												and videos reached 864,573 people on social media (Facebook, Instagram, and YouTube) and over 215,000 households received IEC materials on vaccination. LHSS exceeded the target due to expanding the avenues for dissemination more broadly. This included LHSS grantees sharing COVID-19 information by posting messages and information on utility bills, in public transport, and via television.
CV.2.6- 22	Number of policies, protocols, standards/ guidelines across any result areas developed or adapted with USG support	Output	0	N/A	Total: 3	<b>Total:</b> 10	<b>Total:</b> 0	Total: 3	Total: 17	Total:20	LHSS Activity records	LHSS supported the development of 20 manuals and guidelines: -Guideline on RCCE (1) -Guideline on intensive care management (1)

ID	Indicator	Туре	Baseline (2020)	Targe t FY20	Target FY21	Target FY22	Actual FY20	Actual FY2I	Actual FY22	Cumulative Activity Achieveme nt	Data Source	Comments and Brief Description of Achievements
												-Guideline on infection prevention and Control - (5) -Manuals on case management (4) -SoPs on vaccine management (9)
CV.2.4- 17	Number of health facilities where USG provided support for IPC and/or WASH for COVID-19	Output	0	0	7	N/A	<b>Total:</b> 0	<b>Total:</b> 154	Total: 4	Total: I 58	LHSS Activity records	LHSS supported 158 health care facilities by training health care workers on case management and infection prevention and control.
CV.2.4- 18	Number of workers who received COVID-19- related training in IPC and/or WASH	Output	0	N/A	500	N/A	<b>Total:</b> 0 Male: 0 Female: 0	<b>Total:</b> 552 Male: 152 Female:40 0	<b>Total:</b> 202 Male: 14 Female:18 8	<b>Total: 754</b> Male: 166 Female: 588	LHSS Activity records	LHSS partnered with the KSMIRCE to lead distance learning training on updated COVID-19 clinical guidelines over Zoom. LHSS exceeded its target due to reaching more providers via online training as a part of distance learning for the sixth version of clinical guideline <del>s</del> on COVID- 19 and post-COVID syndrome for health care providers.

ID	Indicator	Туре	Baseline (2020)	Targe t FY20	Target FY2I	Target FY22	Actual FY20	Actual FY2I	Actual FY22	Cumulative Activity Achieveme nt	Data Source	Comments and Brief Description of Achievements
CV.2.5- 20	Number of health workers trained in COVID-19 case management	Output	0	0	140	600	<b>Total:</b> 0 Male: 0 Female: 0	<b>Total:</b> <b>765</b> Male: 190 Female: 575	<b>Total:</b> <b>915</b> Male: 238 Female: 677	<b>Total:</b> <b>1,680</b> Male: 428 Female: 1,252	LHSS Activity records and training register	LHSS conducted training sessions and refreshers on intensive care management (management of patients with post- COVID-19 syndrome, algorithm for referral to inpatient/outpatient treatment, rehabilitation, and medical check-ups) for 1,680 health care workers in seven regions. There were 765 (unique participants) trained in 2021. In 2022, the same health care providers were trained on different topics, such as COVID-19 rehabilitation and post-COVID treatment and respiratory failure. As a result, 153% of the target (600 healthcare workers) was achieved when counting unique participants.

ID	Indicator	Туре	Baseline (2020)	Targe t FY20	Target FY2I	Target FY22	Actual FY20	Actual FY2I	Actual FY22	Cumulative Activity Achieveme nt	Data Source	Comments and Brief Description of Achievements
15	Existence of a functional M&E System	Output	0	N/A	Yes	Yes	N/A	Yes	Yes	Yes	LHSS Activity records	LHSS established functional M&E system on stock and cold chain management for COVID-19 vaccines at the Ministry of Health.
16	Number of health service providers trained on interpersonal communicati ons Note: This is a subset of Indicator CV.1.3-3	Output	0	N/A	N/A	15	<b>Total:</b> Male:0 Female: 0	<b>Total:</b> 0 Male: 0 Female: 0	<b>Total:</b> 25 Male:3 Female: 22	<b>Total:</b> 25 Male:3 Female: 22	LHSS Activity records	LHSS developed the health care workers trainer's guide on interpersonal communication and presented it to key stakeholders. The guide was then successfully tested among Republican Health Promotion Center staff and health care workers (25 participants) from pilot health care facilities. Target set was 15 health care workers. There was high demand for training, hence 25 national trainers from seven regions of Kyrgyz Republic were trained and the target was increased by 10 people.

ID	Indicator	Туре	Baseline (2020)	Targe t FY20	Target FY21	Target FY22	Actual FY20	Actual FY21	Actual FY22	Cumulative Activity Achieveme nt	Data Source	Comments and Brief Description of Achievements
17	Number of people reached through USAID- supported mass media with COVID- 19-related risk communicati on messaging, including social media Note: This is a subset of Indicator CV.1.1-1	Output	0	N/A	1,000,000	350,000	N/A	<b>Total:</b> <b>4,842,606</b> Male: N/A Female: N/A	Total: 252 Male: 120 Female: 132	<b>Total:</b> <b>4,842,858</b> Male: N/A Female: N/A	LHSS Activity records	Starting from May 2021, LHSS coordinated with the MOH and UNICEF to better align messages and determine appropriate target groups for the LHSS- supported information and communication strategy. As a result, over 4.8 million people reached with COVID-19 vaccine- related crises and communications related messaging. In March 2022, LHSS held a public health event which consisted of an information tent located on the main square of Bishkek. The purpose was to raise awareness about the importance of vaccination against COVID-19. Two- hundred and fifty-two respondents were interviewed and received consultations on COVID-19 and

ID	Indicator	Туре	Baseline (2020)	Targe t FY20	Target FY21	Target FY22	Actual FY20	Actual FY21	Actual FY22	Cumulative Activity Achieveme nt	Data Source	Comments and Brief Description of Achievements
												vaccination. As a result, 68% of respondents noted that the information received during the event contributed to more positive attitude towards COVID-19 vaccines.
19	Number (and average percentage score) of health care workers who achieved proficient level of 80% and above on COVID-19– related end- of-training assessments	Output	0	N/A	N/A	500 (80%)	<b>Total:</b> 0 Male: 0 Female: 0	<b>Total:</b> 0 Male: 0 Female: 0	<b>Total:</b> 808 (98%) Male: 33 Female: 775	<b>Total: 808</b> (98%) Male: 33 Female:775	LHSS Activity records	This indicator is related to the CV 1.3 3. Out of a total of 833 healthcare workers who were trained on interpersonal communication skills, 808 achieved average proficiency score of 98% on COVID-19- related end of training assessments conducted among healthcare workers in Osh, Batken, Jalalabac Issyk-kul, Naryn and Chui oblasts. Given indicator is related to the CV 1.3 3 that has a target of 1000 healthcare workers. It was expected that only

ID	Indicator	Туре	Baseline (2020)	Targe t FY20	Target FY21	Target FY22	Actual FY20	Actual FY21	Actual FY22	Cumulative Activity Achieveme nt	Data Source	Comments and Brief Description of Achievements
												50% of people who took the tests to achieve a proficiency level of 80% or above.
20	Existence of COVID-19 vaccine multisectoral coordination mechanisms that meet regularly with USAID partner participation	Output	No	Yes	Yes	Yes	No	Yes	Yes	N/A	LHSS Activity records	LHSS participated in COVID-19 vaccine multisectoral coordination mechanisms that met regularly with USAID.
26	Existence of brief report on strengthening the country's Liquid Oxygen Ecosystem	Output	No	N/A	N/A	Yes	N/A	N/A	Yes	Yes	LHSS Activity records	LHSS supported development of the Brief report on strengthening the country's Liquid Oxygen Ecosystem
27	Number of health workers trained in COVID-19 testing or specimen transport with USAID support	Output	0	0	0	14	<b>Total:</b> 0 Male: 0 Female: 0	<b>Total:</b> 0 Male: 0 Female: 0	Total: 42 Male: 3 Female: 39	<b>Total: 42</b> Male: 3 Female: 39	LHSS Activity records	LHSS trained 42 lab specialists in nine laboratories in 2022 under the Good Laboratories for Good Health WHO initiative. Initially, LHSS planned to train three or four

ID	Indicator	Туре	Baseline (2020)	Targe t FY20	Target FY2I	Target FY22	Actual FY20	Actual FY2I	Actual FY22	Cumulative Activity Achieveme nt	Data Source	Comments and Brief Description of Achievements
												lab specialists from four laboratories, and 14 was set as a target. However, LHSS could not conduct training since those original four laboratories were not equipped and did not function. Thus, under WHO's Good Laboratories for Good Health initiative, LHSS proceeded to conducted mentoring visits in nine labs and trained 42 lab specialists.
28	Number of PCR tests performed in pilot labs for COVID-19 with direct support from USG	Output	0	0	0	5,000	0	0	Total: 172,311	Total:  72,3	LHSS Activity records	The I) DPSS&SSES, 2) Virological Laboratory of the Center of State Sanitary and Epidemiological Surveillance in Bishkek, and 3)
29	Number of molecular tests performed with use GeneXpert for COVID- 19 with direct	Output	0	0	0	700	0	0	Total: 12,044	Total: 12,044	LHSS Activity records	Virological Laboratory of the Center of DDP&SSES in Osh city ran 172,311 PCR tests and 12,044 tests using the GeneXpert for COVID-19 with direct support from USAID. Target setting for this

ID	Indicator	Туре	Baseline (2020)	Targe t FY20	Target FY21	Target FY22	Actual FY20	Actual FY2I	Actual FY22	Cumulative Activity Achieveme nt	Data Source	Comments and Brief Description of Achievements
	support from USG											indicator was decided on with the MOH.

## ANNEX B: ENVIRONMENTAL COMPLIANCE

LHSS Kyrgyz Republic was committed to carrying out environmentally responsible operations. The project ensured compliance with conditions set out in the IEE, approved EMMP, host country laws and regulations.

# ANNEX C: SUCCESS STORY (APRIL 2022)

# Equipping health workers in Kyrgyz Republic with communication tools for addressing misinformation surrounding COVID-19 vaccine

COVID-19 has impacted the lives of millions of people in Kyrgyz Republic, including health workers who have worked tirelessly since the beginning of the pandemic to care for COVID-19 patients, sometimes at great risk to their own lives.

COVID-19 vaccines, the most effective protection against hospitalization and death, are now widely available across the country. But, in no small part because of misinformation promoting fear and hesitation, only 28 percent of the population have received at least one dose of the vaccine.

Health workers play a central role in providing continued care and promoting vaccination and combating misinformation with evidence-based health education for their patients. The Kyrgyz Republic Ministry of Health aims to vaccinate 70 percent of the country's population against COVID-19. Through its Local Health System Sustainability Project (LHSS) Kyrgyz Republic Activity, USAID is supporting the Ministry of Health to reach this goal. The Activity is partnering with the Republican Center for Health Promotion and Mass Communication to design activities that provide health workers with important information and communication tools.

#### Interpersonal communications skills to understand patient concerns

Interpersonal communication in health care is often defined as the ability of medical staff to elicit and understand patient concerns, to explain current issues, and to engage in shared decision-making if desired. To help prepare medical staff to address the public's concerns related to vaccination against COVID-19, LHSS and the Republican Center for Health Promotion and Mass Communication carried out a series of trainings in February and March 2022 on interpersonal communication. These training

courses aimed to reduce concerns and misunderstanding about COVID-19 among health workers and to raise their awareness about ways to lower the risks of infection.

As part of this training, participants learned the concept of herd immunity, the effects of COVID-19 vaccines on the body, vaccine efficacy and safety, and potential side effects after vaccination. During the training, facilitators answered health workers' questions and concerns, and provided valid sources for continued reference. As a result of the training, the health care providers enhanced their technical knowledge on COVID-19 vaccines and learned how to communicate with patients to properly address their concerns. Baseline and end-line data before and



Aizharkyn Egembergieva, specialist from the Republican Center for Health Promotion and Mass Communication, facilitates an interpersonal communication training. (Photo: LHSS Project - Kyrgyz Republic)

after training show a 39 percentage points increase (49 percent to 88 percent) in training participants' test scores, which indicates a significant improvement in interpersonal communication skills when it

comes to engaging with patients and other health care professionals on the importance of COVID-19 vaccination.

# Getting consistent, reliable sources of information

As soon as COVID-19 vaccines were available, the government of the Kyrgyz Republic required all medical workers to get vaccinated. In fact, at least 73 percent of medical workers are vaccinated today, the highest rate of any cadre or group in the country. Nevertheless, many health workers still had concerns about vaccines and were not well-informed about data concerning vaccine safety and efficacy.

Nasiba Abizova is an immunization nurse in the family medicine center of Kant, a small town located in Chui Valley of northern Kyrgyz Republic.



Nasiba Abizova, an immunization nurse in Kant, works to promote COVID-19 vaccination. (Photo: LHSS Project -Kyrgyz Republic)

Nasiba recalls when the government issued its mandate requiring all health workers to get vaccinated against COVID-19. Having been an immunologist herself, she knew that vaccines were safe and effective in preventing disease, but she acknowledges that there were concerns about vaccine safety. "At that moment, there was no reliable information about vaccines against COVID-19 per se. It felt as if we were 'guinea pigs' and many people were afraid," Nasiba shared.

"Now that the effectiveness of vaccines against COVID-19 is undoubtable, we should make sure that our population trusts them. This is how we should get back to our normal lives," said Nasiba.

#### Counseling patients when there is conflicting guidance



Interpersonal communications training participants at a family health center in Kant, northern Kyrgyzstan. (Photo: LHSS Project -Kyrgyz Republic)

One of the biggest challenges for health workers has been deciphering differing guidance from health authorities and providing recommendations to their patients. "At one point, the government interim recommendations were that pregnant women should not receive vaccination," explained Aizharkyn Egembergieva, specialist of the Republican Center for Health Promotion and facilitator for the interpersonal communications training. "However, at that time, the WHO was strongly advising that pregnant women indeed be prioritized for vaccination. This caused confusion among health workers as they did not know how to advise their patients," she continued. "Today, gladly, our protocols for pregnant patients are aligned with those of WHO."

Participants have found this training to be exceptionally valuable. "The trainings were really eyeopening for me, because I did not know the differences between the kinds of vaccines, and, more importantly, I did not know how to properly convey all this information to the public," explains Nasiba. "Not only did we gain technical knowledge on vaccines, but we also learned how to communicate with our patients to effectively address their concerns."

## ANNEX D: COMPLETED DELIVERABLES

- Summary: Information and Communications Products to Increase COVID-19 Vaccination Uptake—LHSS Kyrgyz Republic Activity (ARPA)
- Summary: Updated SOPs for Cold Chain Management and Training Materials (ARPA)
- Equipping Health Care Providers with Interpersonal Communication Skills: Vaccinating against COVID-19—Kyrgyz Republic Training Package (ARPA)
- Equitable Access to and Delivery of COVID-19 Vaccines: Strengthening the Cold Chain System in the Kyrgyz Republic (ARPA)
- Risk Communication and Community Engagement in the Kyrgyz Republic (ARPA)
- Summary of the Digital Reporting Form Training Materials—LHSS Kyrgyz Republic Activity (ARPA)
- Summary: Standard Operating Procedures on Personnel Management for Laboratory Diagnostics (ARPA)
- Summary: Revised COVID-19 Clinical Case Management Guidelines—LHSS Kyrgyz Republic Activity (ARPA)
- Summary: Practical Manual on Infection Prevention and Control in Primary Health Care Facilities in the Kyrgyz Republic in the Context of the COVID-19 Epidemic (ARPA)
- Success Story: Multidisciplinary Teams and the Universal Nurse Model: Strengthening the Kyrgyz Republic's Health System (ARPA)
- Assessment of Liquid Oxygen Capabilities and Availability for Use in Medical Facilities in the Kyrgyz Republic (ARPA)
- Summary: Trainer's Guide: Interpersonal Communication for Health Care Providers on COVID-19 Vaccination (non-ARPA)
- Guidelines for Establishing Multidisciplinary Teams for the Treatment of COVID-19 (non-ARPA)
- Assessment Report on the Kyrgyz Republic Laboratory for Virologic and Molecular Genetic Studies (non-ARPA)

## ANNEX E: TRIVIA QUIZ EVENT REPORT

The LHSS Kyrgyz Republic project, the Republican Center for Health Promotion and Mass Communication, and the Red Crescent Society of Kyrgyzstan sponsored a "Trivia Quiz Event" on July 15, 2022, for health care specialists, including cardiologists, endocrinologists, pulmonologists, immunologists, and epidemiologists. The event sought to help these specialists deepen their knowledge of COVID-19 and vaccinations. Forty-eight health care providers attended the event, representing a range of facilities and institutions, including family medicine centers, national hospitals, the Republican Center for Health Promotion and Mass Communication, the DDP&SSES and the Ministry of Health.



Quiz Night participants discuss a question. (Photo: LHSS Project - Kyrgyz Republic)

The Republican Center for Health Promotion and Mass Communication prepared 20 general knowledge and technical vaccine knowledge questions. Eight teams comprised of six health care workers participated. The teams consisted of a mix of health care specialists, some of whom had previously participated in LHSS-led discussion clubs. Each team had one minute to respond to each question.

Of the eight teams, five answered at least half of the questions correctly. Participants generally performed well when answering questions related to Immunoglobulin M (IgM), COVID-19 strains present in the country, populations recommended by the WHO to receive booster doses, and the

use of adjuvants. Many participants struggled to answer questions about COVID-19 vaccination, including questions related to vaccination of pregnant and lactating women, vaccine types and components, the development of an immune response to vaccination, the difference between the Sputnik and AstraZeneca vaccines, and the approval of the first vaccine.

LHSS and the Republican Health Promotion and Mass Communication Center gave recognition letters to participants to acknowledge their participation and encourage vaccination advocacy.

Following the event, LHSS communicated with several participants. Feedback was positive, with participants stating they appreciated being engaged in a more innovative manner that was a welcome alternative to the usual format of trainings and continuing medical education. One participant noted, "It was a very well-planned and interesting event. I was able to recollect a lot of forgotten [vaccination] terms and make new useful connections with other health care workers."

# Quiz participant on patients refusing to get vaccinated

"Remote villages and regions were in short supply of accurate information. People often relied on the news from the news channels, social networks, and local authorities. Unfortunately, not all these sources of information were reliable."

Participants also shared the challenges they faced when

sharing COVID-19 and vaccine information with their patients. One provider recounted issues with misinformation: "The main problems were created by people who opposed vaccinations. After being a host on television, I was physically attacked by people who were against vaccination. People believed in global conspiracy that resulted in fear of vaccines."

The quiz revealed that many participants did not possess adequate knowledge about COVID-19 vaccination, as no team answered more than 15 out of 20 questions correctly. Not all participants had

been trained on COVID-19 and vaccinations, meaning they may have not had access to up-to-date information.

Under ARPA Objective 1: Accelerate widespread and equitable access to and delivery of safe and effective COVID-19 vaccinations, LHSS sought to develop evidence-based information, education, and communication materials on vaccination and counseling and to train health care providers to offer high-quality and equitable counseling services. Events in innovative formats such as quizzes served as a vaccine promotion strategy and aimed to increase awareness of vaccines.

## ANNEX F: PRESS RELEASE



### PRESS RELEASE

#### USAID and the Government of the Kyrgyz Republic Partner to Increase Vaccination Against COVID-19

#### November 10, 2022

#### **Bishkek, Kyrgyz Republic**

The United States Agency for International Development (USAID), the Ministry of Health, and the Ministry of Culture will work together to increase vaccine intake in Batken, Jalal-Abad, Chui Oblasts, and Bishkek. This will include training medical specialists, engaging local community activists, and conducting campaigns to inform the public about the benefits of vaccination against COVID-19. These measures were the central topic of a November 10 partners' meeting devoted to the Kyrgyz Republic's COVID-19 response.

During the meeting, USAID presented epidemiological data, successful strategies for managing human resources for health, and for engaging communities to prevent the spread of COVID-19 and increase vaccine uptake.

Earlier, vaccination information campaigns and community mobilization efforts supported by USAID accelerated vaccine coverage in three districts of the Chui region by 4 percent. Going forward, USAID will increase vaccine coverage in Batken, Jalal-Abad, Chui oblasts and in Bishkek city, all of which have low vaccine uptake, to ensure that critical for help preventing new COVID-19 variants that could threaten the health of Kyrgyzstanis.

According to USAID's Director of Health and Education, Nisha Gupta, as part of the U.S. government's partnership with the Kyrgyz Republic in the fight against COVID-19, 4,000 doctors, lab workers, and other medical staff received training to improve detection, prevention, and treatment of COVID-19. It also included \$1.4 millions of equipment that strengthened medical institutions' capacity to diagnose COVID-19 and other communicable diseases and prevent their spread.

Since the beginning of the pandemic, USAID has provided more than \$10 million overall to help the Kyrgyz Republic in its COVID-19 response. The United States has also donated over 450,000 Pfizer-BioNTech vaccine doses through the COVAX facility.

https://akipress.com/news:685370:USAID\_and\_Kyrgyz\_Government\_partner\_to\_increase\_vaccination\_against\_COVID-19/

## ANNEX G: FINAL GANTT CHART

### LHSS Kyrgyzstan Activity Work Plan A: COVID-19 Response Activities Gantt Chart

Task	Deliverable(s)	Status
INTERVENTION I: PROCURE PRIORITY CASE DETECTION AND CASE MA	ANAGEMENT MATERIALS	_
Confirm laboratory and/or case management procurement priorities, locations, and _quantities	N/A	Completed
Develop requests for quotes (RFQs) with vendors to establish procurement technical options and lead times	N/A	Completed
Quality approve selected items and purchase desired materials in accordance with US government policies for procurement of COVID-19 commodities	N/A	Completed
INTERVENTION 2: PROVIDE TECHNICAL ASSISTANCE TO ADVANCE IN	FECTION PREVENTION AND CON	FROL (IPC)
Facilitate trainings in implementing new clinical protocols and SOPs for IPC, including use of PPE for hospital staff, first responders, and FMC staff	N/A	Completed
Use WHO recommendations and other peer-reviewed guidelines, protocols, and literature to develop a list of quick, low-cost modifications to improve IPC at primary, secondary, and tertiary medical centers	N/A	Completed
Develop multidisciplinary approach concept on diagnostics and treatment	Multidisciplinary Team (MDT) Approach Manual	Completed
Support the implementation of individual hospital workplans, to possibly include the equipping of facilities with certain supplies. This may include changes to FMC patient triage and the layout of FMCs for IPC, improved isolation of PUIs, and strategies to manage rapidly increasing patient volumes	N/A	Completed
Provide Logistics and Supply Chain Management assistance for supplies for IPC	N/A	Completed
Provide IPC guidance and controls translated and validated into local languages (IFRC, LHSS)	N/A	Completed
Organize I national (ToT) and I regional trainings for Multidisciplinary Team (MDT)	N/A	Completed
Modify WHO guidelines to develop IPC training modules for primary care physicians and family medical centers	N/A	Completed

Modify WHO guidelines and develop Clinical protocol (CP) and SOPs for PHC level (including IPC, including use of PPE)	N/A	Completed
Support routine trainings of family medicine specialists in the prevention, diagnosis and	N/A	Completed
treatment of patients with COVID-19 (collaboration with KSMIRCE)		
Purchase of equipment for distance learning (KSMIRCE - 2 sets)	N/A	Completed
Conduct laboratory assessment for GeneXpert platform installation	Laboratory Assessment for GeneXpert	Completed
INTERVENTION 3: SUPPORT LABORATORY CASE DETECTION CAPACI	TIES FOR SARS-COV-2 AND OTHER	PATHOGENS
Purchase of equipment for distance learning (SES Laboratory – 1 set)	N/A	Completed
Provide local laboratory staff with necessary lab supplies, diagnostic options, and	N/A	Completed
reagents, as appropriate		
Conduct trainings in laboratory BioSafety and IPC	N/A	Completed
Organize and support trainings in RT-PCR and other lab techniques relevant to COVID- 19	N/A	Completed
Provide Logistics and Supply Chain Management for laboratory equipment and supplies	N/A	Completed
Organize national, subnational, or regional meetings with the government and partners to discuss laboratory practice related to COVID-19 (WHO with logistical support from LHSS)	N/A	Completed
Ensure linkage of laboratory and epidemiological data	N/A	Completed
INTERVENTION 4: SURVEILLANCE AND RAPID RESPONSE		
Provide computers, GIS licenses, and monitors for Emergency Operations and the COVID response	N/A	Completed
Develop COVID-19 surveillance system (Software) for Hotline 118, sanitary	N/A	N/A- this activity
epidemiological service and patient referral to the PHC and hospital level		was supported by
		Soros Foundation
Support local MOH epidemiological staff to investigate clusters, assess capacities, and	N/A	Completed
provide epidemiologic expertise at local levels		
Conduct trainings on use of COVID-19 case definitions, screening protocols, and	N/A	Completed
methods of disease surveillance		

Organize training (ONLINE) in supply chain management, including estimating necessary amount of PPE, lab diagnostics, and other consumable items	N/A	N/A- This activity was supported by WHO and UNICEF
INTERVENTION 5: RISK COMMUNICATIONS		
Rapid needs assessment and formation of taskforces	N/A	Completed
Production and dissemination of public service announcements and information campaigns across different platforms and segments of population	N/A	Completed
Production of media content by/for Internews media partners	N/A	Completed
Addressing rumors and combating misinformation around COVID-19	N/A	Completed
Improving communication capacity of the Ministry of Health	N/A	Completed

LHSS Kyrgyzstan Activit	y Work Plan B: Technical Assistance Gantt Chart

Task	Deliverable(s)	Status					
INTERVENTION I: SUPPORT THE MOH TO STRENGTHEN TO EXISTING SUPPLY CHAIN MANAGEMENT ECOSYSTEM FOR HIGH- QUALITY APPROVED COVID-19 VACCINES							
Facilitate discussion and agreement among MOH, RCI, and other partners (WHO, UNICEF, CDC) on the regulatory documentation and operational processes	N/A	Completed					
Conduct desk review/rapid assessment of ongoing regulatory and operational processes (i.e., the supply chain management system) related to deployment of approved vaccines	N/A	Completed					
Map development partner contributions, identify key challenges and opportunities, and develop feasible recommendations (i.e., action plan or road map) for the MOH to strengthen the existing supply chain management system so it can support deployment of approved COVID-19 vaccines	N/A	Completed					
Provide technical expertise (by hiring local experts and facilitating the coordination process) to support revision and development of relevant supply chain management guidelines, instructions, and SOP for health care providers	N/A	Completed					
Introduce the new/updated guidelines, instructions, and SOP by conducting online and in-person trainings for key users using the existing platform of continuing medical education at the Kyrgyz State Medical Institute for Retraining and Continuous Education (KSMIRCE)	N/A	Completed					
Hire a local expert to apply to the Global Fund COVID-19 Response Mechanism for additional funds to support vaccine and emergency response activities. This work complements LHSS current COVID-19 activities and will support strengthening supply chains for the vaccine	N/A	Completed					
INTERVENTION 2: STRENGTHEN VACCINE SUPPLY CHAIN SYSTEM	1 FOR COLD CHAIN STORAGE BY SUPPOR	TING DEVELOPMENT					
OF A MONITORING AND EVALUATION SYSTEM Conduct rapid assessment of cold chain function during vaccine transportation at	N/A	Completed					
all levels; RCI will suggest some gaps/areas for support							
Develop comprehensive M&E system for identifying potential gaps in temperature monitoring if vaccination efficacy is relatively low	N/A	Completed					

Facilitate the development of a digital solution for M&E of cold chain system	N/A	Completed
INTERVENTION 3: STRENGTHEN HEALTH WORK FORCE COMPETI	ENCIES IN INTERPERSONAL COMMUNICA	TION FOR VACCINE
ADMINISTRATION AND AEFI		1
If there are no existing relevant assessments, conduct a rapid assessment on health	N/A	Completed
care workers' knowledge and skills gaps on interpersonal communication, consent,		
and awareness on vaccine safety and vaccine hesitancy among clients		
Adapt training materials from evidence-based resources	Trainer's Guide on Interpersonal Communication COVID-19 Vaccination	Completed
Identify regions to pilot the TOTs with agreement of MOH, RCHP, and other	N/A	Completed
implementing partners who may be planning trainings		
Provide advisory and consultancy services in development and introduction of	N/A	Completed
training materials and tools for service providers in pilot regions: FAQs, use and		
side effects of vaccines, background investigations		
INTERVENTION 4: SUPPORT THE DEVELOPMENT OF A DEMAND S	TRATEGY	
Conduct focus group discussion with medical workers and medical associations to	N/A	Completed
capture insights on their perceptions and possible concerns related to COVID-19		
vaccination		
Complete a desk review of existing social data and behavioral insights research	N/A	Completed
Develop information and communication strategy with segmented target groups,	N/A	Completed
based on the demand-generation assessments and activities and tools that LHSS		
partner Internews developed in Year I		
Develop and publish/disseminate media spots, videos, articles and infographics,	N/A	Completed
information posters, and booklets to key targets identified by the MOHSD, LHSS,		
and USAID Kyrgyz Republic		
Organize round tables and conferences to present the results of the communications plan as part of establishing a system for two-way communication or "social listening."	N/A	Completed

### LHSS Kyrgyzstan Activity Work Plan C: ARPA Gantt Chart

Task	Deliverable(s)	Status
INTERVENTION I: EXPAND VACCINE PROMOTIONS AND INCREA	SE DEMAND GENERATION	
Support the existing communication expert group under the RCHP&MC to review communications products and develop information and communications plan for healthcare workers	N/A	Completed
Review and incorporate key findings of the recently conducted WHO's survey on vaccine hesitancy among the population and healthcare workers into the National Communications Plan	N/A	Completed
Review, select and adapt the existing and evidence-based communications products and counseling job aids for healthcare providers on COVID-19 vaccination	N/A	Completed
Develop and disseminate IEC materials and counseling job aids (e.g., media spots, videos, articles and infographics, information posters and booklets) for healthcare workers and medical associations to provide high-quality vaccination and counseling services	Information and communications products for healthcare workers and medical associations (counseling job aids and videos, articles and infographics, information posters and booklets)	Completed
Establish a communication platform /channel (e.g., MOH and RCHP&MC social media channels) for medical workers and medical associations to share their experiences and address vaccine hesitancy	N/A	Completed
INTERVENTION 2: SUPPORT IMPROVED VACCINE DEPLOYMENT A	T THE DISTRICT LEVEL	
In close coordination with WHO and UNICEF, support the revision of six SOPs on cold chain management	Updated SOPs and training materials	Completed
Develop training materials based on updated SOP for healthcare workers	N/A	Completed
Conduct trainings/mentoring visits for healthcare workers on revised SOPs at pilot sites	N/A	Completed
<b>INTERVENTION 3: STRENGTHEN VACCINE ADMINISTRATION REA</b>	DINESS	
Finalize adapted trainer's guide on Interpersonal Communication during COVID- 19 Vaccination	N/A	Completed
Develop interpersonal communication skills training materials to strengthen healthcare providers' capacity to address vaccine hesitancy, safety awareness and concerns, and respond to frequently asked questions from clients	Training materials and guide for healthcare providers in pilot regions	Completed
Hire local health and communications experts (exact number to be determined)	N/A	Completed
Hold national TOTs for key healthcare providers on interpersonal communication skills-building on vaccine hesitancy	N/A	Completed

Task	Deliverable(s)	Status
Conduct cascade trainings for healthcare providers in Talas, Naryn, Issyk-Kul and Chui regions and Bishkek city	N/A	Completed
Conduct pre- and post-training tests to assess changes in knowledge and skills of trained providers	N/A	Completed
INTERVENTION 4: ENHANCE COLD CHAIN SYSTEM		
Test and finalize the developed digital vaccine stock and cold chain management information system for better planning of vaccine distribution from the central level to the point-of-service delivery	Brief summary report on digital vaccine stock and cold chain management system rollout	Completed
Develop dashboards on cold chain equipment data which consist of (a) demand and availability of refrigeration equipment by regions and districts, (b) temperature charts for the given period and (c) transportation scheme	N/A	Completed
Pilot a digital vaccine stock and cold chain management system and provide trainings for RCI on how to administer the system	N/A	Completed
INTERVENTION 5: STRENGTHEN PUBLIC HEALTH RESPONSE THE ENGAGEMENT (RCCE)	ROUGH RISK COMMUNICATION AND COM	MUNITY
Determine what type of grants (results-based, challenge grant etc.) would be most suitable for the Kyrgyz context and develop a concept note detailing the grants program	N/A	Completed
Design a small grants program using a to-be-determined model with a competitive selection process	N/A	Completed
Provide on-going quality assurance technical assistance to grantees for RCCE activities	N/A	Completed
Design a feedback mechanism for grantees to report lessons learned and challenges	N/A	Completed
Build and increase awareness of COVID-19 among targeted communities	COVID-19 community engagement summary brief	Completed
INTERVENTION 6: SUPPORT DIGITALIZATION OF COVID-19 TEST	ING AND DIAGNOSTIC INFORMATION SYS	TEMS
Adapt electronic epidemiological investigation cards and emergency notifications (developed by ICAP project) for COVID-19 and other acute infectious diseases for integration into the unified digital epi-platform	N/A	Completed
Develop and/or adapt reporting forms based on the epidemiological cards and emergency notifications	N/A	Completed
Develop and/adapt dashboards based on the epidemiological cards and emergency notifications to display statistics on GIS maps, charts and tables	N/A	Completed
Finalize the digital epi-information sub-system	N/A	Completed

Task	Deliverable(s)	Status
Prepare training materials on using the digital reporting forms and conduct blended training for PHEOC and its regional branches specialists (district sanitary- epidemiological services) and PHC facilities	Training materials on using the digital reporting forms	Completed
<b>INTERVENTION 7: STRENGHTEN DIAGNOSTICS AND LABORATOR</b>	RY SURVEILLANCE	
Facilitate agreement among MOH, DDP&SSES, Republican Centre of Lab Quality Control, LHSS, and other development partners (WHO, CDC) on the existing gaps and challenges in quality control and quality management of laboratory diagnostics, waste management, biosafety and biosecurity	N/A	Completed
Support in scaling up of mentoring visits on quality management of laboratory diagnostic, waste management system, biosecurity, and biosafety	N/A	Completed
Support in revision of the SOPs on quality management of laboratory diagnostic based on the result of mentoring visits	SOPs on quality management of laboratory diagnostics	Completed
Ensure transfer of PCR tests data to the national repository of laboratory data from public laboratories	N/A	Completed
Support development of a system where patients can remotely access PCR test results	N/A	Completed
Develop dashboards based on the national laboratory data repository to visualize statistics on GIS maps, charts, and tables	N/A	Completed
Procure supplies and equipment for specimen transportation. List of supplies and specifications will be determined with MOH and USAID	N/A	Completed
INTERVENTION 8: SUPPORT REVISION OF COVID-19 CLINICAL CA	SE MANAGEMENT GUIDELINES	
Support adaptation of WHO guidelines and SOPs for PHC and hospital clinical management of COVID-19 and post-COVID19 long-term complications	N/A	Completed
Prepare and introduce a training curriculum on management of COVID-19 for all healthcare levels using the existing platform of continuing medical education at the Kyrgyz State Medical Institute of Retraining and Continuous Education	Guidelines and revised training curriculum	Completed
Procure training equipment and supplies for distance learning courses at the Kyrgyz State Medical Institute of Retraining and Continuous Education. List of supplies and specifications will be determined with MOH and USAID	N/A	Completed
INTERVENTION 9: STRENGTHEN COVID-19 CLINICAL CASE MANA	GEMENT	
Reinforce MDT skills on COVID-19 case management through refresher trainings and supportive supervision by national MDT trainers. Exact number of trainings, trainees, and location to be determined	N/A	Completed
Maintain the existing online counseling and medical concilium network for MDTs	N/A	Completed

Task	Deliverable(s)	Status
Develop regulatory workload norms for nurses, considering the profile of the hospital and nurse staffing requirements in emergencies	N/A	Completed
Finalize functional responsibilities of a Universal Nurse to be scaled up to other hospitals serving COVID-19 patients	I-to-2-page story on the MDT and Universal Nurse model expansion	Completed
Add a Nurse Assistant to the Universal Nurse model, if feasible	N/A	Completed
Support KSMIRCE to develop a practical guide on IPC for PHC level facilities in COVID-19 settings	Practical guide on IPC for PHC level facilities in COVID-19 settings	Completed
Procure diagnostic equipment and supplies for IPC for pilot hospitals. List of supplies and specifications will be determined with MOH and USAID	N/A	Completed
INTERVENTION 10: ASSESS IN-COUNTRY OXYGEN THERAPY NETWORK		
Revise and update the existing training module on clinical O2 therapy and ICU case management for ICU clinicians at the hospital level	N/A	Completed
Introduce the updated training module in a format of TOT on clinical O2 therapy and ICU case management for ICU clinicians in partnership with the World Bank's ERIC project	N/A	Completed
Conduct interviews of MOH and other relevant stakeholders using USAID's Liquid Oxygen Assessment tools with emphasis on regulatory framework, demand, storage capacity, import-related challenges	N/A	Completed
Prepare a brief report with feasible recommendations to enhance the nation's Liquid Oxygen Ecosystem	Brief report including recommendations on strengthening the country's Liquid Oxygen Ecosystem	Completed